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1 IN THE UNITED STATES DISTRICT COURT
2 IN AND FOR THE DISTRICT OF DELAWARE

3 MIDWEST ENERGY EMISSIONS CORP., et)
4 al.,)
5 -----Plaintiffs,) Case No.
6 vs.) 19-CV-1334-CJB
7 ARTHUR J. GALLAGHER & CO., et al.,)
8 -----Defendants.) Volume I

9 TRANSCRIPT OF JURY TRIAL

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11 JURY TRIAL had before the Honorable Christopher J.
12 Burke, U.S.M.J., and a jury of eight in Courtroom 2A on the
13 26th of February, 2024.

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15 APPEARANCES

16 DEVLIN LAW FIRM
17 BY: JAMES LENNON, ESQ.
18 PETER MAZUR, ESQ.

19 -and-

20 CALDWELL CASSADY & CURRY
21 BY: BRADLEY CALDWELL, ESQ.
22 JASON CASSADY, ESQ.
23 JOHN CURRY, ESQ.
24 JUSTIN NEMUNAITIS, ESQ.
25 WARREN MCCARTY, III, ESQ.
 DANIEL PEARSON, ESQ.
 ADRIENNE DELLINGER, ESQ.
 AISHA HALEY, ESQ.
 RICHARD COCHRANE, ESQ.

Counsel for Plaintiff

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1 THE COURT: Thanks to our court reporter for
2 being here and also I understand plaintiff's Delaware
3 counsel is still downstairs but I didn't want to wait any
4 longer so why don't we get started. And why don't we go on
5 the record and we'll hear prior to the beginning of trial in
6 the matter of Midwest Energy Emissions Corp. versus Arthur
7 J. Gallagher. It's civil action 19-1334-CJB here in court.
8 Before we go further, let's have counsel for each side give
9 appearances for the record. I usually start with Delaware
10 counsel but they're not quite here so we'll start with
11 whoever is at plaintiffs' table.

12 MR. NEMUNAITIS: Good morning, Your Honor.
13 Justin Nemunaitis for the plaintiffs. I'll be arguing some
14 things. Aisha Haley will be arguing some things. Warren
15 McCarty and Daniel Pearson are also here too.

16 THE COURT: Thank you. Counsel, we may have you
17 fill out a form that just has everybody exactly just to help
18 me on the bench. We'll do the same for counsel on
19 defendants' side.

20 MR. DORSNEY: Good morning, Your Honor. On
21 behalf of the CERT defendants it's Cortlan Hitch from Morris
22 James. With me today is Ken Dorsney from Morris James.
23 Jeff Dyess, Benn Wilson, and Ashley Robinson from Bradley
24 Caldwell.

25 THE COURT: Counsel, just a couple of logistical

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1 (Appearances continued.)

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3 MORRIS JAMES LLP
4 BY: CORTLAN HITCH, ESQ.
5 KENNETH DORSNEY, ESQ.

6 -and-

7 BRADLEY ARANT BOULT CUMMINGS LLP
8 BY: JEFF DYESS, ESQ.
9 PAUL SYKES, ESQ.
10 BENN WILSON, ESQ.
11 ASHLEY ROBINSON, ESQ.
12 JESSICA ZURLO, ESQ.

Counsel for CERT Defendants

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1 reminders. One is I know we have at least I think there's
2 one other jury trial that's going to be happening in court
3 this week so there will be counsel for that trial as well.
4 I and know that the line downstairs can get long. Last time
5 I was going to take the bench as early at 8:15 each morning,
6 that was in part because we had 34 defendants and three sets
7 of counsel and also because there was a lot of back and
8 forth about whether the 15 hours per side that I allowed for
9 trial time was sufficient so I gave a little extra play to
10 raise disputes beforehand.

11 I'll likely take the bench at 8:30 each morning
12 to resolve disputes before we begin at 9:00. Today our jury
13 won't be up until 9:30 so we have time. That said, I'd ask
14 Counsel to be here sitting in the courtroom 15 minutes
15 before we start, which may mean you need to get downstairs a
16 significant amount of time earlier. Do your best to make
17 sure you're ready to go and we'll go.

18 The other thing is if you'll send me an e-mail,
19 as you did, the night before letting me know what disputes
20 we might have to take up here in the morning. Part of the
21 point of that is to have a list, but part of the point of it
22 is so that I can do a little prep, you know, oh, I see,
23 issue one is going to be about blank. Let's just take a
24 look at blank beforehand so that I'm not coming in cold and
25 I can help the parties a little more efficiently. I think

<p style="text-align: center;">5</p> <p>1 what we got is just a listing. We can guess maybe at what 2 the issue is. But it was helpful I think with regard to one 3 or two of the disputes the parties attached the slides. But 4 otherwise, we were kind of baffled, what are we going to be 5 talking about about issue number 4. If you could just do me 6 a favor and like for issue one, kind of what you did, it's 7 blank, and here's the rules that are implicated, and here's 8 one sentence per side about what's going on just so I can 9 have an understanding.</p> <p>10 With all that said, let's try to use our time 11 well. Parties have I think five different issues they want 12 to talk about. Why don't we start with issue one and I 13 think it's your side that is bringing the issue, 14 Mr. Nemunaitis.</p> <p>15 MR. NEMUNAITIS: Thank you, Your Honor. Do you 16 have a copy of defendants' opening slides or would you like 17 me to put it on the document camera?</p> <p>18 THE COURT: Yes. These? Yeah, I do.</p> <p>19 MR. NEMUNAITIS: Issue number 1 relates to the 20 contributory infringement ruling that Your Honor issued 21 recently as well as one additional motion in limine we had 22 filed. On the contributory issue, as Your Honor knows, we 23 were concerned they were focusing on incorrect laws related 24 to contributory infringement. They were focusing on 25 comparing the claims to refined coal in general as opposed</p>	<p style="text-align: center;">7</p> <p>1 number 3, and this was granted. We were concerned that they 2 would make the argument that it's improper to or that 3 something improper was done by filing continuation 4 applications that could ultimately cover what's accused in 5 this case. And again, here it appears on their timeline 6 they're comparing sort of the length of time when a 7 continuation was filed to what's accused in this case which 8 could run afoul of that motion in limine. So those are our 9 concerns and objections to the slides.</p> <p>10 THE COURT: I think I understand what's going on 11 with the first one. I'm not really sure I understand about 12 the second one. On the first issue because we had a lot of 13 back and forth about this what coal counts, what refined 14 coal counts, who's going to be saying what about refined 15 coal. This is where in my mind I was after making all these 16 decisions so tell me if this is helpful for the parties. 17 After we went through all the process, when it comes to the 18 elements of contributory infringement, in my view, and I 19 think per my rulings, the only coal that matters for 20 demonstrating that the elements are met is the refined coal 21 that these particular defendants within the damages period 22 provided to the power plants at issue.</p> <p>23 That said, the only way in which that I was made 24 to believe it could be possible for defendants to be making 25 arguments that matter about other refined coal, refined coal</p>
<p style="text-align: center;">6</p> <p>1 to the specific refined coal that's accused in this case.</p> <p>2 THE COURT: If you could speak up a little bit, 3 Mr. Nemunaitis.</p> <p>4 MR. NEMUNAITIS: Sorry about that, Your Honor. 5 If you look at slide 19 of their opening presentation, it 6 looks like this slide is comparing --</p> <p>7 THE COURT: The slides don't have numbers on 8 them unfortunately so maybe if you could tell me what slide.</p> <p>9 MR. NEMUNAITIS: It's this one right here.</p> <p>10 THE COURT: Got it. Okay.</p> <p>11 MR. NEMUNAITIS: So in is this slide they're 12 comparing Section 45 refined coal in general to the asserted 13 patents. In the next slide, that's just the tax 14 regulations. But then following that there's a timeline 15 which is slide 21. And in that timeline right after they 16 compare sort of refined coal in general to the patents, now 17 they're comparing nonaccused refined coal sold before the 18 infringement time period and refined coal sold by nonaccused 19 entities to the patents in suit. So we believe that at 20 least it appears that they may be making the argument that 21 we were afraid we were going to make and that you said would 22 be the correct construction and so that is our objection to 23 these slides.</p> <p>24 The other issue with this slide is we had a 25 motion in limine ruling, it's claims motion in limine</p>	<p style="text-align: center;">8</p> <p>1 that perhaps was sold by these defendants prior to the 2 damages period, say years before to the power plants, et 3 cetera, would be to the extent the defendants were going to 4 make in the evidence, make an argument about a mistake, that 5 they didn't know or intend to induce or contribute to 6 infringement because they had some mistaken view of what the 7 law required and that that impacted their relevant state of 8 mind. And so that's -- coming into today that's where I'm 9 at. I don't know what you're going to say about that.</p> <p>10 MR. NEMUNAITIS: Understood, Your Honor. And 11 that actually feeds into the second issue. I'm familiar 12 with that mistake of fact, mistake of law argument and that 13 actually looks like it's coming up on the next slide where 14 they go through the timeline of the pleadings in this case 15 and various orders from Your Honor. That issue didn't come 16 up at the motion in limine stage but the first pretrial 17 conference and Your Honor explained that that was fair game. 18 But we pointed out at that point that that would only be 19 fair game if that defense was properly disclosed. And with 20 regard to the remaining defenses at certain points that 21 defense was not disclosed. And we have copies of their 22 interrogatory responses here if I could pass them up to the 23 Court.</p> <p>24 THE COURT: You can hand them up. Sure.</p> <p>25 MR. NEMUNAITIS: I'm sorry. Can I grab one of</p>

<p style="text-align: center;">9</p> <p>1 those copies?</p> <p>2 THE COURT: Please hand a copy to the other side</p> <p>3 too. Thank you.</p> <p>4 MR. NEMUNAITIS: So what I just handed up should</p> <p>5 include defendants' response to interrogatory 21. And if</p> <p>6 you look at the current defendants' response to</p> <p>7 interrogatory number 21, once you get past the objections</p> <p>8 it's on page eight it says, "Subject to and without waiving</p> <p>9 the foregoing objections, defendants state at this time</p> <p>10 defendants are not asserting an opinion of counsel defense</p> <p>11 to plaintiffs' claims of infringement in this action." This</p> <p>12 was the interrogatory related to opinion of counsel</p> <p>13 defenses.</p> <p>14 In contrast to that if you look at what the</p> <p>15 Gallagher defendants provided in response to their</p> <p>16 interrogatory number 21, that was the listing of this</p> <p>17 defense that goes through the changes in the complaint and</p> <p>18 the argument therein. And that was the argument about why</p> <p>19 it was disclosed.</p> <p>20 THE COURT: I'm not sure, is this the other</p> <p>21 document you gave me and where are you pointing me to in</p> <p>22 that document?</p> <p>23 MR. NEMUNAITIS: Yes, one of those is CERT's</p> <p>24 responses to interrogatory 21 and the other one is the</p> <p>25 Gallagher DTE.</p>	<p style="text-align: center;">11</p> <p>1 would direct Your Honor to page 36, the next page, where at</p> <p>2 the very top it says, "Prior to this lawsuit they had no</p> <p>3 knowledge of the particulars of the process employed by the</p> <p>4 above listed coal powered power plants including whether any</p> <p>5 of these power plants utilized activated carbon processes to</p> <p>6 capture mercury." But there's not a description of this</p> <p>7 current defense here.</p> <p>8 THE COURT: Okay. So let's tackle this issue</p> <p>9 about which I'll summarize as what can be said about refined</p> <p>10 coal other than refined coal that was provided by these</p> <p>11 defendants in the damages period to the power plants at</p> <p>12 issue. And I think you're asserting you acknowledge that</p> <p>13 you talked about the possibility that the defendants could</p> <p>14 assert a mistake of law defense but you're asserting that</p> <p>15 based on statements they made in response to certain</p> <p>16 interrogatories they would have had to have disclosed that</p> <p>17 defense and didn't sufficiently do so. Does that summarize</p> <p>18 what you're saying?</p> <p>19 MR. NEMUNAITIS: Correct, Your Honor. Yes.</p> <p>20 THE COURT: Let's hear from the other side.</p> <p>21 MR. CALDWELL: Thank you, Your Honor. Paul</p> <p>22 Sykes for CERT, Your Honor. It's not an advise of counsel</p> <p>23 defense. This is goes to the defendant's state of mind</p> <p>24 which as the Court limited in one of its orders which is</p> <p>25 front and center of the case.</p>
<p style="text-align: center;">10</p> <p>1 THE COURT: In the CERT one you have highlighted</p> <p>2 the portion you want me to look and I see what they're</p> <p>3 saying. They were not making an opinion of counsel defense.</p> <p>4 I think you were contrasting that with the comment of</p> <p>5 defendants.</p> <p>6 MR. NEMUNAITIS: Correct.</p> <p>7 THE COURT: I don't know where you want me to</p> <p>8 look with that one.</p> <p>9 MR. NEMUNAITIS: With that one, not a particular</p> <p>10 sentence just if you look through it goes through the</p> <p>11 history of the complaint and the nature of the statements</p> <p>12 they are relying on this misunderstanding of the law.</p> <p>13 THE COURT: I guess my question is maybe they're</p> <p>14 not making an opinion of counsel defense, like my lawyers</p> <p>15 told me that blank, but I don't know maybe -- I don't know</p> <p>16 maybe their employees will say I just didn't think that we</p> <p>17 infringed or contributorily infringed because blank,</p> <p>18 separate and apart from something the lawyers told me.</p> <p>19 MR. NEMUNAITIS: That's possible, Your Honor,</p> <p>20 and I'd like to hand up one more document, if I may.</p> <p>21 THE COURT: Okay.</p> <p>22 MR. NEMUNAITIS: And so that should be the CERT</p> <p>23 defendants' responses including response to interrogatory</p> <p>24 number 9 which is on page 35, and there it says, "If you</p> <p>25 dispute infringement of any claim state your basis." And I</p>	<p style="text-align: center;">12</p> <p>1 THE COURT: Mr. Sykes, so we're on the same</p> <p>2 page, it looks like from these slides you're going to be</p> <p>3 making reference at least in regards to the timeline slide</p> <p>4 I'm gathering the refined coal these defendants made at a</p> <p>5 time period prior to the 2019 key date for damages?</p> <p>6 MR. CALDWELL: Yes, Your Honor. The issue is</p> <p>7 what they knew and what they believed. And what they --</p> <p>8 their belief and the reasonableness of their belief, the</p> <p>9 credibility of those beliefs as to why they did not</p> <p>10 contributorily infringe. And so it's the state of mind that</p> <p>11 they had shortly after the complaint was filed. What had we</p> <p>12 been doing? What was our history? What did they learn</p> <p>13 about the complaint? What the allegations were? This is a</p> <p>14 case involving activated carbon injection used with coal and</p> <p>15 added bromine. So their understanding of the case in view</p> <p>16 of their history, so why they believed and really believed</p> <p>17 there were substantial non-infringing uses and why that coal</p> <p>18 wasn't specially made and adapted and even if that view was</p> <p>19 later found to be incorrect legally, which I believe the</p> <p>20 definitive ruling in that case came in November 2023, their</p> <p>21 view and what they believed during the period of alleged</p> <p>22 infringement, which was July 2019 to the end of 2021, is</p> <p>23 relevant to their state of mind. And the basis for that and</p> <p>24 the reasonableness involves their history of what they've</p> <p>25 been doing.</p>

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1 THE COURT: Understood. Just so I have an
2 understanding though, am I right that the kind of -- the
3 evidence you want to talk about and present that relates to
4 refined coal other than the refined coal that I said is
5 relevant to the elements of the contributory infringement
6 claim is it limited to refined coal that these defendants
7 made prior to the damages period or is there other refined
8 coal you're going to be talking about?

9 MR. CALDWELL: It's refined coal that they made
10 prior to the damages period and refined coal that our --
11 that the principals of these defendants were also aware of
12 that their sister companies who were defendants in this case
13 from July 2019 to May 2022 were making. So it is coal,
14 refined coal, before the damages period and then also
15 refined coal during the damages period that was accused of
16 infringement for the entire time period that the alleged
17 infringement was going on from July 2019 to December 2021,
18 and all of that is the basis of their state of mind and what
19 they believed and what they reasonably believed and we think
20 the jury needs to hear that evidence to establish the
21 credibility.

22 THE COURT: What does refined coal that other
23 defendants were making during the damages period or as part
24 of this case have to do with these defendants belief about
25 what they were doing, what they were doing infringed?

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1 MR. CALDWELL: Well, the plaintiff has alleged,
2 and this is in the complaint, that the CERT company, the
3 defendants, were run by a small number of individuals, four
4 principals, and that the knowledge of one principal is
5 chargeable to every other company and that's the basis for
6 their taking their damages claims from the date on which the
7 entity was added to the case and trying to get back to 2019.
8 Similarly, the knowledge of those principals, these four
9 individuals, is their knowledge comes from what these other
10 companies, who were defendants in the case through 2022,
11 what those companies, those defendant companies, were doing
12 during the lawsuit while they were being sued and while they
13 were making refined coal.

14 THE COURT: But I don't understand. What
15 does -- just explain to me, the question is: Did these
16 defendants, your clients, did they believe that knowledge
17 that they were contributorily infringing? How does -- if
18 there's evidence, well, defendant who's now dismissed over
19 here, they made a certain kind of coal and here's the
20 parameters of that coal, what does that coal and their
21 knowledge of it have to do with whether they believe they
22 infringed?

23 MR. CALDWELL: Okay. They were making -- they
24 had knowledge of refined coal made with the same formulation
25 during the entire damages period of this lawsuit that was

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1 sold to a power plant that was not using it at any time with
2 activated carbon. And so their belief and their knowledge
3 is that, well, it's the same formulation, 0.2 percent adsorb
4 and 0.002 percent MerSorb applied to this coal that is being
5 accused of infringement. Well, currently being accused of
6 infringement. And also, is going to a power plant that
7 allegedly uses activated carbon. Refined coal with that
8 very same formula is being sold at the same time during the
9 lawsuit to a power plant that is not using activated carbon.

10 So that goes directly to their state of mind as to the
11 specially made and adapted which is -- that is knowledge.

12 THE COURT: Okay. I think I understand your
13 argument there. Let me ask you to address the plaintiffs'
14 argument that you in some way didn't disclose pursuant to
15 discovery that you would be intending to make this defense,
16 this mistake defense.

17 MR. CALDWELL: The first thing I would say, this
18 is not a defense. It is part of the proof; right? They
19 have to prove, and Your Honor adapted our instructions, they
20 come straight out of the Supreme Court case, really two
21 Supreme Court cases, the *Global Tech* and *Collin* cases, and
22 its their burden of proof to prove that we actually knew we
23 were infringing. And a good faith or reasonable belief that
24 we weren't defeats that burden of proof that they have. So
25 it's not a defense. It's not a classic affirmative defense.

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1 So we're not advocating or pursuing an advice of counsel
2 defense which is an entirely different defense, but what we
3 believed and why we believed it, how credible and the facts,
4 the evidence on which our clients formed those beliefs, the
5 jury needs to hear that in order to evaluate the
6 credibility.

7 THE COURT: And in terms of whether it's a
8 defense or not, I was handed up one interrogatory that just
9 says if you dispute infringement of a certain claim tell us
10 why. I think here you're saying this is an argument you're
11 going to make about why you dispute infringement. And they
12 say that -- in response defendants said that prior to this
13 lawsuit they had no knowledge of the particulars of the
14 processes employed by certain power plants including whether
15 they utilized activated carbon.

16 MR. CALDWELL: Prior to the lawsuit they didn't
17 have that knowledge of the particulars. After we were
18 served, and this goes to their pursuing claims for
19 willfulness and willful blindness. After we were served our
20 clients did an investigation and I think you'll hear
21 testimony that, there's two Mr. Greens, our client is
22 Mr. Jeff Green, their expert is Mr. Phillip Green, that
23 Mr. Jeff Green, our client, as part of the due diligence in
24 not being willfully blind reached out to power plants to
25 understand what they were doing. And so, again, state of

<p style="text-align: center;">17</p> <p>1 mind and knowledge, they didn't understand which power 2 plants were using or had activated carbon equipment 3 installed and which didn't.</p> <p>4 THE COURT: I got you. Let me say this because 5 I want to make sure I try to resolve as many as I can. 6 Based on what I heard from both sides it strikes that the 7 arguments that defendants say they're going to make with 8 regard to what I'll call other refined coal are asserted to 9 go to the mistake defense or not a defense, this argument 10 that they don't infringe, contributorily infringe, because 11 they made a mistake about the law requires but they didn't 12 think they did. And essentially the arguments go to I said 13 what the refined coal that counts is for purpose of the 14 elements, but it's asserted it can't be an argument that the 15 defendants believe other refined coal counted or -- in some 16 way for purposes of knowing that you were doing something 17 wrong. I think that's an argument defendants can make. I 18 haven't seen any -- I think the types of arguments that are 19 described by defendants' counsel here this morning by 20 Mr. Sykes strike me as falling in line with whatever I would 21 have considered an appropriate argument to make assuming the 22 argument bears out. There may need to be a corrective 23 instruction at the end of the trial to make sure the jury 24 can distinguish between what the law is what versus maybe 25 what defendants say their clients thought it was. But I</p>	<p style="text-align: center;">19</p> <p>1 the use of those licenses in opening statements by 2 defendants because they are noncomparable licenses. Our 3 damages expert opined that they were noncomparable. The 4 license agreements themselves are not going to come into 5 evidence. No one from plaintiff's side is going to admit 6 them into evidence.</p> <p>7 Defendants used to have a damages expert that 8 gave opinions on these licenses. Defendants are not calling 9 their damages expert. Defendants do not have a witness 10 through whom they can admit these noncomparable licenses. I 11 certainly understand that defendants may intend to 12 cross-examine our witness on these licenses and we don't 13 object to that cross-examination but our understanding is 14 that opening statements should be about what the evidence 15 will show not a preview of whole type about you're about to 16 see some really cool things on cross. And because these 17 licenses will only be, as far as we know, shown to the jury 18 during defendants' cross for the first time. And I'm not 19 exactly sure how they will or will not come in but I don't 20 think the documents themselves will be admitted into 21 evidence so we don't believe it would be proper to discuss 22 them during opening. If defendants wanted to admit them 23 defendants had the opportunity to call their own damages 24 expert.</p> <p>25 THE COURT: Let me hear from the other side.</p>
<p style="text-align: center;">18</p> <p>1 don't see any of the discovery responses that are put up 2 before me as being sufficiently clear that defendants should 3 have and didn't say that they were going to make the 4 particular kind of argument that they're making. I don't 5 have any reason -- my decision is I don't have any reason to 6 strike or preclude any evidence with regard to this issue 7 that I've seen so far. Okay?</p> <p>8 MR. CALDWELL: Thank you, Your Honor. 9 THE COURT: All right. Mr. Nemunaitis, you 10 brought up another issue I think about the middle of three 11 maybe that you raised that I said I wasn't totally sure I 12 understood. Is that the one you want to cover next? 13 MR. NEMUNAITIS: We can move on to other issues, 14 Your Honor. 15 THE COURT: Fair enough. Tell me what you think 16 is -- what's the next one I need to take up. 17 MR. NEMUNAITIS: Issue number 3. 18 THE COURT: Issue 3 says, "Argument on 19 noncomparable licenses, EGE and ETX 1926." 20 All right, Mr. Pearson. 21 MR. PEARSON: Thank you, Your Honor. We object. 22 This is a limited objection, this is not a new motion in 23 limine. There are eight licenses that are from ME2C to 24 power plants. Defendants disclosed that they wanted to use 25 those licenses during opening statements and we object to</p>	<p style="text-align: center;">20</p> <p>1 Mr. Sykes. 2 MR. CALDWELL: Your Honor, this was squarely 3 addressed by the Court previously in its oral order, mill 4 number 2, Document 620, DI number 620. And the plaintiff 5 sought to exclude these very license agreements from 6 evidence. And the statement in the Court's order is the 7 first category relates to the discussion of the four 8 settlement agreements by which certain former defendants 9 obtained dismissal from the case there. Defendants note 10 such agreements are relevant to damages. Plaintiffs do not 11 currently maintain an objection to the admission or 12 discussion of such evidence. The Court agreed to this. 13 THE COURT: I think I understand that came at a 14 point at which you had a damages expert who was going to be 15 relying on these licenses as part of their testimony and now 16 the plaintiff says you don't have a damages expert and these 17 documents are not going to be admitted into evidence. 18 MR. CALDWELL: So that gets to the second issue 19 and that's that the plaintiffs' witness, Mr. MacPherson, the 20 CEO, was examined as a 30(b)(6) witness on each of these 21 agreements. He had personal knowledge. He testified he was 22 familiar with them. And these are ME2C licenses so he's the 23 chief executive office, the 30(b)(6) deponent, had personal 24 knowledge and we think that these are actions by the party 25 plaintiff. He actually testified under oath that his view</p>

<p style="text-align: center;">21</p> <p>1 was that these agreements, in particular the Vistra 2 agreement, reflected the fair value of the plaintiffs' 3 licensed technology.</p> <p>4 THE COURT: Is what you're saying that you think 5 you're actually going to be able to get these licenses in 6 and admit them through the testimony of plaintiffs' witness? 7 MR. CALDWELL: Yes, sir, absolutely. They had 8 personal firsthand knowledge. They dealt with these. These 9 are corporate acts of the plaintiff. There's foundation, 10 personal knowledge, et cetera.</p> <p>11 THE COURT: When you do that you may ask the 12 plaintiffs' damages expert about them and whether he 13 considered them, et cetera? 14 MR. CALDWELL: Yes, Your Honor.</p> <p>15 THE COURT: I'll hear what Mr. Pearson has to 16 say about that. Thank you.</p> <p>17 MS. HALEY: There's no question that Mr. Sykes 18 would be able to cross-examine our CEO about those 19 documents, there's no question the documents or that 20 evidentiary foundation would be able to be laid. These are 21 not photographs, Your Honor. These are licenses that they 22 are trying to build a damages case, they're going to try to 23 admit these licenses and Mr. Sykes is going to offer the 24 lawyer opinion that they are comparable and then use those 25 licenses to argue about what the reasonable royalty should</p>	<p style="text-align: center;">23</p> <p>1 don't think the damages evidence in this case should be 2 admitting noncomparable licenses.</p> <p>3 THE COURT: Is your expert going to speak to 4 these licenses and say they're noncomparable.</p> <p>5 MS. HALEY: Absolutely, Your Honor. This is in 6 paragraph 124 of his opening report. That is my -- 7 THE COURT: Why can't Mr. Sykes cross-examine 8 your expert with these now admitted licenses and question 9 and test whether that opinion is accurate, whether they 10 really are noncomparable or whether they're not? 11 MS. HALEY: He absolutely can cross-examine my 12 witness but my witness is not going to admit the exhibits 13 into evidence and as I mentioned before I don't think in our 14 understanding of opening statements we do not believe 15 opening statements should be a preview to the jury of 16 Mr. Sykes's cross-examination.</p> <p>17 THE COURT: I thought you said the problem was 18 these documents were not going to be admitted as exhibits. 19 And exhibits that may be admitted, they can be talked about 20 in openings. But now we need to address that piece. 21 MS. HALEY: I do not believe the exhibits will 22 be admitted as evidence.</p> <p>23 THE COURT: Because when offered, although 24 foundation may be laid for what they are and what they say 25 by a person of knowledge, they won't be appropriate to admit</p>
<p style="text-align: center;">22</p> <p>1 be in closing argument. We think that's improper. We don't 2 think noncomparable licenses should be admitted into the 3 record and because he cannot lay a foundation of 4 comparability, and even if were to lay some facts that he 5 would argue went to comparability it would still be a 6 lawyer's argument that it's comparable. That would make 7 Rule 702.</p> <p>8 THE COURT: My question is in terms of whether 9 the documents may be admitted into evidence. It think 10 Mr. Sykes says he'll be able to lay the foundation such that 11 he can do that through your witness. I don't hear you 12 disputing as -- you may be able to dispute that, but for our 13 purposes right now you're not saying he couldn't do that? 14 MS. HALEY: I'm sorry, Your Honor. I am trying 15 to indicate that I dispute that as I do not believe 16 regardless of the foundation he may be able to lay for the 17 document that it would be proper under 702 to admit a 18 noncomparable license agreement.</p> <p>19 THE COURT: I think you're saying your assertion 20 is that even if foundation could be laid with regard to the 21 document that it wouldn't be proper to admit it under Rule 22 702 because you're saying you don't think it would be 23 relevant; is that right? 24 MS. HALEY: Because I think there's an 25 affirmative damages opinion that it is noncomparable. I</p>	<p style="text-align: center;">24</p> <p>1 because they're not comparable.</p> <p>2 MS. HALEY: And would lead to severe jury 3 confusion for the jury to have to analyze licenses that are 4 noncomparable.</p> <p>5 THE COURT: They can't the defense -- they may 6 not have a damages expert, but they can certainly -- they 7 can question, they can poke holes in your damages expert's 8 testimony. I think you're acknowledging they can do that. 9 MS. HALEY: Absolutely, Your Honor. I believe 10 they can do that without admission of the exhibits. 11 THE COURT: They can do that with regard to 12 issue of comparability and licenses. That's a big issue, 13 whether these licenses are comparable. Your expert actually 14 speaks to it.</p> <p>15 MS. HALEY: Yes, Your Honor. And if after 16 poking holes in Mr. Philip Green's opinion they move to 17 admit the exhibits at that point and I object then Your 18 Honor finds that they did sufficiently lay a foundation of 19 comparability during that cross-examine I understand the 20 exhibits will be admitted at that point. But that's a long 21 way in the future and we don't think a preview of 22 cross-examination is appropriate during opening statements. 23 THE COURT: With regard to this issue, I have 24 not been convinced that these exhibits -- that there won't 25 be necessarily a sufficient foundation for their admission</p>

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1 or that they may -- it's clear to me that they can never be
2 admitted as exhibits in the case. In fact sitting here
3 right this moment, if we've got license agreements that the
4 plaintiffs' damages expert talks about, speaks to with
5 regard to the issue of comparability, if there's otherwise a
6 foundation of personal knowledge about these the exhibits
7 such that they could be admitted, and if the defense intends
8 to use -- to reference the exhibits to question the
9 plaintiffs' experts view on that subject, it seems all very
10 possible and doable.

11 And so in any event, I don't have a sufficient
12 basis at this moment to strike reference to these exhibits
13 from the defendants' opening slides so I won't do so. All
14 right. Got a few more minutes. Maybe we'll address one
15 other thing before we get started or we need to get back. I
16 think our jury is going to be up by 9:30 so I want to have a
17 few minutes to get ready for that. Mr. Nemunaitis, anything
18 further on your list you need to take care of?

19 MR. NEMUNAITIS: I believe the last two issues
20 were defendants' issues.

21 THE COURT: Mr. Sykes, is there anything you
22 want to raise?

23 MR. CALDWELL: There's one agreement, Your
24 Honor. The AJG Gallagher Chem-Mod agreement they have
25 identified in opening and we would like to move to exclude

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1 that under Rule 403 as unduly prejudicial.

2 THE COURT: Which number is this, is this issue
3 number 4 or 5? I hadn't seen any of these exhibits and I
4 don't know what the issue was.

5 MR. CALDWELL: Yes, Your Honor. It's issue
6 number 4. This relates to PTX 766, Your Honor. And this is
7 the settlement agreement between the prior defendants, AJG
8 and Gallagher, but also very importantly Chem-Mod was a
9 party to this agreement or is a party to this agreement. If
10 you recall, Your Honor, Chem-Mod is the CERT defendants
11 entities licensor. So Chem-Mod joined into this agreement
12 on behalf of all of its licensees and if you flip to the
13 back page, exhibit D, and they excluded the CERT defendants
14 of course. And we think that this agreement is a good
15 example of one that should be excluded as unfairly
16 prejudicial under Rule 403. We direct Your Honor to the
17 *Wyser Dynamics* case that starts out with a general rule of
18 disapproval of settlement agreements to establish a
19 reasonable royalty. In that case they excluded -- the
20 Federal Circuit excluded a license that was entered into
21 shortly before trial. We have that here. At that agreement
22 the lump sum license fee was six times larger than other
23 licenses. In this case this Chem-Mod license is eight to
24 nine times larger than the next license that ME2C is granted
25 and 45 times larger than the one below it.

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1 THE COURT: Can I stop you. This is a license
2 that the damages expert is going to rely on and you think
3 it's not comparable?

4 MR. CALDWELL: We think it's not comparable and
5 unduly, unfairly prejudicial.

6 THE COURT: I guess my question, my first
7 thought about this is the plaintiffs' damages expert is
8 going to be relying on a license and you don't think they
9 should rely on that, how come this didn't come up during the
10 Daubert phase?

11 MR. CALDWELL: This occurred 6 or 9 months after
12 the Daubert phase, Your Honor. This occurred 2 or 3 days
13 before the last trial.

14 THE COURT: Okay. This is one of the licenses
15 from the defendants that settled right before the trial?

16 MR. CALDWELL: Yes, Your Honor. This is the
17 license of the DTE and AJG defendants, the other 25 or so
18 defendants, and it wasn't just the defendants that entered
19 into the agreement. Chem-Mod, who was the licensor of the
20 technology that our clients used to make refined coal at
21 issue, Chem-Mod is a party to this agreement also. So the
22 jury will be hearing a lot about a lot of documents,
23 exhibits about the Chem-Mod process, refined coal made with
24 Chem-Mod and Chem-Mod testing of the EERC, so it becomes
25 very confusing. We believe it will be incredibly confusing

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1 to the jury to be hearing that the defendants licensor took
2 a license to the plaintiffs' patents and so why are
3 defendants -- why haven't they taken a license?

4 THE COURT: I don't mean to interrupt but I know
5 we're tight on time. So this is one of the sets of
6 defendants that settled right before the last trial. They
7 entered into a license with the plaintiffs regarding that
8 settlement. Chem-Mod, who was a licensor of yours, for some
9 reason is part of this license. But didn't you tell me
10 during the conference we had right before we postponed the
11 last trial that these license agreements, the ones that
12 these defendants that were recently in the case, they would
13 be super relevant, really important.

14 MR. CALDWELL: We said we needed to understand
15 the plaintiffs' damages opinions on them and the other
16 agreement, the Alistar agreement, was entered in. So these
17 were entered into the night before that conference. And the
18 Alistar agreement is the one I actually referenced as being
19 relevant. And that one is certainly not anything we're
20 super happy about now having seen it and understanding what
21 it's about. At the time of the conference we hadn't even
22 seen the Alistar agreement. This agreement didn't exist in
23 this form at that time, Your Honor. It was only a term
24 sheet and it wasn't clear to me not seeing it until 8:00 or
25 9:00 the night before, but I hadn't appreciated it because

<p style="text-align: center;">29</p> <p>1 it didn't have this long list of other licensees on it and 2 dozens of refined coal companies. This was entered into 3 just to get the chronology for Your Honor, I think the term 4 sheet was about November 9th, Thursday night November 9th. 5 We had the conference with Your Honor the morning of Friday 6 November 10th, could be off by a day but I think this is 7 correct. And then this agreement, the full agreement we saw 8 here, it was entered into December 28th, so six weeks later 9 and was produced to us within a week or so. So we got this 10 in January 2024. And because of the incredible juror 11 confusion that will result from Chem-Mod and who is Chem-Mod 12 why are they a party to this agreement or not who is 13 Chem-Mod, they're going to hear a lot about a Chem-Mod 14 process. Why are they a party to this agreement and why is 15 CERT's licensor -- why did they take a license to ME2C's 16 patents and it leads naturally to this argument about 17 whether it's spoken or unspoken if Chem-Mod took a license 18 these guys must infringe and it's incredibly confusing and 19 prejudicial, Your Honor. 20 THE COURT: Thank you, Mr. Sykes. I'll stop you 21 there. I'll ask plaintiffs' counsel if they want to say 22 anything about this issue before we wrap up. 23 MR. MCCARTY: Your Honor, this is Warren McCarty 24 for the plaintiff. 25 THE COURT: During the trial make sure you're</p>	<p style="text-align: center;">31</p> <p>1 before the last postponement, could well be relevant to the 2 issue of damages. With regard to the issue of undue 3 prejudice and Rule 403. It doesn't strike me necessarily 4 that the Chem-Mod, an entity that the jurors will hear about 5 in another context, is for some reason a part of this 6 license, is so confusing that it would be unduly prejudicial 7 for this license to be discussed or admitted in this case. 8 For that reason I'll deny defendants' motion. 9 Counsel, we're about 9:20. I hope we're on time 10 and the jurors will be up here at 9:30. So I need to close 11 so we can prepare for the beginning of voir dire. Do you 12 have anything more? 13 MR. NEMUNAITIS: One quick issue, Your Honor. 14 Technically the wording of one of the motions in limine 15 deals with dropped claims and dropped parties and things 16 like that. It has an exception to be able to talk about 17 settlements agreements like this one. We wanted to mention 18 it in opening. I just want to make sure we were not going 19 to violate the motion in limine by mentioning the agreement 20 you said we could say in opening. 21 THE COURT: What thing and what motion in 22 limine? 23 MR. NEMUNAITIS: Dropped claims and dropped 24 issues in the case essentially. 25 THE COURT: With this license agreement if your</p>
<p style="text-align: center;">30</p> <p>1 projecting. I'll do the same. Mr. McCarty, go ahead 2 MR. MCCARTY: Yes, sir. We heard about juror 3 confusion potentially because of Chem-Mod, maybe some 4 prejudice. As Your Honor observed during the conference 5 prior to the last trial that was postponed, this license is 6 one of the reasons why the case was postponed and Mr. Sykes 7 on that call said on substance this agreement that has just 8 been entered into is highly relevant to damages. Your Honor 9 made the same observation given the nature of the parties. 10 This document is a document that is going to be used by the 11 plaintiffs' damages expert, it's a document that's going to 12 be introduced through the CEO of the company who negotiated 13 the license, the witnesses in this case had percipient 14 knowledge of this license and the parties have had a full 15 and fair opportunity to address that license through the 16 last several months. 17 THE COURT: Thank you, Mr. McCarty. I agree 18 with the plaintiffs' arguments about why it is this license 19 appears relevant. It is entered to into by a group of seems 20 to me fairly similarly situated defendants who were going to 21 be a part of trial prior to the last postponement. I'm not 22 saying ultimately the jury will be correct to believe this 23 license is a good one to use in figuring out damages, the 24 defendants will have arguments otherwise. But it certainly 25 seems one, as was suggested during the conference right</p>	<p style="text-align: center;">32</p> <p>1 expert is going to be opining on why it's relevant to 2 damages, yeah, it's going to be part of the case and you can 3 talk about it. It doesn't obviate anything in that regard, 4 Mr. Sykes. 5 MR. CALDWELL: Just briefly, Your Honor. Can we 6 get an instruction from the Court or direction from the 7 Court the plaintiff with that license agreement they can't 8 say because Chem-Mod took a license these defendants must 9 infringe just to eliminate that argument? 10 THE COURT: I don't know that the plaintiff is 11 going to make that argument, first of all. And I think we 12 talked about this in another context. It could be the case 13 that with regard to final jury instructions if there is some 14 potential for jury confusion with regard to Chem-Mod or its 15 role in the case that you might be able to tell me, Judge, 16 there needs to be some clarifying instruction with regard to 17 determining the case. I'm just not going to make a decision 18 on it right now. 19 MR. DORSNEY: Briefly, Your Honor. Would you 20 like up -- 21 THE COURT: Mr. Dorsney, you're asking about 22 what the process will be for the seating of prospective 23 jurors? 24 MR. DORSNEY: So we don't have a problem. Where 25 would you like our extra folks to sit while we have the voir</p>

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1 dire panel?

2 THE COURT: Our jury administrator will be up

3 here, you'll have to ask her. My understanding is she will

4 be bringing in jurors and they're going to be lined up and

5 randomly assigned juror numbers as we talked about in the

6 first pretrial conference. In terms of how much space

7 that's going to take up and where your folks should sit, she

8 should be in shortly.

9 Thank you. All right. Then the Court will

10 stand in recess. Thanks, everybody.

11 (A recess was taken, after which the following

12 proceedings were had:)

13 THE COURT: Welcome to our prospective jurors.

14 Everyone, I'm Judge Burke, and on behalf of my colleagues

15 here at the U.S. District Court For the District of Delaware

16 I just want to welcome you to our courthouse. And we very

17 much appreciate your participation in this voir dire process

18 here today.

19 I'm now going to begin by asking you some

20 questions which relate to your becoming jurors in this case.

21 This part of the trial, as I mentioned, is called a voir

22 dire examination of prospective jury members. Voir dire

23 simply means that you will truthfully answer questions which

24 are asked of you as a prospective juror in this proceeding.

25 The purpose of the voir dire examination is

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1 first to gain knowledge about your attitudes concerning

2 issues to be decided and questions answered in this case.

3 Second, to enable the Court to determine whether any

4 prospective juror should be excused, and then third, to

5 enable the counsel for the parties to exercise their

6 individual judgment with respect to peremptory challenges,

7 that is challenges for which no reason need be given by

8 counsel.

9 Now my courtroom deputy is going to administer

10 the oath because it's important that you answer the

11 questions that I'm about to ask truthfully. Let's have our

12 courtroom deputy swear in the panel.

13 (The venire panel was sworn.)

14 THE COURT: Okay. Ladies and gentlemen, you all

15 have a printed copy in front of you, hopefully, that has --

16 that's supposed to have all of the questions that I'm going

17 to ask you as part of this voir dire process listed on it,

18 but I want to make sure you actually do have all the pages

19 that you're supposed to have.

20 Just to let you know, you should have a document

21 that you're holding that's an eight-page document and in

22 total there's 19 questions on it. And you'll know that

23 because on the bottom of page 8 is the last question, it's

24 Question 19, and you should have each page of that

25 eight-page document. I just want to make sure because there

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1 was a little bit of confusion that everybody has a full

2 document of these voir dire questions in their possession

3 with all the pages. If anybody doesn't, if you could raise

4 your hand and let us know. Looks like everybody does.

5 Thank you. And the reason I say that is because if you

6 answer yes to any question -- you should also all have a

7 pen. Okay, great. What I'm going to do is I'm going to ask

8 that if your answer is yes to any of these questions, I'd

9 like you to take your pen and just circle the number of that

10 question. So, again, circle any question that you have a

11 yes answer to.

12 After I finish reading all the questions you may

13 be asked whether you answered yes to any questions. And

14 once I've completed all the questions I may ask some of you

15 who did answer yes to one or more questions to come back to

16 the jury room to discuss your answers with the lawyers and

17 me. So let's begin.

18 First, I'll tell you that this is a timed trial

19 which means that each side has a set amount of hours in

20 which to present their case. The presentation of evidence

21 in this case is expected to be completed either on this

22 Friday, March 1st or next Monday, March 4th. Jury

23 deliberations will follow and we expect to be completed with

24 the case by Monday, March 4th or Tuesday, March 5th.

25 The schedule that I expect to keep over the days

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1 of evidence presentation will include a morning break of

2 15 minutes, a lunch break of at least a half hour and an

3 afternoon break of 15 minutes. Trial will start each day at

4 9:00 a.m. and will finish no later than 5:00 p.m. each day.

5 So Question No. One is: Does the schedule I've

6 just mentioned present a special problem to any of you?

7 Next I'm going to ask you some questions

8 relating to the identification of the parties and their

9 counsel. These questions will be about the people involved

10 in this case so you can tell me if anyone here has any prior

11 dealings with anyone involved in the case.

12 Question No. 2 is that the plaintiffs in this

13 case are Midwest Energy Emissions Corp. and MES, Inc.

14 Together they will sometimes be referred to as ME2C.

15 Question No. 2 is: Have you or any of your close family

16 members had any dealings with either of the plaintiffs.

17 Question No. 3 is that ME2C is represented by

18 the Devlin Law Firm and the Caldwell, Cassady & Curry law

19 firm. The individual lawyers involved are James Lennon,

20 Peter Mazur, Bradley Caldwell, Justin Nemunaitis, Warren

21 McCarty, Daniel Pearson, Aisah Haley, Adrienne Dellinger and

22 Richard Cochrane. Do any of you know or are you acquainted

23 with these lawyers or any other lawyer and employees in

24 their offices?

25 Question No. 4 is: Do any of you have pending

<p style="text-align: center;">37</p> <p>1 business or have you had business with those law firms or 2 with ME2C?</p> <p>3 Question 5: There are 12 separate defendants 4 and/or counterclaim plaintiffs in this case. I'll refer to 5 these parties as defendants. The defendants are represented 6 by the same attorneys. I'll tell you the names of these 7 defendants and the counsel for them. The defendants are 8 CERT Operations II LLC, CERT Operations IV LLC, CERT 9 Operations V LLC, CERT Operations RCB LLC, Senescence Energy 10 Products, LLC; Bascobert (A) Holdings, LLC; Buffington 11 Partners, LLC; Larkwood Energy, LLC; Rutledge Products, LLC; 12 Cottbus Associates, LLC; Spring Hill Resources, LLC and 13 Marquis Industrial Company, LLC. Now I'm actually going to 14 ask you're a question. There wasn't a question in No. 5, 15 sorry about that. So if you have a yes answer, circle 16 No. 6, okay?</p> <p>17 The question is: Have any of you had dealings 18 with these entities? Also, these defendants are represented 19 by the law firms of Morris James LPP and Bradley Arant Boulton 20 Cummings LLP. The individual lawyers involved are Kenneth 21 Dorsney, Cortlan Hitch, Paul Sykes and Jeff Dyess. Do any 22 of you know or are you acquainted these lawyers or any other 23 lawyer or employees in their offices? Do any of you have 24 pending business or have you had business with those law 25 firms? So if the answer is yes to any of those questions</p>	<p style="text-align: center;">39</p> <p>1 patent infringement. For now I'll simply tell you that this 2 case is an action for patent infringement under the patent 3 laws of the United States. ME2C owns several United States 4 patents that relate to methods for capturing mercury from 5 the emissions of coal-fired power plants. ME2C has accused 6 defendants of indirectly infringing those patents by selling 7 a product known as refined coal and by inducing the power 8 plant customers that purchase its refined coal to practice 9 ME2C's patented methods without permission.</p> <p>10 If the jury in this case finds the defendant to 11 have indirectly infringed, then ME2C is seeking money 12 damages from that defendant of \$1 for each ton of refined 13 coal that the defendants sold to an infringing power plant 14 that used the refined coal to infringe the patents.</p> <p>15 Each defendant denies infringement in this case 16 and contends that ME2C is not entitled to damages. Each 17 defendant also contends that ME2C's patents are invalid.</p> <p>18 During the trial if you're selected for the 19 jury, you'll be asked to make decisions to resolve these 20 disputes between ME2C and the defendants. I've briefly 21 described the positions and contentions of the parties in 22 the case.</p> <p>23 So Question No. 9 is: Do any of you know 24 anything about this dispute other than what I've just 25 described?</p>
<p style="text-align: center;">38</p> <p>1 that is in No. 6, just circle No. 6.</p> <p>2 Next, during the course of the trial you may 3 hear references to companies that are not parties to this 4 case including but not limited to Arthur J. Gallagher & Co. 5 and Chem-Mod LLC. Question No. 7 is: Have any of you or 6 your close family members had any dealings with any of these 7 companies or any people from those companies or have you or 8 your close family members had any dealings with any company 9 that operates or provides services to a coal-fired power 10 plant? If yes, circle No. 7.</p> <p>11 Next question is about the witnesses. I'm going 12 to read a list of witnesses who may be called during this 13 trial: Rick MacPherson, Jim Trettel, John Pavlish, Michael 14 Holmes, Edwin Olson, Philip Green, Philip O'Keefe, Catharine 15 Lawton, Stephen Niksa, Connie Senior, Sally Batanian, Vince 16 Inendino, Katherine Panczak, Christopher Berkimer, George 17 Kotch, Vincent Verschuere, Leah Schaatt, Jeff Green, Thomas 18 Erickson, Jay Gunderson, William Whitney, George Kotch, 19 James Landreth, John Finlinson, Daniel Carro and Larry 20 Kuennen. Question 8 is: Do you know or are you acquainted 21 with any of the people that I just named?</p> <p>22 Now I'm going to ask you some questions about 23 the nature of the case. I'll tell you briefly about this 24 case and the parties involved.</p> <p>25 ME2C has sued each of the named defendants for</p>	<p style="text-align: center;">40</p> <p>1 Question No. 10 is: Have you, any members of 2 your family or close friends ever been involved in a patent 3 infringement case or involved in a controversy over a 4 patent?</p> <p>5 Question No. 11 says that this case is 6 specifically about patent infringement. Does anyone have 7 any beliefs or views about patent infringement lawsuits 8 generally?</p> <p>9 Next I have some questions about the technology 10 that may be at issue in this case. Question No. 12: As I 11 mentioned before that the technology in this case deals with 12 a way of capturing mercury emissions from coal-fired power 13 plants. Was anyone here familiar with that type of 14 technology before today?</p> <p>15 Question No. 13 is: Has anyone here ever worked 16 at a power plant?</p> <p>17 Question No. 14: Has anyone here ever worked 18 with pollution control technology?</p> <p>19 Question No. 15: Has anyone here ever worked in 20 the chemicals industry?</p> <p>21 Question No. 16: Has anyone here ever worked 22 for an engineering firm or as a process engineer?</p> <p>23 Question No. 17: The technology in this case 24 involves power plants that combust coal to generate 25 electricity. Does anyone here have strong feelings about</p>

<p style="text-align: center;">41</p> <p>1 coal to the point that you could not follow the law in 2 deciding the case? 3 Next a question about the burdens of proof and 4 the law. One of your duties as jurors is to take the law as 5 I instruct you, apply it to the facts and decide which party 6 should prevail on the issues presented. It is my 7 responsibility to decide which rules of law apply to the 8 case and to instruct you on what legal principles to follow. 9 In addition, because this is a patent case I'll also provide 10 you definitions of what certain terms of the patents mean. 11 These are called the Court's claim constructions. You are 12 bound by your oath as jurors to follow the Court's 13 instructions and its claim constructions even if you 14 personally disagree with them. 15 So Question No. 18: Would anyone be unable to 16 follow my instructions in this case if you personally 17 disagree with the instructions provided by the Court? 18 And then lastly, a concluding question which is 19 Question No. 19: Is there anything else including something 20 you have remembered in connection with one of the earlier 21 questions or that any of you think may prevent you from 22 rendering a fair and impartial verdict based solely upon the 23 evidence and my instructions as to the law? 24 Okay. All right. So I want you to circle the 25 number of any questions for which you had a yes answer to.</p>	<p style="text-align: center;">43</p> <p>1 both in the hospital and their days fluctuate during the 2 week. I'm supposed to do it tomorrow and Wednesday for one 3 that's a nurse at Christiana. 4 THE COURT: Okay. So you're the primary 5 caretaker for your kids' kids. 6 PROSPECTIVE JUROR: Yes. 7 THE COURT: And you're scheduled to watch them 8 tomorrow and Wednesday? 9 PROSPECTIVE JUROR: Of this week. It fluctuates 10 during the week. They have different days. Sometimes it 11 can be a Monday and a Thursday or a Tuesday and Friday. 12 THE COURT: Okay. Got it. And I guess the 13 question would be: Would it be feasible or would you and 14 your kids be able to make alternate plans for someone to 15 watch the kids? 16 PROSPECTIVE JUROR: Pretty much everybody else 17 works. I'm the only one that doesn't work so -- I mean, 18 they'd have to take off from their jobs if we tried to get 19 somebody else is the thing. 20 THE COURT: Okay. 21 PROSPECTIVE JUROR: And one's husband is a 22 principal at a high school and that would create a conflict 23 there. It's just difficult, you know. I guess not 24 impossible but difficult, especially since tomorrow is my 25 first day because you're saying it would start now, right?</p>
<p style="text-align: center;">42</p> <p>1 What will happen now, everyone, is that I'll leave the 2 bench, I'm going to have certain of the lawyers for each 3 side, two per side, come back with me and my staff to my 4 jury room and then others of my staff members will work with 5 you to figure out which of you we need to bring back, if 6 any, to talk with us about any yes answers that you had, and 7 we'll proceed as efficiently as we can to complete the voir 8 dire process. 9 I expect that the process will be completed by 10 lunchtime, but it may take some time between now and then, 11 so I just ask you to be patient with us. 12 All right. Unless there's anything further, the 13 Court will stand in recess. Thank you. 14 (The following proceedings were had in 15 chambers.) 16 THE CLERK: This is Juror No. 2. 17 THE COURT: Okay. So you're Ms. Ellingsworth? 18 PROSPECTIVE JUROR: Yes. 19 THE COURT: Okay. Welcome. I'm with 20 plaintiffs' counsel and defendants' counsel here. I'm just 21 going to ask you a few questions and they may have some 22 follow-up questions. So you had a yes answer to at least 23 question. What question was that? 24 PROSPECTIVE JUROR: That was the time period. I 25 take care of my grandchildren while my two daughters work,</p>	<p style="text-align: center;">44</p> <p>1 THE COURT: It will start today, yes. 2 PROSPECTIVE JUROR: It would be difficult to do 3 especially this week. 4 THE COURT: Okay. Let me ask if the plaintiffs' 5 counsel has any questions. 6 MR. SYKES: I have no questions, Your Honor. 7 THE COURT: Okay. And defendants' counsel? 8 MR. DORSNEY: No questions, Your Honor. 9 THE COURT: Ms. Ellingsworth, there were no 10 other questions that you had a yes answer to? 11 PROSPECTIVE JUROR: No, as long as I would 12 understand what everybody was talking about. 13 THE COURT: All right. Well, thank you very 14 much, ma'am. I appreciate it. 15 PROSPECTIVE JUROR: All right. Thank you. 16 THE COURT: Any applications plaintiffs' side? 17 MR. SYKES: None, Your Honor. 18 THE COURT: Defendants' side? I'm a little 19 concerned about whether the juror could be available Tuesday 20 and Wednesday. She said it's not impossible but that it 21 would be potentially pretty difficult. Any concerns about 22 that? 23 MR. SYKES: I mean, I don't want to sound like 24 I'm being insensitive about it, I just know that probably 25 most of the folks who have come here today probably have to</p>

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1 shuffle some things around so it wouldn't apply for a cause
 2 dismissal on that basis.
 3 THE COURT: On defendants' side?
 4 MR. DORSNEY: I don't know if I would apply for
 5 a basis, but she's early so if we're going to allow someone
 6 out for that reason, I'm sure they wouldn't object.
 7 THE COURT: Okay. I'm concerned enough. It is
 8 early, we do have a lot of additional potential jurors. I'm
 9 concerned enough with her being a primary caretaker or at
 10 least appearing not to have any idea as to how they would
 11 fix that problem and they'd have to fix it by tomorrow and
 12 that concerns me. So I don't want to have a situation where
 13 we lose a juror on our second day. So I'm going to go ahead
 14 and strike Juror No. 2 for cause.
 15 All right. We'll bring the next juror in.
 16 THE CLERK: This is Juror No. 4.
 17 THE COURT: Hi, sir. Come on in. Have a seat.
 18 PROSPECTIVE JUROR: Good morning.
 19 THE COURT: Good morning. Are you Mr. Dailey?
 20 PROSPECTIVE JUROR: Yes, I am.
 21 THE COURT: Okay. Welcome. These folks are
 22 with the plaintiffs' side and these folks over here are with
 23 the defendants' side. You had a yes answer to some of the
 24 questions?
 25 PROSPECTIVE JUROR: Yes.

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1 THE COURT: Tell me which questions.
 2 PROSPECTIVE JUROR: 13, 14, and 15.
 3 THE COURT: So 13 was: Have you ever worked at
 4 a power plant. 14 was: Anyone here ever worked with
 5 pollution control technology. And 15 was: Anybody here
 6 ever worked in the chemicals industry.
 7 So tell me about your answers to those.
 8 PROSPECTIVE JUROR: Well, I'm a union plumber
 9 and pipe fitter, and I worked at Delaware City Refinery for
 10 quite some time. I'm familiar with, you know, pollution
 11 control technologies as far as scrubbers and things like
 12 that and, you know, just dealing with being -- working
 13 around the refinery. I'm not familiar with the chemicals
 14 per se but the piping side of it.
 15 THE COURT: Could you let the folks know at the
 16 refinery, what kind of work does the refinery do? What does
 17 it do with chemicals?
 18 PROSPECTIVE JUROR: Well, there's an acid plant
 19 down there. They make propane gas, oil, you know, regular
 20 gas.
 21 THE COURT: Okay. Now, in this case, I would be
 22 giving you a lot of instructions on what the rules are that
 23 you'd have to follow, things like how you should deal with
 24 evidence and how you should respond as a juror. And the
 25 thing you'd have to be able to do is even if you had

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1 knowledge about something that might be related to the case
 2 from your work, you have to kind of make sure that whatever
 3 that knowledge is it didn't stop you from following the
 4 rules as I give you, including that the only evidence you
 5 could consider is the evidence that we hear during the
 6 trial. If I said that to you, would you be able to do that
 7 in this case?
 8 PROSPECTIVE JUROR: I believe so, yeah.
 9 THE COURT: Okay. Let me see if the lawyers
 10 have any questions on plaintiffs side.
 11 MR. SYKES: At this point we're allowed to
 12 direct questions to the juror?
 13 THE COURT: You may, yes.
 14 MR. SYKES: Thank you, Your Honor.
 15 Sir, is there anything in your experience at
 16 that refinery and pipe fitter work make you feel like you
 17 come in sort of already equipped with an understanding of
 18 how pollution control works at a coal --
 19 PROSPECTIVE JUROR: No.
 20 MR. CALDWELL: -- electrical plant?
 21 PROSPECTIVE JUROR: No.
 22 MR. CALDWELL: Have you ever worked with
 23 anything related to mercury capture?
 24 PROSPECTIVE JUROR: No, I have not. Not that
 25 I'm aware of, but you know.

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1 MR. SYKES: Fair enough.
 2 Would you say that your experience working at a
 3 refinery and as a pipe fitter -- I understand you said you'd
 4 follow the Court's instructions, but do you think your
 5 experience working for a plant like that maybe start you out
 6 leaning one way or another like in favor of kind of the
 7 plant because the plant is sort of the type of place that
 8 would employ folks like yourself, like pipe fitters and
 9 whatnot?
 10 PROSPECTIVE JUROR: Not necessarily, no. No, I
 11 kind of keep an open mind to everything, you know. I don't
 12 try and focus, you know, in on one thing, you know.
 13 MR. SYKES: I just want to make it clear. I
 14 mean, the reason I'm asking is that I represent the
 15 plaintiff in this case. They aren't a plant, and do you
 16 think the fact that I represent the plaintiff who is going
 17 to be looking at what they believe to be patent infringement
 18 at plants might start you out kind of leaning in favor of
 19 the other party?
 20 PROSPECTIVE JUROR: I don't believe so, no.
 21 MR. SYKES: You'd be able to apply the Court's
 22 rules fairly?
 23 PROSPECTIVE JUROR: Absolutely.
 24 MR. SYKES: Thank you.
 25 THE COURT: Defendants' counsel, any questions?

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1 MR. WILSON: I think I'd just ask a follow-on to
2 that question. You wouldn't be inclined to lean in favor of
3 somebody who was more aligned with the plant in favor of the
4 plant, would you?

5 PROSPECTIVE JUROR: No. Okay. I was -- I
6 didn't work directly for the refinery. We're hired like a
7 subcontractor, okay, through the union. So, you know, I
8 worked for Local 74 plumbers and pipe fitters. I did not
9 work for Delaware City Refinery plant. So as far as the
10 plant operations and things like that, I have no clue on how
11 it works, you know, other than them handing us blueprints
12 and saying, you know, this pipe goes here or, you know,
13 whatever the case may be. But I did not work directly for
14 the refinery itself.

15 MR. WILSON: Did any of your experience as a
16 pipe fitter, as a contract worker lead you to believe that
17 industrial facilities like plants like refineries are bad
18 people and other folks are good people?

19 PROSPECTIVE JUROR: No.

20 MR. DORSNEY: How many years did you work at the
21 refinery?

22 PROSPECTIVE JUROR: Six years full-time and
23 then, you know, a couple years every now and then for a few
24 months, but six years pretty much steady.

25 MR. DORSNEY: And you said Local 74, is that a

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1 Delaware local?

2 PROSPECTIVE JUROR: Yes.

3 MR. DORSNEY: No further questions.

4 THE COURT: All right. Mr. Dailey, thank you.
5 I appreciate it. She'll help you out.

6 Okay. Any applications?

7 MR. SYKES: No, sir.

8 THE COURT: On defense side?

9 MR. DORSNEY: No, Your Honor.

10 THE COURT: Okay. I agree. The juror remains
11 in our pool.

12 All right. Let's bring in the next juror.

13 THE CLERK: This is Juror No. 5.

14 THE COURT: Is it Ms. Frosch?

15 PROSPECTIVE JUROR: Frosch.

16 THE COURT: Okay. Please have a seat. Thank
17 you. Welcome.

18 These are some folks here from the plaintiffs'
19 side, lawyers, and then the lawyers for the defendants' side
20 as well.

21 Ms. Frosch, you had some yes answers. I think I
22 heard my deputy say it was Question 1.

23 PROSPECTIVE JUROR: It was Question 1.

24 THE COURT: And what were the other ones just so
25 I know?

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1 PROSPECTIVE JUROR: One I had a question on --
2 well, actually 7, 17, and 19.

3 THE COURT: So 1, 7, 17, and 19?

4 PROSPECTIVE JUROR: Yes.

5 THE COURT: Okay. Let's start with 1. What was
6 your question?

7 PROSPECTIVE JUROR: Well, I didn't realize that
8 the case could go into March thinking January, February was
9 the date. So as of Monday I was planning -- we have a lake
10 house up in northeast Pennsylvania, which is actually coal
11 country, that's by biggest issue here, and we had planned to
12 go up there. Monday through Friday this week was not a big
13 deal. That was my biggest issue.

14 THE COURT: Okay. We do expect that it is
15 possible, well, probably likely that the jury will have to
16 sit on Monday of next week, maybe Tuesday too. That's our
17 best guess. Theoretically possible that the jury could be
18 concluded by Friday, but we have to assume Monday or Tuesday
19 is possible.

20 I guess there, I notice you're retired. If you
21 were selected, would you be able to say, look, we had
22 planned to go Monday, but yes, if I had to stay even if it
23 was through Tuesday, I could do it, we could go Wednesday.
24 It wouldn't love, but I could do it.

25 PROSPECTIVE JUROR: This might sound crazy, but

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1 I'm a very big planner. This weekend my granddaughter is in
2 high school, she's graduating and it's her final musical, so
3 we're going -- and that's out near Harrisburg. We'll bring
4 two of my other grandchildren, we're going up there, then we
5 have to take them home on Sunday. One lives in
6 Gilbertsville, one lives in Philly, and from there we were
7 planning to drive up so we didn't have to drive back down
8 here and go back up.

9 Technically I could have my husband take the
10 kids back and I would have to drive up separately. I'm not
11 a big driver. It was bad enough driving into Wilmington
12 today. I was, like, I don't miss working anymore, coming
13 into the city. That's my biggest reason.

14 I could make arrangements if I had to. Would I
15 like to? No, but I can.

16 THE COURT: Okay. Your granddaughter's
17 graduation, when is that happening?

18 PROSPECTIVE JUROR: It's not until May, but this
19 is her musical this weekend --

20 THE COURT: Oh, it's over the weekend.

21 PROSPECTIVE JUROR: -- and she's -- it's
22 Saturday, and she's the lighting director.

23 THE COURT: So you guys were bringing her
24 upstate this weekend?

25 PROSPECTIVE JUROR: My other kids -- we were

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1 bringing two of my other grandchildren to see the play --

2 THE COURT: Okay.

3 PROSPECTIVE JUROR: -- and then they're coming

4 back down here and then we have to take them home Sunday.

5 THE COURT: Okay.

6 PROSPECTIVE JUROR: So that -- it was just

7 logistics so I didn't have to drive three hours up to our

8 lake on Monday, Tuesday or Wednesday.

9 THE COURT: So it would be difficult

10 logistically, but you don't want to do it. You could do it

11 if you had to.

12 PROSPECTIVE JUROR: I could if I had to.

13 THE COURT: Okay. Let me ask you then about

14 Question No. 7. This was the question about whether any of

15 you or your family members had dealings with companies like

16 Arthur J. Gallagher or Chem-Mod.

17 PROSPECTIVE JUROR: It's none of those

18 companies. My thing is it's just this is coal-fired. My

19 grandparents worked in the coal mines years ago. My

20 grandfather died because of the coal mines. We're

21 originally from the Scranton/Carbondale area. So that's

22 just when I saw coal I said I just need to let you know I

23 have a history and a family history of coal-related issues.

24 THE COURT: Okay. And that was also related to

25 Question 17 which was asking: Does anyone here have strong

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1 feelings about coal.

2 PROSPECTIVE JUROR: Right. I mean, I grew up

3 there. I'm not a big fan of coal-fired things. It's dirty.

4 I'll be honest with you, it's dirty. You know, but that's

5 related to this. I have no idea what any of this stuff is.

6 THE COURT: Understood. Now, in this case the

7 technology at issue and patents at issue relate to ways of

8 trying to take pollutants out of coal to make it in some

9 ways less dirty. On one side is a party that has a patent

10 and they're going to be arguing that the other side, the

11 defendants who worked with power plants that burned coal

12 infringed the patent, and the defendants are going to

13 arguing, no, we didn't.

14 Would the fact that -- I will tell you that you

15 will need to -- if you're a juror, you have to be fair to

16 both sides which means you'd have to follow the rules I gave

17 you, and you couldn't come in saying, look, I don't love

18 coal so if, like, I feel like one side or the other is too

19 close to people who work with coal, they start out, like,

20 kind of in a bad place with me.

21 Would you be able to come in and be fair or

22 would you hold it against one side if they had a

23 relationship with burning coal or involved with coal?

24 PROSPECTIVE JUROR: That's a hard question for

25 me to answer only because that was a livelihood for my

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1 ancestors growing up in the coal country. So that was very

2 important to them, that was their livelihood. It's not a

3 big part of it now, I just -- and I'm glad to see they're

4 taking something out of the coal to make it eco friendly or

5 whatever. It's tough for me to answer. I'll be honest,

6 it's very hard more me to answer that question.

7 THE COURT: Okay. The last question, No. 19 I

8 think was, like, do you have any other -- any other thing.

9 Was that kind of related to the schedule?

10 PROSPECTIVE JUROR: Yeah, because I didn't know

11 how to bring it all in to you just to let you know that

12 that's by background.

13 THE COURT: Understood. Let me let the lawyers

14 ask some questions now and see if I have any follow-up.

15 PROSPECTIVE JUROR: Sure.

16 THE COURT: Let's ask the plaintiffs' counsel

17 first. Mr. Caldwell?

18 MR. SYKES: I don't have any questions.

19 THE COURT: And defendants' side?

20 MR. DORSNEY: I'm sorry if this is a touchy

21 topic, but you said you had a family member that had passed

22 away from a coal-related disease?

23 PROSPECTIVE JUROR: Yeah, it was my father's

24 father.

25 MR. DORSNEY: He worked in the coal mines for a

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1 number of years?

2 PROSPECTIVE JUROR: He worked in the coal mines.

3 MR. DORSNEY: Does it have anything to do with

4 black lung or something like that?

5 PROSPECTIVE JUROR: I don't know exactly what it

6 was. I'm pretty sure it was, but he -- that was years ago

7 and he -- many, many obviously.

8 MR. DORSNEY: And has that influenced your view

9 of coal in general over the years?

10 PROSPECTIVE JUROR: I just look at coal as dirty

11 honestly because living in the area, and what I remember as

12 a kid you'd go down through that area, it might be nice and

13 pretty and snowy, not when the coal was burning or you'd see

14 the hills burning with the coal coming through the hills and

15 stuff like that. So this was the impression that I was left

16 with as a kid.

17 MR. DORSNEY: Thank you.

18 THE COURT: One last question. Again, here in

19 this case it's alleged that the plaintiffs' technology helps

20 remove from coal, from burning coal some bad chemicals, and

21 that the defendants, it's alleged that they were doing

22 things to help do that.

23 PROSPECTIVE JUROR: Right.

24 THE COURT: So in other words, based on what

25 you've heard so far from what I told you about the case, is

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1 there anything you heard from either said where you'd say
2 based on my experience with coal I don't think I'd like this
3 side or that side or not necessarily?
4 PROSPECTIVE JUROR: It's not necessarily. I
5 mean, I'm looking at it as it's progress I guess.
6 THE COURT: And as a juror you would make every
7 effort to follow my instructions?
8 PROSPECTIVE JUROR: Yeah, I definitely would.
9 THE COURT: Okay. Ms. Frosch, anything further?
10 PROSPECTIVE JUROR: Not that I can think of.
11 THE COURT: The court deputy will help you step
12 outside.
13 PROSPECTIVE JUROR: Thank you.
14 THE COURT: Applications from plaintiffs' side?
15 MR. SYKES: No, Your Honor.
16 THE COURT: Any applications from defendants'
17 side?
18 MR. DORSNEY: I think we should -- I guess we
19 would make the application that she should not serve on the
20 jury. I think she had a difficult time answering your
21 question directly as whether or not she would have some type
22 of -- I know you did follow up with the question, but
23 originally when she answered the question she had a
24 difficult time answering it one way or the other whether or
25 not she would have some type of bias that would be brought

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1 into her decision-making. She hasn't seen the evidence yet,
2 so anything that is present now would be amplified in that
3 process. The fact that she's lost a family member due to a
4 coal-related disease and coal-related disease that she tied
5 to pollution later on that she saw in the streets and the
6 hills and during the snow I think makes her unqualified and
7 unfit to serve on the jury.
8 THE COURT: I guess one question I would have
9 is -- I talked about this with the juror is, I mean, in a
10 sense, like, on the defendants' side, you know, the
11 allegation is they're working with power plants to really
12 try to help the environment in a sense to provide coal to be
13 burned in a more environmentally friendly way, kind of like
14 the opposite of maybe someone who has said in the past one
15 of their relatives had died of coal-related inhalation would
16 be worried about it. So, I guess, what's the argument
17 there?
18 MR. DORSNEY: Well, I think I was looking beyond
19 that, Your Honor, to whether or not she's going to put an
20 unwarranted value on the technology. Maybe she credits both
21 sides with the fact that we're trying to do something right
22 but then she sees value in the technology that it does not
23 belong so then the damage figure does not accurately
24 represent the benefit that the patented technology has rally
25 provided in the industry. So I think that that would

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1 influence that. So I was trying to go beyond that issue.
2 MR. WILSON: I think I just supplement, Your
3 Honor. I think -- my opinion of how the evidence is going
4 to play out in this case is we're going to be more closely
5 tied to the power plant.
6 MR. DORSNEY: Because they're dirty.
7 MR. DYESS: We're going to be -- I just think
8 that's an unfair prejudice towards our side through that. I
9 think that natural connection is going to come out in the
10 evidence.
11 THE COURT: Okay. All right. Having heard
12 everything, I am not going to strike this juror for cause at
13 this time. On the -- with regard to the questions about her
14 schedule, although which no one is suggesting is a reason
15 for cause strike, although she said it would be -- you know,
16 take some struggling, she could serve on this jury.
17 And then with regard to the issue about coal, I
18 do acknowledge that she has a relative who has had some
19 serious experience with coal and its effects, but I think
20 ultimately her answers to the questions didn't indicate to
21 me off the top that she would necessarily have a bias with
22 regard to either of the sides here including defendants'
23 side in terms of what the nature of their work with power
24 plants is, as I've described it.
25 To the extent there is some concern with the

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1 witness ascribing too much value to plaintiffs' technology,
2 I didn't hear anything that would suggest that coming out of
3 her statements, and so I'm not going to strike this juror
4 for cause. I'm going to leave her in the pool subject to
5 peremptory challenges of course.
6 Okay. All right. Let's bring the next juror
7 in.
8 THE CLERK: This is Juror No. 8.
9 THE COURT: Are you Mr. Bazemore?
10 PROSPECTIVE JUROR: Yes.
11 THE COURT: All right. Please have a seat here.
12 How are you doing?
13 PROSPECTIVE JUROR: Okay. How are you?
14 THE COURT: Good. Thanks for being with us.
15 PROSPECTIVE JUROR: Thank you.
16 THE COURT: I'm Judge Burke, as I said. These
17 are the lawyers on the plaintiffs' side, and they can
18 introduce themselves, and these are the lawyers on the
19 defendants' side. I know you had a yes answer or more than
20 one. Which questions did you answer yes to?
21 PROSPECTIVE JUROR: Just No. 1.
22 THE COURT: Okay. Tell me what your concern was
23 there.
24 PROSPECTIVE JUROR: Just because I'm still in
25 physical therapy twice a week from a prior auto accident I

<p style="text-align: center;">61</p> <p>1 had last year.</p> <p>2 THE COURT: Okay.</p> <p>3 PROSPECTIVE JUROR: So that just my trying to</p> <p>4 see if -- make sure I can still make those scheduled</p> <p>5 appointments.</p> <p>6 THE COURT: When are your physical therapy</p> <p>7 appointments?</p> <p>8 PROSPECTIVE JUROR: It's usually Tuesdays and</p> <p>9 Thursdays twice a week.</p> <p>10 THE COURT: And what time are they?</p> <p>11 PROSPECTIVE JUROR: Usually anywhere between</p> <p>12 11:00 or 1:00, whichever one I can actually fit into.</p> <p>13 THE COURT: Okay. Yeah, so we would -- if you</p> <p>14 were a member of the jury, you would have to be here between</p> <p>15 11:00 and 1:00 this Tuesday and Thursday. It's possible the</p> <p>16 case could even go until next Tuesday, like we said,</p> <p>17 although, that's probably the latest it would go. So to</p> <p>18 serve, you would not be able to attend therapy this Tuesday</p> <p>19 or -- do you go both days or just one?</p> <p>20 PROSPECTIVE JUROR: Both days.</p> <p>21 THE COURT: Both days. If you had to miss those</p> <p>22 appointments, is that doable? I don't know in terms of</p> <p>23 maybe you can tell a little more about, you know, if you're</p> <p>24 comfortable, why you're going to therapy and would it be</p> <p>25 doable to not make them this week?</p>	<p style="text-align: center;">63</p> <p>1 28th or 29th this week.</p> <p>2 THE COURT: So you're supposed to get an MRI too</p> <p>3 this week?</p> <p>4 PROSPECTIVE JUROR: Yes.</p> <p>5 THE COURT: During the day obviously?</p> <p>6 PROSPECTIVE JUROR: Yes.</p> <p>7 THE COURT: Okay. Let me see if the lawyers</p> <p>8 have questions for you.</p> <p>9 MR. CALDWELL: I don't, Your Honor.</p> <p>10 THE COURT: Okay.</p> <p>11 MR. DORSNEY: The MRI, I'm assuming it took a</p> <p>12 while to get that on the books?</p> <p>13 PROSPECTIVE JUROR: Yeah. Well, it was pretty</p> <p>14 fast but usually because they want that done prior to my</p> <p>15 next doctor visit that I have coming up in I think mid</p> <p>16 March.</p> <p>17 THE COURT: And you mentioned that you're still</p> <p>18 feeling some pain. Do you feel pain when you sit for long</p> <p>19 stretches?</p> <p>20 PROSPECTIVE JUROR: Yeah, I do. I mean, because</p> <p>21 a lot of my job is constantly walking, so usually once I</p> <p>22 kind of walk, the muscles kind of loosen up and once I sit</p> <p>23 they kind of -- for a long period of time --</p> <p>24 MR. DORSNEY: They begin to tighten up again,</p> <p>25 right? And you said you were involved in August?</p>
<p style="text-align: center;">62</p> <p>1 PROSPECTIVE JUROR: Possibly but I'm not a</p> <p>2 hundred percent sure because with my back doctor, he wanted</p> <p>3 many me to go to therapy for six weeks because I also have</p> <p>4 an MRI scheduled at the end of this week for my neck and</p> <p>5 back.</p> <p>6 THE COURT: Are why are you going to therapy?</p> <p>7 PROSPECTIVE JUROR: From an auto accident I had.</p> <p>8 I was hit from the rear.</p> <p>9 THE COURT: And how long ago was that?</p> <p>10 PROSPECTIVE JUROR: This was August 14th of last</p> <p>11 year.</p> <p>12 THE COURT: Okay. So your doctor has ordered</p> <p>13 that you go to therapy twice a week?</p> <p>14 PROSPECTIVE JUROR: Yeah. I've been going to</p> <p>15 physical therapy ever since the auto accident. So the last</p> <p>16 visit I had I think it was, like, maybe 2 or 3 weeks with my</p> <p>17 actual back doctor, I was still having pain so -- from</p> <p>18 actually returning back to work just this December because I</p> <p>19 was out of work for about four months. So just going back</p> <p>20 in, like, late December, I've still been having some pain.</p> <p>21 So going back there for my follow-up visit, he recommended</p> <p>22 me getting that MRI just to check to make sure I don't have</p> <p>23 any nerve damage.</p> <p>24 THE COURT: When is your MRI scheduled for?</p> <p>25 PROSPECTIVE JUROR: I believe it's either the</p>	<p style="text-align: center;">64</p> <p>1 PROSPECTIVE JUROR: Correct.</p> <p>2 MR. DORSNEY: And you involved in litigation</p> <p>3 related to that --</p> <p>4 PROSPECTIVE JUROR: Yes.</p> <p>5 MR. DORSNEY: -- auto accident as well?</p> <p>6 PROSPECTIVE JUROR: Yes.</p> <p>7 MR. DORSNEY: Okay. And you've been going</p> <p>8 consistently to therapy since then twice a week?</p> <p>9 PROSPECTIVE JUROR: Yes.</p> <p>10 MR. DORSNEY: Is that what the doctors</p> <p>11 recommended?</p> <p>12 PROSPECTIVE JUROR: Correct.</p> <p>13 MR. DORSNEY: Okay. With that follow-up with</p> <p>14 the MRI this week, correct?</p> <p>15 PROSPECTIVE JUROR: Correct.</p> <p>16 MR. DORSNEY: Okay. No further questions.</p> <p>17 THE COURT: Okay. Thanks, Mr. Bazemore. That's</p> <p>18 all we have.</p> <p>19 Counsel, I'm inclined to strike the juror for</p> <p>20 cause. Any objections there?</p> <p>21 MR. DORSNEY: No objection.</p> <p>22 THE COURT: So Juror No. 8 will be struck for</p> <p>23 cause in light of the fact that he's clearly got a serious</p> <p>24 injury that his doctor has ordered him to go to therapy for</p> <p>25 multiple times during the week. He'd have to serve as well</p>

<p style="text-align: center;">65</p> <p>1 as having an MRI, and I don't want to mess with his health 2 in that way. 3 Okay. Let's bring in our next juror. 4 THE CLERK: This is Juror No. 9. 5 THE COURT: Good morning, Mr. Brown is it? 6 PROSPECTIVE JUROR: Yes. 7 THE COURT: Have a seat, please. 8 PROSPECTIVE JUROR: Good morning. 9 THE COURT: I'm Judge Burke again, and these are 10 the plaintiffs' lawyers and the defendants' lawyers. I know 11 you had a yes answer to at least one of the questions. What 12 questions did you have a yes answer to? 13 PROSPECTIVE JUROR: No. 6. 14 THE COURT: Okay. All right. And Question 15 No. 6 was: Have you had any dealings with any of the 16 lawyers for the defendants' side working at the Morris James 17 firm or the Bradley Arant firm or including any of the 18 lawyers working on this case. Tell me about that. 19 PROSPECTIVE JUROR: None of the lawyers working 20 on the case, but I do know somebody that works at the firm. 21 Well, I'm not even sure if they're there anymore. 22 THE COURT: Is this Morris James? 23 PROSPECTIVE JUROR: Yes. 24 THE COURT: Okay. Who is the person you know? 25 PROSPECTIVE JUROR: Patricia Winston.</p>	<p style="text-align: center;">67</p> <p>1 defendants were likely right or giving them some kind of 2 edge or would you be able to put that out of your mind and 3 say, no, I got to judge this fairly. 4 PROSPECTIVE JUROR: No, I wouldn't. I just 5 thought, you know, I'd be honest about it. 6 THE COURT: Oh, no, that's great. I appreciate 7 it. I guess on the flip side, like, we wouldn't want you 8 coming in saying -- I don't know if you had not a good 9 relationship with somebody who used to work there, you would 10 hold it against them. Would you do that? 11 PROSPECTIVE JUROR: No. 12 THE COURT: You wouldn't hold it against them, 13 right? 14 PROSPECTIVE JUROR: No, no. 15 THE COURT: All right. Let me ask if 16 plaintiffs' counsel has any questions. 17 MR. SYKES: Briefly, thank you. 18 So obviously, my job is to fairly represent my 19 client and make sure that they start out with everything 20 even, and naturally our concern will be if your friend, your 21 childhood friend you had a relationship with apparently had 22 a close working relationship with Mr. Dorsney and he's one 23 of the few lawyers that will be on the other side against 24 us, does that mean my client starts out a little bit behind? 25 In other words, you don't know me from Adam but you feel</p>
<p style="text-align: center;">66</p> <p>1 THE COURT: Okay. She's not there anymore. She 2 became a judge -- 3 PROSPECTIVE JUROR: Yeah, I heard that. 4 THE COURT: -- at the Superior Court. And how 5 do you know Judge Winston? 6 PROSPECTIVE JUROR: Childhood friends and, you 7 know, we had a relationship at one point. 8 THE COURT: Okay. All right. Now, she did used 9 to work at Morris James. 10 And, Mr. Dorsney, how long did she work there? 11 MR. DORSNEY: She worked there at least ten 12 years that I was there before she took the bench. 13 THE COURT: Okay. All right. 14 MR. DORSNEY: And, Your Honor, she did work in 15 my litigation group just full disclosure. 16 THE COURT: Okay. All right. So I guess, 17 Mr. Brown, the real question is just that I know you know 18 Judge Winston from the past. The question or concern would 19 be like if for some reason coming into this case, I will 20 tell you, look, you have to listen to my instructions, you 21 have to follow all the rules I give you and you couldn't 22 come in, like, biased or in favor of one side or the other. 23 So is the fact that you know somebody who used to work for 24 one of the law firms that is representing the defendants' 25 side, would that mean that you would come in thinking the</p>	<p style="text-align: center;">68</p> <p>1 like there's a connection with the lawyers on the other 2 side? 3 PROSPECTIVE JUROR: No. 4 MR. SYKES: Could you be able to sort of set 5 that aside completely and say, hey, you know, lawyers work 6 for different people, whatever I knew about the past has 7 absolutely no bearing on the parties in this case? 8 PROSPECTIVE JUROR: Yeah. 9 MR. CALDWELL: Thank you. 10 THE COURT: All right. Defendants' side? 11 MR. DORSNEY: No questions, Your Honor. 12 THE COURT: All right. Mr. Brown, anything 13 else? 14 PROSPECTIVE JUROR: No. 15 THE COURT: All right. Thank you, sir. She'll 16 show you out. 17 Applications for plaintiffs? 18 MR. SYKES: I'll make the application because I 19 just -- I do feel like I mean, it's not just, hey, it's 20 somebody I knew kind of in passing socially, it sounds like 21 a long-term childhood friend with whom he had a 22 relationship, I think the fact that it was someone that 23 worked closely with opposing counsel who was also elevated 24 to a judgeship, it's, like, an implementer of legitimacy or 25 just authority that I think we would start off with an</p>

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1 uneven position on, and for that reason I would move to
2 strike for cause because of that past relationship. It
3 sounds extensive. I mean, it's not just kind of in passing.
4 THE COURT: Okay. Any applications on the
5 defense side or any response?
6 MR. DORSNEY: No application, but I've never had
7 a relationship with this individual nor did I know that
8 Patricia had a relationship with this individual. I don't
9 think the fact that he knew somebody in our law firm as a
10 child is a basis to strike this individual for cause when
11 they have three peremptory challenges and they're welcome to
12 use one of them.
13 THE COURT: Okay. I agree with the defense. I
14 am not going to strike Juror No. 9 for cause. In part I say
15 this too because just observing his demeanor when he
16 answered the question, he was very firm, I think, in
17 emphasizing that no, this would not be an issue, and I think
18 that also had an impact on me as well.
19 All right. So he'll remain in the pool and
20 we'll move on to our next juror.
21 THE CLERK: This is Juror No. 13, Mr. Murphy.
22 THE COURT: All right. Mr Murphy, come on in,
23 have a seat.
24 PROSPECTIVE JUROR: Good morning. How are you?
25 THE COURT: How you doing? Good.

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1 Mr. Murphy, I'm Judge Burke again and these are
2 the lawyers for the plaintiffs' side and the lawyers for the
3 defendants' side. I know you had a yes answer to at least
4 one question. Which questions did you have a yes answer to?
5 PROSPECTIVE JUROR: I had a yes answer to a
6 number actually. 1 --
7 THE COURT: Question 1.
8 PROSPECTIVE JUROR: 7, 10, 11, and 19.
9 THE COURT: Okay. That's a lot. All right. So
10 for Question 1 which was the one about the schedule. Tell
11 me about your answer there.
12 PROSPECTIVE JUROR: The scheduling is more due
13 because of my work. I work for a company called Hologic, so
14 I develop in R&D as a -- well, as part of an engineering
15 team. I'm a process technician, and I'll be going to
16 Danbury, Massachusetts. This is a delay in our research if
17 I'm out this week.
18 THE COURT: When were you scheduled to go to
19 Danbury?
20 PROSPECTIVE JUROR: I am scheduled to leave
21 Wednesday, and it was supposed to be Wednesday, Thursday,
22 Friday.
23 THE COURT: What were you going to be doing
24 there?
25 PROSPECTIVE JUROR: So I'm going to --

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1 THE COURT: Just briefly?
2 PROSPECTIVE JUROR: I'm not supposed to say
3 proprietary.
4 THE COURT: Okay. So I guess we could just
5 suffice to say you're going to be doing work for Hologic
6 there that has a client in Connecticut.
7 PROSPECTIVE JUROR: I'm supposed to be going
8 through our -- I'll say if I'm allowed to -- assembly line
9 to develop our next phase for mammography.
10 THE COURT: Okay. Now, with regard to that, you
11 know, no doubt a lot of prospective jurors have some stuff
12 that they were expected to do this week for work. One of
13 the things we're trying to figure out is if they ended up
14 getting selected to serve, even if it might be difficult to
15 reschedule, have someone go in their place, et cetera, is it
16 possible, is it doable? You know, so if you were selected
17 here.
18 PROSPECTIVE JUROR: I'm not able to reschedule
19 this. Our plant up north is closing.
20 THE COURT: Okay. And so what would happen if
21 you did have to serve and you couldn't make this trip? What
22 would the company do, do you know?
23 PROSPECTIVE JUROR: I don't know. We don't have
24 anybody that has the 18 years of experience in mammography
25 like I do.

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1 THE COURT: There's nobody else at the company
2 that could do the work you were scheduled to do on this
3 trip?
4 PROSPECTIVE JUROR: I don't know if anyone is
5 going to Philly. I don't know if they're going to be able
6 to do it in the manner that I do it.
7 THE COURT: Okay. All right.
8 PROSPECTIVE JUROR: It's concerning for our
9 research. You know, when you work on devices that impact
10 lives daily, it's important to us and it's important to our
11 research and, frankly, to our patients.
12 THE COURT: Okay. Question 7 was the one about
13 do you have any -- you or your family members have any
14 dealings with any people relating to some of the entities
15 that might come up in the case.
16 PROSPECTIVE JUROR: So Dave Walker. And, again,
17 I'm not sure of these names, but I figured it would be
18 better to answer yes and ask those questions.
19 THE COURT: Sure.
20 PROSPECTIVE JUROR: And then I'm not sure of her
21 last name, but my daughter's dance teacher, her name is
22 Haley and I know that she works in -- they both work in
23 nuclear.
24 THE COURT: Oh, okay. So Mr. Walker and then
25 Haley, they don't necessarily work for -- the companies I

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1 mentioned by name were Arthur J. Gallagher --

2 PROSPECTIVE JUROR: Coal-fired power plants,

3 yes. I'm not sure if at this point they work -- I know they

4 for power plants. I'm not sure if it's coal fired because I

5 know that Dave transferred. I just -- work's been busy, I

6 haven't talked to him.

7 THE COURT: So Mr. Walker is somebody that you

8 know who worked at a coal-fired power plant before?

9 PROSPECTIVE JUROR: Nuclear.

10 THE COURT: Nuclear power plant, okay. And

11 Haley, did she work at a power plant?

12 PROSPECTIVE JUROR: Yes.

13 THE COURT: What kind of power plant?

14 PROSPECTIVE JUROR: I'm not sure.

15 THE COURT: And how well do you know these

16 folks, Mr. Walker, for example?

17 PROSPECTIVE JUROR: Dave I grew up with. We

18 went to church together, and Haley is my daughter's dance

19 teacher so I don't know Haley all that well, but I do see

20 her on a weekly basis.

21 THE COURT: Okay. As far as you know, either

22 the power plants that they might work for involve coal or

23 burning coal?

24 PROSPECTIVE JUROR: I haven't gotten into those

25 kind of conversations with Haley, and, you know, it's been a

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1 while since I talked with Dave just because of work.

2 THE COURT: About how long would you say it's

3 been since you talked to Mr. Walker?

4 PROSPECTIVE JUROR: Six months.

5 THE COURT: Okay. Question 10 was about whether

6 you or any of your family or close friends have ever been

7 involved in a patent infringement case or a controversy with

8 a patent. What about that?

9 PROSPECTIVE JUROR: Yes. So with Hologic we've

10 had one with Larry Ibbetson and another one regarding one of

11 our -- I'm not allowed to speak on it, but one of our parts.

12 So yeah, I have big issues with this.

13 THE COURT: Okay. And were you personally --

14 PROSPECTIVE JUROR: And that's kind of what

15 makes --

16 THE COURT: Let me just ask -- hold on. And you

17 say this is also related to your answer to Question 19?

18 PROSPECTIVE JUROR: Yeah. And that's where I'm

19 like...

20 THE COURT: And I guess also Question 11 was

21 about saying, hey, the case about patent infringement. It

22 sounds like your answer to this relates to all three of

23 these?

24 PROSPECTIVE JUROR: All three, yes.

25 THE COURT: What is the -- let me just ask

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1 first: Do either of these two cases that Hologic was

2 involved in, did you have a personal role in either case?

3 PROSPECTIVE JUROR: I did not, no. It was -- it

4 personally impacted me and friends of mine.

5 THE COURT: And tell me about that. It sounds

6 like you have some feelings about that.

7 PROSPECTIVE JUROR: Oh, I have a lot.

8 THE COURT: If you could kind of summarize them.

9 What is the nature of your feeling and why?

10 PROSPECTIVE JUROR: So there was a lot of

11 financial loss and that led to friends being let go.

12 THE COURT: Do you mean that the company Hologic

13 suffered financial loss?

14 PROSPECTIVE JUROR: Yes, to a degree.

15 THE COURT: Is it because in these cases they

16 were found guilty of patent infringement?

17 PROSPECTIVE JUROR: No, no.

18 THE COURT: What was the loss due to?

19 PROSPECTIVE JUROR: So -- and again, I'm not

20 even sure if I'm allowed to speak on this, but we have a

21 part that's actually currently being manufactured by another

22 company because they somehow won that case, but we had the

23 design. And I'm not sure if it was a matter of the

24 information was filed incorrectly, but we were the ones to

25 come up with the design of the part.

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1 THE COURT: So in these cases was it that

2 Hologic had a patent and they were accusing somebody else of

3 infringing it?

4 PROSPECTIVE JUROR: The vendor that we had, they

5 now manufacture that part.

6 THE COURT: But it's the idea that, like, in the

7 cases that Hologic was the one who was losing money because

8 somebody else was doing something against their patent?

9 PROSPECTIVE JUROR: That was our design.

10 THE COURT: Okay.

11 PROSPECTIVE JUROR: And as a result, like, I had

12 friends that, you know, I was really close with, they don't

13 work there anymore. I'm fortunate that I was able to work

14 there still just based on job knowledge.

15 THE COURT: Now, in this case there's going to

16 be allegations from the plaintiff that the defendants' side

17 infringes two of their patents. Now, the defendants, they

18 disagree. They're going to say no, we don't. And both

19 sides are going to put on evidence about that.

20 I think the concern for us would be if you were

21 to come in the case before you heard any evidence, if you

22 were thinking that you were kind of predisposed to one side,

23 like the plaintiffs' side --

24 PROSPECTIVE JUROR: I am.

25 THE COURT: You would be?

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1 PROSPECTIVE JUROR: Yeah.
2 THE COURT: Even if I told you you had to try to
3 put that out of your mind?
4 PROSPECTIVE JUROR: You know, and I'm -- I was
5 nervous in the courtroom, and I'm sitting there in the back
6 and I'm, like, well, you got to put that out of your mind,
7 you've got to say no to that. Like, you just got to just
8 put that aside. It is very difficult to put personal
9 feelings aside and not have that.
10 THE COURT: And you have these feelings in part
11 because you saw how --
12 PROSPECTIVE JUROR: Because I've seen firsthand
13 twice with how that's turned out.
14 THE COURT: Okay. Let me let the lawyers for
15 each side ask questions about these issues too.
16 Mr. Caldwell?
17 MR. SYKES: Good morning.
18 PROSPECTIVE JUROR: Good morning.
19 MR. CALDWELL: So my client will be putting on,
20 for example, the witnesses -- the inventor on the
21 patent-in-suit. He's going to talk about his history of
22 working and developing his invention, filing for the patent
23 and getting a patent. And it's going to be our contention
24 and we're going to try to put evidence on that we believe
25 shows that the defendants are using our patented technology

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1 without permission. If that's what unfolds through the
2 evidence of this court -- the evidence of this trial, are
3 you going to start out sort of leaning towards one party or
4 the other based on kind of what you've been through in your
5 own life?
6 PROSPECTIVE JUROR: I mean, I've already kind of
7 leaned there, and I know that's probably wrong.
8 MR. SYKES: Well, if you don't mind me asking
9 just to be specific, which way are you -- do you feel that
10 you're already leaning?
11 PROSPECTIVE JUROR: I am strongly opposed to
12 anyone stealing anyone's information and research as someone
13 who's put in 18 years of research and had that information.
14 MR. SYKES: Thank you.
15 THE COURT: All right. Defendants' side?
16 PROSPECTIVE JUROR: I'm sorry. I just...
17 THE COURT: No, we appreciate your candor.
18 On defendants' side, any questions?
19 MR. DORSNEY: No questions, Your Honor.
20 THE COURT: All right. Mr. Murphy, thank you.
21 Thank you for coming in. The bailiff will show you out,
22 okay?
23 PROSPECTIVE JUROR: Do you mind if a take a
24 minute?
25 THE COURT: No, yeah. Absolutely. Take your

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1 time. Take all the time you need. Thank you, sir.
2 So I'm inclined to strike that juror for cause.
3 Is there any objection?
4 MR. DORSNEY: No objection.
5 THE COURT: Okay. And just for the record, I'm
6 doing so because the juror upon repeated questioning could
7 not say that he would not favor the side that own patent
8 rights, in fact said he would, and additionally seemed to
9 get emotional in thinking about these issues which I think
10 showed the significance of that predisposition. So Juror 13
11 will be struck for cause.
12 All right. Let's move on to our next juror.
13 THE CLERK: Juror No. 11.
14 THE COURT: Okay. So we're going out of order.
15 Juror No. 11.
16 THE CLERK: Juror No. 11, Mr. Bernardo.
17 THE COURT: All right. Hi, sir. Come on in,
18 have a seat. You're Mr. Bernardo?
19 PROSPECTIVE JUROR: Yeah.
20 THE COURT: All right. I'm Judge Burke. Good
21 to be with you. And these are some lawyers for the
22 plaintiffs' side and these for the defendants' side.
23 PROSPECTIVE JUROR: Okay.
24 THE COURT: Sounds like you had a yes answer to
25 at least one of the questions. What questions do you have a

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1 yes answer to?
2 PROSPECTIVE JUROR: Number 11.
3 THE COURT: Is that the only one?
4 PROSPECTIVE JUROR: Yes.
5 THE COURT: So 11 is, it says: This case is
6 about patent infringement. Does anybody have beliefs or
7 views about that, infringement lawsuits generally. What are
8 your thoughts about that?
9 PROSPECTIVE JUROR: My thoughts about that is
10 that while I'm not against all patent laws or anything like
11 that, but I do know that sometimes patent laws are written
12 or interpreted in such a way as to help, you know,
13 established corporations against smaller corporations.
14 THE COURT: So is what you're saying that you --
15 PROSPECTIVE JUROR: Or to extend unfair --
16 extend advantages to powerful corporations or powerful
17 interests beyond what the originals laws were.
18 THE COURT: Got it. So it sounds like what
19 you're saying, tell me if I'm right is that you understand
20 there are patent laws and patents that are issued, which are
21 legitimate, but you sometimes worry that sometimes people
22 who get patents if they're big corporations can use them
23 wrongly in a way to try to enhance their power. Is that
24 right?
25 PROSPECTIVE JUROR: Yeah. Or sometimes have the

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1 laws redeveloped or reinterpreted. This doesn't apply to
2 patents, but it applies to copyright the way certain
3 copyright laws have been created or reinterpreted so that,
4 for example, Disney Corporation has had patent copyright
5 laws changed so that the Mickey Mouse character is always --
6 is never in public domain. Sir Russ Condyle's estate has
7 done similar things.

8 THE COURT: Okay.

9 PROSPECTIVE JUROR: That's my -- that would be a
10 concrete example of my objection.

11 THE COURT: Got it.

12 PROSPECTIVE JUROR: But again, that's...

13 THE COURT: Okay. Now, in this case you're
14 going to hear that the plaintiffs, they have two patents --
15 PROSPECTIVE JUROR: Yes.

16 THE COURT: -- and they're alleging that the
17 defendants infringed those patents, did something that
18 essentially amounts to what the patents cover. Defendants
19 are arguing, no, we did not do that and they're going to
20 present evidence one way or the other.

21 I guess when you go into this case, when you go
22 into the -- I'm going to give you rules and instructions
23 you've got to follow, and the gist of them are going to be,
24 look, whatever predispositions you have about patents or the
25 people that own them, you can't put your thumb on the scale.

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1 You can't go into the jury thinking, well, I -- separate and
2 apart from the evidence here, I'm leaning towards one side
3 or the other.

4 PROSPECTIVE JUROR: Right.

5 THE COURT: Would you be able to put any of your
6 prior views about patents or people that follow them out of
7 your mind and just confront the evidence fairly like I
8 instruct you or would that be difficult for you?

9 PROSPECTIVE JUROR: I would be able to follow
10 the evidence and interpret it according to the laws as, you
11 know, written and the definitions that you would give me.

12 THE COURT: Okay. You wouldn't hold it against
13 one side like the plaintiffs who have these patents?

14 PROSPECTIVE JUROR: I don't know enough about
15 this case to decide so naturally I couldn't do that.

16 THE COURT: You would have to wait hear more
17 evidence about -- like, what kind of evidence the parties
18 present.

19 PROSPECTIVE JUROR: Look at both sides and make
20 that decision, but the question did ask that question, and I
21 wanted to make sure.

22 THE COURT: No, no. Yes, absolutely. Was there
23 another question that you had a yes answer to?

24 PROSPECTIVE JUROR: No.

25 THE COURT: Okay. Let me let the lawyers ask

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1 questions. Mr. Caldwell?

2 MR. CALDWELL: No questions, thank you.

3 MR. DORSNEY: If I understand this correctly,
4 you're a teacher; is that correct?

5 PROSPECTIVE JUROR: Yes.

6 MR. DORSNEY: Have you encountered copyright
7 issues in your profession?

8 PROSPECTIVE JUROR: Once. Yeah, I was
9 preparing -- I used to teach freshman composition classes a
10 lot and one of the ideas I had or got from another teacher
11 was to produce a booklet, you know, with a binder of all
12 assignments, all handouts, all policies for my classes and
13 give to the students on the first day of class. And I
14 wanted to use an essay that I found online that I thought
15 would be very helpful for my students to read, and I sent it
16 over to the print shop for the college I was teaching in and
17 they said, sorry, we can't do this because the essay is
18 under copyright. So then I had to remove that. That's an
19 experience that I've had.

20 MR. DORSNEY: And what was the impact on
21 your...?

22 PROSPECTIVE JUROR: Oh, I just had to come down
23 and revise my -- my thing. I had to take that out and make
24 other revisions. It wasn't a major hardship case, but it
25 was an example if you asked about my work someone invented

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1 where my work was affected by copyright laws.

2 MR. DORSNEY: Okay. Thank you.

3 THE COURT: All right. Thank you.
4 Mr. Bernardo, she'll show you out.

5 PROSPECTIVE JUROR: Okay. Thank you very much.

6 THE COURT: Any applications?

7 MR. SYKES: Not from the plaintiff.

8 THE COURT: On defendants' side?

9 MR. DORSNEY: No, Your Honor.

10 THE COURT: Okay. The juror will remain in the
11 pool then. We'll move to our next juror.

12 THE CLERK: This is Mr. Hale, Juror No. 14.

13 THE COURT: Mr. Hale, come on in, have a seat.
14 Welcome.

15 PROSPECTIVE JUROR: How are you?

16 THE COURT: I'm Judge Burke again, and these are
17 the lawyers for the plaintiffs' side and lawyers for the
18 defendants' side.

19 Sounds like you a yes answer to a least one of
20 the questions.

21 PROSPECTIVE JUROR: I did.

22 THE COURT: Which question.

23 PROSPECTIVE JUROR: The time.

24 THE COURT: The first one?

25 PROSPECTIVE JUROR: Yeah.

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1 THE COURT: Okay. So tell me, why did you
2 circle that?

3 PROSPECTIVE JUROR: Just financially it's going
4 to be really tough to miss a week's worth of work and then
5 all the projects I got going on. It's going to push
6 everything back and that's just going to push everything
7 farther and farther back. It's going to be hard to get
8 stuff done.

9 THE COURT: It says here you're a carpenter.
10 PROSPECTIVE JUROR: Yeah.

11 THE COURT: Do you have your own business or do
12 you work for --

13 PROSPECTIVE JUROR: I work for a general
14 contractor, but I'm on my way back. I was actually working
15 on getting my business license myself.

16 THE COURT: Okay. And the GC you work for, as
17 we said in the instructions, we expect the trial -- it's
18 going to start today and it will end -- could end before
19 this -- the latest we expect it to end is next Tuesday. So
20 it could be as much as seven days, could be a little less.
21 During that time are you scheduled to be working?

22 PROSPECTIVE JUROR: Yeah, every day.
23 THE COURT: Every day. Every workday?
24 PROSPECTIVE JUROR: Yeah. Saturdays usually.
25 THE COURT: Okay. And obviously for all the

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1 jurors if they got selected, many of them work. There's
2 only a few that are retired.

3 PROSPECTIVE JUROR: Yeah, yeah.

4 THE COURT: So we're trying to -- we know it's
5 not easy and people sometimes have to shuffle things around,
6 but I guess the question is: If you were selected, knowing
7 it wouldn't be easy, but could you and the GC figure
8 something out? Could someone either take your place or
9 could you just not be working --

10 PROSPECTIVE JUROR: It's me and him at the
11 moment. And then I've got dogs and chickens and a lot of
12 stuff to take care of. I'd have to get that sorted out.

13 THE COURT: Okay. What would happen if you had
14 to serve? What would the general contractor do on this job
15 site?

16 PROSPECTIVE JUROR: I don't know. I guess he'd
17 just have to do as much as he could by himself.

18 THE COURT: When you -- you must go on vacation
19 or be away from work sometimes. When that happens, what
20 happens?

21 PROSPECTIVE JUROR: He's usually on vacation as
22 well.

23 THE COURT: Okay.
24 PROSPECTIVE JUROR: But this is, like, our busy
25 time. We slow down in the summer because we work primarily

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1 on beach homes. We're down at the beach.
2 THE COURT: All right. And where are you
3 working this coming week?

4 PROSPECTIVE JUROR: Fenwick Island.
5 THE COURT: So at the beach on a house down
6 there that's being renovated?

7 PROSPECTIVE JUROR: We've got three or four
8 projects going right now. One in Bethany.

9 THE COURT: Okay. The GC you work for, does he
10 also do some of this work himself?

11 PROSPECTIVE JUROR: Yeah, yeah. It's me and
12 him.

13 THE COURT: To it's like a two-person team. If
14 you were to serve here, it would just be a one-person team
15 for next week?

16 PROSPECTIVE JUROR: Yeah.
17 THE COURT: Which would slow things down?
18 PROSPECTIVE JUROR: Dramatically.
19 THE COURT: Okay. But if I ask you lastly, is
20 it possible? I mean, could you do it?

21 PROSPECTIVE JUROR: I mean, if I had to. I
22 don't want to go to jail.
23 THE COURT: All right. Let me ask either side
24 if they have questions for you.
25 Mr. Caldwell:

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1 MR. SYKES: One super quick question. What type
2 of work is it? What is the trade that's your specialty?

3 PROSPECTIVE JUROR: We're renovating homes. So
4 it's everything from exterior carpentry to interior finish
5 work. Windows, doors, siding. We don't do any roofing. We
6 sub out plumbing and electrical, but it's all that stuff.

7 MR. CALDWELL: Okay. Thank you.
8 No other questions for me, Your Honor.

9 MR. DORSNEY: Is it a situation where you would
10 have to make up the work on top of, like, next week's
11 projects or are you going to lose the ability to earn --

12 PROSPECTIVE JUROR: I don't think we'll lose the
13 ability, but it just pushes -- you know, we have electrical
14 contractors waiting on us to get stuff done, plumbing
15 contractors coming, tile guys. You know, so it just pushes
16 everybody back, and then that can really pile up because,
17 you know, everybody wants their houses ready for summertime.
18 So that could really push us back.

19 MR. DORSNEY: Yeah, I understand. Thank you.
20 THE COURT: One more question: The place you're
21 working on in Fenwick, after next Tuesday will you still
22 likely be working on the same place?

23 PROSPECTIVE JUROR: Yeah.
24 THE COURT: How long is that job expected to go?
25 PROSPECTIVE JUROR: Well, it's a complete

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1 interior renovation, so they want to be done -- they'd like
 2 have it ready for summer because it's a rental property.
 3 You know, that's a source of income for them as well.
 4 THE COURT: Gotcha. All right. Thanks,
 5 Mr. Hale. Appreciate it. She'll show you out.
 6 PROSPECTIVE JUROR: All right. Thank you.
 7 THE COURT: Any applications from plaintiff?
 8 MR. SYKES: No, sir.
 9 THE COURT: And for defendant?
 10 MR. DORSNEY: No, Your Honor.
 11 THE COURT: Yeah, I cannot strike the juror for
 12 cause. He's clearly -- I think would like to be at work,
 13 but so would many of our jurors, and I think it just strikes
 14 me that the nature of his work is such that, you know, they
 15 may be delayed but his partner, the general contractor,
 16 could handle some it and, again, just doesn't seem outsized
 17 in comparison to what we would hear from other jurors here
 18 that's an emergency. So this juror will remain in the pool.
 19 THE CLERK: This is Juror No. 17, Mr. Kratz.
 20 THE COURT: Hi, Mr. Kratz. Come on in, have a
 21 seat. Welcome. I'm Judge Burke again, and these are some
 22 lawyers for the plaintiffs' side and these are some lawyers
 23 for the defendants' side.
 24 Sounds like you had a yes answer to at least one
 25 of the questions, and let me just ask: Which questions did

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1 you have a yes answer to?
 2 PROSPECTIVE JUROR: 13. I worked at a power
 3 plant before.
 4 THE COURT: Okay. Was 13 the only one you had a
 5 yes to?
 6 PROSPECTIVE JUROR: Yes.
 7 THE COURT: Okay. So right, it was anyone who
 8 worked at a power plant. So what power plant did you work
 9 at?
 10 PROSPECTIVE JUROR: It was for a generating
 11 station in Portland, Pennsylvania for Metropolitan Edison
 12 Company.
 13 THE COURT: Metropolitan Edison, okay. And what
 14 kind of a power plant was it?
 15 PROSPECTIVE JUROR: Coal fire and electric
 16 generation.
 17 THE COURT: Coal-fired power plant, so they
 18 burned coal there?
 19 PROSPECTIVE JUROR: Yes. For electric.
 20 THE COURT: For electric. Just for my purposes,
 21 what does it mean to be coal-fired for electric?
 22 PROSPECTIVE JUROR: I mean, there's two
 23 coal-fired boilers and they generated so much megawatts for
 24 electric energy --
 25 THE COURT: Got it.

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1 PROSPECTIVE JUROR: -- for that company.
 2 THE COURT: The power was used to generate
 3 electricity?
 4 PROSPECTIVE JUROR: Yes.
 5 THE COURT: Got it. All right. Now, this case
 6 you'll hear and you have heard is going to involve coal in
 7 some way. The patents at issue are about a way of trying to
 8 take mercury out of coal and to try to make the environment
 9 a bit cleaner.
 10 You're also going to hear from the defendants'
 11 side, the defendants worked with power plants who burned
 12 coal and that they sold them a certain kind of coal. Of
 13 course, the thing we're concerned about is when we have
 14 jurors come in, I'm going to give them the rules and they
 15 have to follow them, and we also want to make sure that they
 16 don't have any biases, that they're not going to start the
 17 case, like, predisposed, no matter what they hear to be for
 18 one side or the other.
 19 In your view does you experience with working at
 20 a coal-fired power plant, does it make you -- based on what
 21 you've heard so far, predisposed to think, well, the
 22 defendants must be right in this case or the plaintiffs must
 23 be right?
 24 PROSPECTIVE JUROR: No.
 25 THE COURT: Do you have any thoughts one way or

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1 the other about, like, coal that you would say bias you in
 2 some way or feel strongly about it?
 3 PROSPECTIVE JUROR: I think it's a cheap source
 4 of fuel and I wish they would use more of it for generation.
 5 THE COURT: And I guess any -- and then last
 6 question is: Again, if this case is about patents that are
 7 about trying to help people burn coal in a different way
 8 that's maybe -- you know, removes mercury, any thoughts
 9 about that technology one way or the other that might
 10 predispose you one way or the other?
 11 PROSPECTIVE JUROR: No.
 12 THE COURT: Okay. All right. Let me ask the
 13 lawyers if they have some other questions for you.
 14 Mr. Caldwell?
 15 MR. SYKES: Good morning. What's the rough time
 16 frame when you were working at a coal-fired power plant?
 17 PROSPECTIVE JUROR: Between April of 1986 --
 18 wait. Yeah, 1986 until probably April or something of -- or
 19 maybe it was the fall of 1988.
 20 MR. SYKES: So a couple of years then, 2, 2 and
 21 a half years?
 22 PROSPECTIVE JUROR: Yeah, about. I think I was
 23 over there about a year and a half at that power plant.
 24 MR. CALDWELL: Do you know where they got the
 25 coal from?

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1 PROSPECTIVE JUROR: West Virginia.
2 MR. SYKES: Have you ever thought or given any
3 thought to coal emissions or whether there's sort of toxic
4 aspects of coal emissions or anything like that?
5 PROSPECTIVE JUROR: Not really. I mean, they
6 used low sulfur coal. It didn't -- it didn't look like
7 those power plants smoked a whole lot except when they
8 started up, and that was on fuel oil.
9 MR. SYKES: Okay. So my client as a result of
10 some research, we're going to contend they had inventions
11 that ultimately we lead to some patents and they run a
12 business where they will consult with power plants and try
13 to help them with mercury emissions, and to some extent
14 there's some similarity with the defendants in that they
15 have worked with power plants on mercury emissions.
16 Does knowing that make you feel like you come
17 into this case with sort of some preconceived notions about
18 maybe like the value of emissions technology or the lack of
19 value of emissions technology or anything like that that you
20 walk in with because you've had this experience that maybe
21 some of the other jurors haven't?
22 PROSPECTIVE JUROR: No, not really. I know it's
23 all regulated and they have to make it as clean as possible.
24 It's probably even cleaner now than it had to be in the
25 '80s.

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1 MR. SYKES: And are those regulations something
2 that you already know anything about?
3 PROSPECTIVE JUROR: Well, I was actually in the
4 coal handling where they dump the coal, the cars, and then
5 we had to take a sample of each car to make sure it had the
6 right amount of -- I guess the quality of it. I mean, I
7 don't know I just took the samples, and then they shipped
8 them to a lab and they -- I guess they wanted to make sure
9 they were getting their money's worth and the best coal and
10 the lowest sulfur. I'm sure they had to operate under
11 really strict regulations.
12 MR. SYKES: Were you involved at all in the
13 chemistry aspects in evaluating coal?
14 PROSPECTIVE JUROR: No, just dumping it and
15 transporting it up to the bunker in the power plant and
16 making sure the bunkers didn't get empty. And that's about
17 it really. It was entry level.
18 MR. SYKES: I see. Okay. Thank you. Thank you
19 for answering my questions.
20 THE COURT: Defendants' counsel?
21 MR. DORSNEY: No questions, Your Honor.
22 THE COURT: All right. I guess one other
23 question, Mr. Kratz, is: You might have some -- I know it's
24 been a long time since you worked at this power plant. You
25 might have some knowledge of some rules or regulations that

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1 were in place back then or the way that plant worked or
2 whatever. What I'd be telling you is: Look, regardless of
3 any of that, what you need to consider is not that
4 information but just the evidence you hear in this trial and
5 the rules that I give you. If I told you that, would you be
6 able to focus just on that evidence, put out of your mind
7 any evidence about some other power plant that you worked at
8 all those years ago?
9 PROSPECTIVE JUROR: Right. Yes.
10 THE COURT: All right. Thank you, sir. I
11 appreciate your candor. She'll walk you out.
12 PROSPECTIVE JUROR: Thank you.
13 THE COURT: Okay. Any applications?
14 MR. SYKES: No, Your Honor.
15 THE COURT: Defendants' side.
16 MR. DORSNEY: No, Your Honor.
17 THE COURT: I agree. So Juror 17 is not struck
18 and remains in the pool. I think if I'm right, that means
19 that we have three jurors that were struck for cause.
20 Numbers 2, 8, and 13 which would mean that we have 14 jurors
21 in a row that are not struck for cause; right?
22 Let's just go over who we have on the list that
23 is not struck for cause. Hopefully it matches up with
24 what's on there.
25 So these are the people that would be in the

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1 first 14: Juror No. 1, Juror No. 3, Juror No. 4, Juror
2 No. 5, Juror No. 6, Juror No. 7, Juror No. 9, Juror No. 10,
3 Juror No. 11, Juror No. 12, Juror No. 14, Juror No. 15,
4 Juror No. 16, and Juror No. 17. That's 14.
5 All right. So those 14 jurors will be our
6 presumptive jurors in order subject to the parties'
7 peremptory challenges. If the parties use all six
8 peremptory challenges, the eight remaining will be the
9 jurors. If not, there's more than eight left we'll go with
10 the jurors that are 1 through 8 and the order that remain
11 will be our jurors. So that's where we stand.
12 Mr. Dorsney?
13 MR. DORSNEY: And it will be your preference --
14 I think it typically is in this courthouse -- the first
15 person in the jury box is the foreperson. I just didn't
16 know if you had a different way you were going to do it.
17 THE COURT: It is, and I think that's said
18 somewhere in the our -- it's in our current final jury
19 instructions as well. So yes, that's correct.
20 All right. So again, just so we're all on the
21 same page in order these are the jurors that are going to be
22 subject to the peremptory challenges: Juror 1, Juror 3,
23 Juror 4, Juror 5, Juror 6, Juror 7, Juror 9, Juror 10, Juror
24 11, Juror 12, Juror 14, Juror 15, Juror 16 and Juror 17.
25 Okay. All right. And for counsel, will those

<p style="text-align: center;">97</p> <p>1 14 in order, will they simply be seated in the back in their 2 order or will you be putting them in the jury box? So 3 you'll see everyone up there in the order starting from -- 4 and you're going to go -- just so our counsel knows, so they 5 know who's who, Juror No. 1 will be in the first seat in the 6 front? 7 THE CLERK: There will be a little chart for you 8 too. I'll be placing them in that order. 9 MR. DORSNEY: You'll pass it back and forth 10 between the tables starting with plaintiffs? 11 THE CLERK: Starting with plaintiff, correct. 12 MR. DORSNEY: And we'll just put an X across is 13 all? 14 THE CLERK: Yes. And then I'll make a note of 15 who it goes to. 16 MR. DORSNEY: Thank you very much. 17 THE COURT: Okay. Great. So we'll take a short 18 break to get reconstituted. The way this is going, once we 19 have our final jury, we will excuse the remainder of the 20 jurors, we'll swear them in, then I'll go ahead and at least 21 do a preliminary jury instructions now. And then we'll see 22 where that takes us on time. If it takes us up to a nice 23 point where we could have lunch, we might break for lunch 24 and then openings afterward is my current thought. 25 MR. SYKES: The patent video is in the</p>	<p style="text-align: center;">99</p> <p>1 off. All right. So we'll go off the record then and we'll 2 get set up for peremptories. 3 (The following proceedings were had in open 4 court:) 5 THE CLERK: Would the following jurors come 6 forward: Juror number 17, juror number 16, juror number 15, 7 juror number 14, juror number 12, juror number 11, juror 8 number 10, juror number 9. Also juror number 7, juror 9 number 6, juror number 5, juror number 4, juror number 3 and 10 juror number 1. 11 THE COURT: We're now going to begin the portion 12 of jury selection that involves the application of 13 peremptory challenges, and my staff will work with the 14 parties to do that efficiently. 15 THE CLERK: Those of you in the juror box, if I 16 call your number, you can return to the back of the 17 courtroom: Juror number 3, juror number 5, juror number 9, 18 juror number 11, juror number 16, juror number 17, and we're 19 going to have you guys rearrange and have juror number 1 20 seated where you are. 21 You're going to be in the first seat in the back 22 row. Next to juror number 1 in the front row, we're going 23 to have juror number 4. Juror number 12, you're going to 24 take the second seat in the back row. 25 So the front row should have juror number 1, 4.</p>
<p style="text-align: center;">98</p> <p>1 preliminary instructions as well. 2 THE COURT: Right. So it's going to take some 3 time. 4 MR. DORSNEY: Your Honor, you said break. Are 5 we going to seat the jury before break or are we all just 6 gonna walk out for a break? 7 THE COURT: So what we'll do is we'll finish 8 peremptories, we'll excuse the remaining nonselected jurors, 9 we'll swear in the current jurors. And then my plan is to 10 go right into preliminary jury instructions. My guess is 11 that will take enough time so that when we finish that, it 12 will be the right time to break for lunch, we'll break for 13 lunch, come back and do all the others afterwards. 14 MR. SYKES: Do we have an opportunity to confer 15 with colleagues for a few minutes before we exercise our 16 peremptories or...? 17 THE COURT: You mean before we get started out 18 there or while we're doing it out there? 19 MR. SYKES: I guess that's what I'm asking 20 ultimately. 21 THE COURT: Both. There will be some minutes 22 before we set up now, and then you'll have some -- we're not 23 going to -- you know, we'll give you like a reasonable 24 period, a minute or two to talk amongst yourselves while you 25 have each one before you. If it gets oversized, we'll cut it</p>	<p style="text-align: center;">100</p> <p>1 Juror number 6, if you'll come forward to the front row, and 2 juror number 7 to the front row. 3 The back row should be 10, 12, 14, and 15. 4 THE COURT: Thanks, everyone, for going through 5 that musical chairs. 6 To all of our prospective jurors who are not in 7 the jury box and instead in the back of the courtroom, you 8 have not been selected to serve on the jury. 9 I just want to say to all of you on behalf of 10 our court, we thank and appreciate you for appearing here 11 today and being prepared to serve as jurors. 12 In light of this, you are now excused, and you 13 can gather your things, and our jury administrator will show 14 you out of the courtroom. 15 You may be seated. All right. For our eight 16 jurors, I'll turn to my courtroom deputy who will swear in 17 our jurors. 18 (The jury was sworn.) 19 THE COURT: Okay. Ladies and gentlemen, just to 20 tell you what we're going to do now: Now that you've been 21 sworn in, I'm going to read some preliminary jury 22 instructions for you, and to help you follow along with what 23 I read, we have copies printed out for you of those 24 instructions. I'll ask my courtroom deputy to hand those 25 out.</p>

<p style="text-align: center;">101</p> <p>1 Now, after I read these instructions and finish 2 them, we'll take a break to let you settle in and have lunch 3 before we proceed further.</p> <p>4 All right. Members of the jury, now that you've 5 been sworn in, I have the following preliminary instructions 6 for guidance on your role as jurors in this case. These 7 instructions will give you some general rules and guidance 8 that might apply to any civil case.</p> <p>9 And also because this is a patent trial, I'll 10 also give you some additional preliminary instructions 11 regarding patents to assist you in discharging your duties 12 as jurors.</p> <p>13 As I said, this is a patent case. The 14 plaintiffs in this case are Midwest Energy Emissions Corp. 15 and MES Inc., which I may refer to as ME2C, or plaintiffs.</p> <p>16 The defendants and or counterclaim plaintiffs, 17 who I'll refer to as defendants for now in this case, are 18 CERT Operations II LLC, CERT Operations IV LLC, CERT 19 Operations V LLC, CERT Operations RCB LLC. I may refer to 20 these four defendants as the CERT Operations defendants.</p> <p>21 And Senescence Energy Products, LLC; Buffington 22 Partners, LLC; Larkwood Energy, LLC; Rutledge Products, LLC; 23 Cottbus Associates LLC; Springhill Resources, LLC; and 24 Marquis Industrial Company, LLC. I may refer to these eight 25 defendants as the CERT RC defendants.</p>	<p style="text-align: center;">103</p> <p>1 evidence.</p> <p>2 You must follow that law whether you agree with 3 it or not. In addition to instructing you about the law, at 4 the close of the evidence, I'll provide you with 5 instructions as to what the claims of the patent.</p> <p>6 Again, of course, you're bound by your oath as 7 jurors to follow these and all the instructions that I give 8 you, even if you personally disagree with them. All of the 9 instructions are important, and you should consider them 10 together as a whole.</p> <p>11 Perform these duties fairly. Don't let any bias 12 or sympathy or prejudice that you may feel toward one side 13 or the other influence your decision in any way.</p> <p>14 Also, don't let anything that I say or do during 15 the course of trial influence you. Nothing I say or do is 16 intended to indicate or should be taken by you as indicating 17 what your verdict should be.</p> <p>18 The evidence from which you'll find the facts 19 will consist of the testimony of witnesses and the documents 20 and other things that are admitted into evidence.</p> <p>21 The evidence may also include certain facts 22 agreed to by the parties or that I may instruct you to find.</p> <p>23 Certain things are not evidence and must not be 24 consider by you. I'll list them for you now. First, 25 statements, arguments, and questions by the lawyers are not</p>
<p style="text-align: center;">102</p> <p>1 ME2C is the owner of the two patents that are 2 being litigated in this case. These are U.S. Patent Numbers 3 10,596,517. Collectively these patents may be referred to 4 as the patents-in-suit, or the asserted patents.</p> <p>5 Individually patents are often referred to by 6 their last three digits. For example, U.S. Patent Number 7 10,343,114 may be referred to as the '114 patent, and U.S. 8 Patent Number 10,597,517 may be referred to as the '517.</p> <p>9 A copy of each of the patents has been given to 10 you along with these preliminary instructions.</p> <p>11 ME2C contends that each defendant infringes 12 certain claims of each of the patents-in-suit and that 13 defendants' infringement of the patents-in-suit has been 14 willful.</p> <p>15 The specific claims that ME2C contends are 16 infringed may be referred to collectively as the asserted 17 claims. ME2C also seeks damages for the infringement. 18 Defendants deny that they infringed the patents-in-suit and 19 contend that the patents-in-suit are invalid.</p> <p>20 Let me now turn to the general rules that will 21 govern the discharge of your duties as jurors in this case. 22 It will be your duty to find what the facts are from the 23 evidence as presented at the trial. You and you alone will 24 be the judges of the facts. You'll have to apply those 25 facts to the law as I instruct you at the close of the</p>	<p style="text-align: center;">104</p> <p>1 evidence. Second, objections to questions are not evidence.</p> <p>2 Lawyers have an obligation to their clients to 3 make an objection when they believe testimony or exhibits 4 being offered are not admissible under the rules of 5 evidence. You shouldn't be influenced by a lawyer's 6 objection or my ruling on the objection.</p> <p>7 If I sustain or uphold the objection, and I find 8 the matter is not admissible, then you should just ignore 9 the question or document.</p> <p>10 If I overrule an objection and allow the matter 11 into evidence, then you should treat the testimony or the 12 document just like any other evidence.</p> <p>13 If I instruct you during the trial that some 14 item of evidence is admitted for a limited purpose, then you 15 must follow that instruction and consider that evidence for 16 that purpose only. If this occurs during the trial, I'll 17 try to clarify this for you at the time.</p> <p>18 Third, testimony that the Court has excluded or 19 told you to disregard is not evidence and must not be 20 considered.</p> <p>21 Fourth, you'll be shown charts and animations to 22 help illustrate the testimony of the witnesses. These 23 illustrated exhibits called demonstrative exhibits are not 24 admitted into evidence and should not considered evidence.</p> <p>25 Fifth, anything you see or hear outside the</p>

<p style="text-align: center;">105</p> <p>1 courtroom is not evidence and must be disregarded. You are 2 to decide this case solely on the evidence presented here in 3 the courtroom.</p> <p>4 Now, you may have heard the terms direct 5 evidence and circumstantial evidence.</p> <p>6 Direct evidence is simply evidence like the 7 testimony of an eyewitness, which if you believe it directly 8 proves a fact. So if a witness testified that he saw it 9 raining outside, and you believed him, that would be direct 10 evidence that it was raining outside.</p> <p>11 Circumstantial evidence is simply a chain of 12 circumstances that indirectly proves a fact. If someone 13 walked into the courtroom wearing a rain cover with drops of 14 water carrying a wet umbrella, that would be circumstantial 15 evidence from which you could conclude that it was raining 16 outside.</p> <p>17 It's your job to decide how much weight to give 18 the direct and circumstantial evidence. The law makes no 19 distinction between the weight that you should give to 20 either one, nor does it say that one is better than the 21 other.</p> <p>22 You should consider all the evidence, both 23 direct and circumstantial and give it whatever weight you 24 believe it deserves.</p> <p>25 You are the sole judges of each witness'</p>	<p style="text-align: center;">107</p> <p>1 the case. You're free to accept or eject the testimony of 2 experts just as with any other witness.</p> <p>3 Next, in any legal action, fact must be proven 4 by a required standard of evidence known as the burden of 5 proof. In a patent case like this one, there are two 6 different burdens of proof that are used. The first is 7 called preponderance of the evidence, and the second is 8 called clear and convincing evidence.</p> <p>9 As I noted earlier, ME2C contends that the 10 defendants infringed certain claims of their two patents. A 11 party asserting patent infringement has the burden of 12 proving infringement by a preponderance of the evidence.</p> <p>13 A preponderance of the evidence is evidence that 14 when considered in light of all the facts leads you to 15 believe that what that party claims is more likely true than 16 not.</p> <p>17 To put it differently, if you were to put the 18 parties' evidence on opposite sides of the scale, the 19 evidence supporting ME2C's claims must make the skill tip 20 somewhat toward its side. If the scale should remain equal 21 or tip in favor of the defendants, you must find for the 22 defendants.</p> <p>23 ME2C also has the burden of proving that any 24 infringement was willful, again by a preponderance of the 25 evidence.</p>
<p style="text-align: center;">106</p> <p>1 credibility. You may believe everything a witness says or 2 part of it or none of it. You should consider each witness' 3 means of knowledge, opportunity to observe, how reasonable 4 or unreasonable testimony is, whether it's consistent or 5 inconsistent, whether it's been contradicted, the witness' 6 biases, prejudices, or interests, the witness' manner or 7 demeanor on the witness stand and all circumstances that, 8 according to the evidence, could affect the credibility of 9 the testimony.</p> <p>10 Expert testimony is testimony from a person who 11 has a special skill or knowledge in some science or 12 profession or business. This skill or knowledge is not 13 common to the average person but has been acquired by the 14 expert through special study or experience.</p> <p>15 When knowledge of a technical subject matter may 16 be helpful to the jury, an expert is permitted to state an 17 opinion on those technical matters.</p> <p>18 In weighing expert testimony, you can consider 19 the expert's qualifications, the reason for the expert's 20 opinions, and the reliability of the information supporting 21 the expert's opinions as well as the factors I have 22 previously mentioned for weighing testimony of any other 23 witnesses.</p> <p>24 Expert tm should receive whatever weight and 25 credit you think appropriate given all the other evidence in</p>	<p style="text-align: center;">108</p> <p>1 As I noted earlier, in addition to denying they 2 have infringed, the defendants contend that the asserted 3 patents are invalid. A party challenging the validity of a 4 patent has the burden of proving by clear and convincing 5 evidence that the patent is invalid.</p> <p>6 Clear and convincing evidence is evidence that 7 produces an abiding conviction that the truth of a factual 8 contention is highly probable. Proof by clear and 9 convincing evidence is thus a higher burden than proof by a 10 preponderance of the evidence.</p> <p>11 Now, some of you may have heard the phrase proof 12 beyond a reasonable doubt. That burden of proof applies 13 only in criminal cases and has nothing to do with a civil 14 case like this one. You should therefore not consider it in 15 this case.</p> <p>16 At this time we're going to show a short video 17 as an introduction to the patent system. It contains some 18 background information to help you understand what patents 19 are, why they're needed, the role of the Patent Office and 20 why disputes over patents arise.</p> <p>21 Why don't we play the video now. 22 (A video was played and previously transcribed 23 as follows:)</p> <p>24 JUDGE FOGEL: Hello. I'm Jeremy Fogel. I've 25 been a United States District Judge since 1998, and I am now</p>

<p style="text-align: center;">109</p> <p>1 the director of the Federal Judicial Center. As you 2 probably know by now, this is a patent case. So you may be 3 wondering, how can I sit in judgment on a case like this 4 when I'm not entirely sure what a patent is? We hope to 5 answer that concern with this brief video, which will give 6 you some of the background needed to do your job.</p> <p>7 This case will involve some special issues that 8 the judge and lawyers will explain to you, but all patent 9 cases involve some basics that you will learn about. This 10 video will discuss what patents are, why we have them, how 11 people get them, and why there are disputes that require us 12 to call in a jury like you. We'll also show you what 13 patents look like.</p> <p>14 The United States Constitution gives Congress 15 the power to pass laws relating to patents. Article I, 16 Section 8, Clause 8 allows Congress to promote the progress 17 of science and useful arts by securing for limited times to 18 authors and inventors the exclusive right to their 19 respective writings and discoveries.</p> <p>20 A patent, then, is an official grant by the 21 United States government that gives its owner certain rights 22 to an invention. Those include the right to stop others 23 from making, using, selling, or offering for sale the 24 invention that is claimed in the patent.</p> <p>25 A patent lasts for a specific period of time,</p>	<p style="text-align: center;">111</p> <p>1 domain. The patent system works because the inventor is 2 required to describe the invention in clear and specific 3 terms so that the public knows what the boundaries of the 4 invention are.</p> <p>5 Once a patent is issued by the government, it 6 becomes available for public inspection. In that way, 7 anyone who learns of the patent can read it and understand 8 exactly what the inventor invented and the limits of the 9 patent set forth in the claims.</p> <p>10 Now that we understand what a patent is, let's 11 take a closer look at the term "invention." An invention is 12 a new way of solving a problem or a useful new machine, 13 manufacture, or composition of matter. The patent process 14 begins in the mind of the inventor, and in particular when 15 the invention is formulated in the mind of the inventor. 16 Patent lawyers call this conception. This is when the idea 17 occurs to the inventor clearly enough that he or she can 18 write it down and explain it to someone.</p> <p>19 To qualify for a patent, the invention needs to 20 be new and useful. Also, it must not be obvious to one of 21 ordinary skill in the field. If the inventor believes these 22 requirements are met, he or she will prepare an application 23 for filing with the Patent and Trademark Office whose 24 headquarters are in Alexandria, Virginia, just outside of 25 Washington, D.C. The Patent and Trademark Office, often</p>
<p style="text-align: center;">110</p> <p>1 usually 20 years from the date that the application is filed 2 by the inventor. But because it takes an average of three 3 years for the Patent and Trademark Office to act on the 4 application, the effective life of the patent is closer to 5 17 years.</p> <p>6 A patent represents a bargain made between the 7 government and the inventor. In return for the right to 8 prevent others from using the invention, the inventor must 9 enhance the public knowledge of what we sometimes call the 10 state of the art by adding something new and useful to it. 11 A famous example is Thomas Edison's invention of the light 12 bulb. Harnessing electrical power for illumination 13 transformed society and led to many other important 14 breakthroughs.</p> <p>15 During the lifetime of the patent, its 16 disclosure may inspire new inventions, and after it expires, 17 the invention is free for anyone to use. It is this 18 combination of something new and valuable to the public that 19 justifies granting time-limited patent protection to the 20 inventor.</p> <p>21 A patent is in many ways like a deed to a piece 22 of property. It grants the owner the right to keep people 23 off the property or to charge them a fee like rent for using 24 it. And just as a deed indicates boundaries defining a 25 landowner's property, a patent claim defines the patentee's</p>	<p style="text-align: center;">112</p> <p>1 called the PTO, is the agency of the federal government 2 whose job it is to examine patent applications to make sure 3 they are in proper form and comply with the requirements of 4 the law.</p> <p>5 The inventor can prepare an application for 6 filing with the PTO, but usually it is drafted by a patent 7 attorney or a patent agent who specializes in what is called 8 prosecuting patent applications. That is the process by 9 which they are evaluated. The attorney or agent works with 10 the inventor to be sure the invention is described and 11 claimed in a way that complies with the law and the 12 regulations of the PTO. 98 percent of patent applications 13 are made online using the PTO's electronic filing system, 14 although a few paper applications are still made.</p> <p>15 When the PTO receives the inventor's 16 application, it is first checked to see if it is complete 17 and complies with all the PTO's application requirements. 18 It then assigns the submission to a patent examiner, a staff 19 person with a background in the field or art the invention 20 falls within, to evaluate the application and decide whether 21 a patent can be granted.</p> <p>22 You've been given a sample patent to refer to as 23 you watch this video, so you already have a sense of what a 24 patent looks like. But now let's take a closer look at the 25 three main parts of a patent.</p>

<p style="text-align: center;">113</p> <p>1 To begin with, there are some basic identifying 2 information on the first page. This material is highlighted 3 in your handout. On the upper right side of the page is the 4 number assigned to the patent by the PTO, and on the left 5 side is a title that describes the invention and the names 6 of the inventors and sometimes the company to whom they've 7 assigned the patent. Also on the left is the date when the 8 patent application was filed and back on the right, the date 9 when the patent was issued.</p> <p>10 There also is more detailed information on the 11 first page, including a list of numbers following the 12 caption field of search. These numbers identify previously 13 issued patents the examiner looked at or searched to make 14 sure the applicant's claimed invention really is something 15 new, not obvious, and thus patentable. Also listed on the 16 first page are what we call references, that is, previous 17 patents or articles that describe the technology or prior 18 art known at the time the application was filed.</p> <p>19 It may seem strange to you that we call this 20 preexisting technology "prior art," even though it has 21 nothing to do with artists. We use the word "art" in its 22 historical sense to include inventions and other subject 23 matter reasonably related to the claimed invention. We also 24 refer to the latest technology as state of the art, and we 25 say of someone who can understand and apply the technology</p>	<p style="text-align: center;">115</p> <p>1 receives a filing date. Under the America Invents Act of 2 2011, filing dates will determine who is awarded the patent 3 if there are competing valid applications.</p> <p>4 In 2012, the PTO received nearly 600,000 patent 5 applications and issued more than 270,000 patents. After 6 determining that the application is complete, the receiving 7 branch also decides what field of technology an application 8 relates to and assigns it to the appropriate examining 9 group. In order to make that decision, the patent examiner 10 usually looks at patents that have been issued previously in 11 the same or closely related fields of art. The examiner has 12 computer databases that contain information used to 13 accomplish this task.</p> <p>14 Another part of the job is to decide if the 15 inventor's description of the invention is complete and 16 clear enough to meet the requirements for a patent, 17 including the requirement that the description enable 18 someone of ordinary skill in the field to actually make and 19 use it.</p> <p>20 However, because the job of examining so many 21 applications is challenging, the law requires the applicant 22 to tell the examiner whatever he or she knows about the 23 prior art that might be important to the examiner's decision 24 on whether to allow the patent. We call this the 25 applicant's duty of candor.</p>
<p style="text-align: center;">114</p> <p>1 that he or she is skilled in the art.</p> <p>2 The second major part of the patent is what we 3 call the specification or written description. As is the 4 case in your sample, it is usually the longest part of the 5 patent. It includes an abstract, which is a brief summary 6 of the invention, a background section that describes the 7 nature of the problem the invention is supposed to solve, 8 one or more drawings called figures that illustrate various 9 aspects of the application, and a detailed description of 10 one or more embodiments of the invention. An embodiment is 11 a specific device or method that uses the invention, such as 12 a particular form of light bulb.</p> <p>13 The third and most important part of the patent 14 is the claims. These are the numbered paragraphs that 15 appear at the end. The claims are what give the public 16 notice of the boundaries of the invention. They are similar 17 to the description of property you may have seen in a deed 18 referring to precise measurements taken on the ground. The 19 judge will instruct you further on how any technical or 20 ambiguous terms in the patent claims should be understood.</p> <p>21 Now that we've discussed the main parts of a 22 patent, let's look at how the PTO processes patent 23 applications, what we referred to earlier as prosecution of 24 the patent application. This process begins when the 25 inventor's application arrives at the PTO. There, it</p>	<p style="text-align: center;">116</p> <p>1 One way the applicant can satisfy this duty is 2 by bringing pertinent prior art to the attention of the 3 examiner, either in the original application or in other 4 submissions called information disclosure statements. In 5 this way, the decisions of the examiner are based on both 6 the information provided by the applicant and on the 7 information the examiner finds during his or her prior art 8 search.</p> <p>9 Sometimes the examiner concludes that the 10 application meets all the requirements we discussed and 11 allows the patent to issue at this first stage. But more 12 frequently, the examiner will reject the application as 13 deficient in some respect. This decision will be 14 communicated by the examiner in what is called an Office 15 Action, which is a preliminary notice to the applicant of 16 what the examiner finds insufficient or unpatentable.</p> <p>17 For example, the examiner may reject certain 18 claims as being unpatentable because a journal article 19 written and published by another person prior to the 20 effective filing date of the patent application disclosed 21 what the applicant is currently claiming. At that point, 22 the applicant prepares a written response either agreeing or 23 disagreeing with the examiner.</p> <p>24 An applicant who agrees with the examiner can 25 suggest amendments to the application designed to overcome</p>

<p style="text-align: center;">117</p> <p>1 the examiner's rejection. Alternatively, an applicant who 2 disagrees with the examiner's Office Action can explain the 3 reasons for the disagreement. This exchange of Office 4 Actions and responses goes on until the examiner issues a 5 Final Office Action which may reject or allow some or all of 6 the applicant's claims.</p> <p>7 The overall process is referred to as the 8 prosecution history of the application. The written 9 incoming and outgoing correspondence between the PTO 10 examiner and the applicant is also called the file wrapper. 11 In the past, these file wrappers were all in paper form, as 12 were the submitted applications. Now they are most often 13 electronic and may occasionally be paper as well.</p> <p>14 Most patent applications filed on or after 15 November 29, 2000, are published by the PTO 18 months after 16 the inventor has filed his or her application so that the 17 public may inspect it.</p> <p>18 Once a final PTO Office Action has occurred and 19 one or more claims have been allowed, the applicant is 20 required to pay an issuance fee and the patent is printed. 21 Then on the date shown in the upper right-hand corner of the 22 first page of the patent, it is issued by the PTO, and the 23 inventor receives all the rights of the patent. That date 24 is highlighted on your sample.</p> <p>25 Once a patent has issued, the inventor or the</p>	<p style="text-align: center;">119</p> <p>1 prosecution of a patent application takes place without 2 input from people who might later be accused of 3 infringement, so it's important that we provide a chance for 4 someone accused of infringement to challenge the patent in 5 court.</p> <p>6 In deciding issues of infringement and validity, 7 it is your job to decide the facts of the case. The judge 8 will instruct you about the law, which may include the 9 meaning of certain words or phrases contained in the patent. 10 So it is your primary duty as jurors to resolve any factual 11 disputes and, in some cases such as infringement and 12 validity, to apply the law to those facts.</p> <p>13 To prove infringement, the patent holder must 14 persuade you by what is called a preponderance of the 15 evidence relating to the facts of the case that the patent 16 has been infringed. To prove invalidity, the alleged 17 infringer must persuade you by what is called clear and 18 convincing evidence that the patent is invalid.</p> <p>19 The judge in your case will explain these and 20 other terms and provide additional specific instructions at 21 the appropriate time. Good luck with your task, and thank 22 you for your service.</p> <p>23 (The video ended.)</p> <p>24 THE COURT: All right. Ladies and gentlemen, 25 just a few more preliminary instructions before we'll let</p>
<p style="text-align: center;">118</p> <p>1 person or company the inventor has assigned a patent to can 2 enforce the patent against anyone who uses the invention 3 without permission. We call such unlawful use infringement. 4 But the PTO and its examiners have no jurisdiction over 5 questions relating to infringement of patents. If there is 6 a dispute about infringement, it is brought to the Court to 7 decide.</p> <p>8 Sometimes in a court case, you are also asked to 9 decide about validity, that is, whether the patent should 10 have been allowed at all by the PTO. A party accused of 11 infringement is entitled to challenge whether the asserted 12 patent claims are sufficiently new or nonobvious in light of 13 the prior art or whether other requirements of patentability 14 have been met. In other words, a defense to an infringement 15 lawsuit is that the patent in question is invalid.</p> <p>16 You may wonder why it is that you would be asked 17 to consider such things when the patent has already been 18 reviewed by a government examiner. There are several 19 reasons for this. First, there may be facts or arguments 20 that the examiner did not consider, such as prior art that 21 was not located by the PTO or provided by the applicant.</p> <p>22 In addition, there is, of course, the 23 possibility that mistakes were made or important information 24 overlooked. Examiners have a lot of work to do, and no 25 process is perfect. Also, unlike a court proceeding,</p>	<p style="text-align: center;">120</p> <p>1 you break for lunch and get situated.</p> <p>2 Next, let me tell you that the claims of the 3 patent, as you've heard, define the patent owner's rights 4 under the law. That is, the claims define what the patent 5 owners may exclude others from doing during the term of that 6 patent.</p> <p>7 The claims may be divided into a number of parts 8 or steps referred to as claim limitations. The claims of a 9 patent serve two purposes. First, they set the boundaries 10 of the patented invention, what the patent covers, and 11 second, they provide notice to the public of what those 12 boundaries are.</p> <p>13 It's the claims of the patent that are infringed 14 when patent infringement occurs. The claims are at issue as 15 well when the validity of a patent is challenged.</p> <p>16 In this case, we will be concerned with 17 claims 25 and 26 of the '114 patent, and Claims 1 and 2 of 18 the '517 patent.</p> <p>19 While the claims define the invention, sometimes 20 the words or phrases in those claims need to be further 21 defined or interpreted. This has been done already in the 22 case, and a copy of those definitions are included in your 23 juror notebooks.</p> <p>24 You must accept the definition of these words or 25 phrases in the claims as correct. For any words or phrases</p>

<p style="text-align: center;">121</p> <p>1 in the claims for which you have not been provided with a 2 definition, you should just apply the ordinary and customary 3 meaning. 4 You should not take the definition of the 5 language in the claims as an indication that I have a view 6 regarding how you should decide the issues that you're being 7 asked to decide such as infringement and invalidity. Those 8 issues are yours to decide. 9 In this case, you must decide things according 10 to the instructions I'll give you at the end of trial. 11 Those instructions will repeat this summary and will provide 12 more detail. 13 You must decide, first, whether ME2C has proven 14 by a preponderance of the evidence that each defendant 15 induced infringement by a power plant of one or more of the 16 asserted claims of the '114 and the '517 patents. 17 Next, whether ME2C has proven by a preponderance 18 of the evidence that each of the CERT RC defendants 19 contributed to the infringement by a power plant of one or 20 more of the asserted claims for the '114 and '517 patents. 21 If you decide that ME2C has proven that a 22 defendant infringed one or more of the asserted claims of 23 the patents, whether ME2C has proven by a preponderance of 24 the evidence that that defendant willfully infringed that 25 claim.</p>	<p style="text-align: center;">123</p> <p>1 Third, don't try to do any research or make any 2 investigation about the case on your own. Let me elaborate. 3 During the course of the trial, you must not 4 conduct any independent research about the case or the 5 matters in the case or individuals or entities involved in 6 the case. 7 In other words, you should not consult 8 dictionaries or reference materials, search the internet, 9 websites, blogs, or any other electronic means. Again, 10 should there happen to be a newspaper article or radio or 11 television report relating to this case, and don't watch or 12 listen to the report. 13 It's important that you decide this case based 14 solely on the evidence that's presented in this courtroom. 15 Please do not try to find out information from any other 16 sources. I know that many of you use smartphones, tablets, 17 the internet and other tools of technology. 18 You also must not talk to anyone about this case 19 or use these tools to communicate electronically with anyone 20 about the case. This includes your family and friends. You 21 may not communicate with anyone about the case on your cell 22 phone or smartphone, through e-mail, through tablet, text 23 messaging, Twitter, Snapchat or Whatsapp or any blog or 24 website or any internet chatroom or by way of any other 25 social networking websites including Facebook, Instagram,</p>
<p style="text-align: center;">122</p> <p>1 Next, whether defendants have proven by clear 2 and convincing evidence that one or more of the asserted 3 claimed of the '114 and '517 patents is invalid. 4 Then if you decide that ME2C has proven that a 5 defendant infringed a claim not shown to be invalid, you 6 must decide what monetary damages ME2C has proven by a 7 preponderance of the evidence that it has entitled to. 8 Now, a few words about your conduct as jurors. 9 First I instruct you that during the trial, you're not to 10 discuss the case with anyone or permit anyone to discuss 11 with it you. 12 Until you retire to the jury room at the end of 13 this case to deliberate on your verdict, you're simply not 14 to talk about it. If any lawyer, party, or witness does not 15 speak to you when you pass them in the hall or ride the 16 elevator or the like, remember, it's because they're not 17 supposed to talk with you nor you with them. 18 In this way, any unwarranted and unnecessary 19 suspicion about your fairness can be avoided. If anyone 20 tries to talk to you about the case, bring it to the Court's 21 attention promptly. 22 Second, do not read or listen to anything 23 touching on this case in any way. By that I mean if there 24 may be newspaper or internet articles relating to the case, 25 don't read the article or watch or listen to the report.</p>	<p style="text-align: center;">124</p> <p>1 LinkedIn. 2 Finally, don't form any opinion until all the 3 evidence is in. Keep an open mind until you start your 4 deliberations at the end of the case. You'll also be given 5 a notepad and a pen. 6 If you wish, you may, but you're not required to 7 take notes during the presentation of evidence, the 8 summation of the attorneys at the conclusion of the evidence 9 and during my instructions to you on the law. 10 Notes can be helpful to you because at the end 11 of the trial, you must make your decision based on what you 12 recall of the evidence, but don't let notetaking distract 13 you to the point that you miss hearing other testimony from 14 the witness. 15 Your notes are only to be used as aids to your 16 memory, and if your memory should later be different from 17 your notes, then you should rely on your memory and not your 18 notes. 19 Also keep in mind that you will not have a 20 transcript of the testimony to review, so above all your 21 memory will be your greatest asset when it comes time to 22 deliberate and render a decision in this case. 23 If you do take notes, you must leave them in the 24 jury deliberation room, which is secured at the end of each 25 day, and remember that your notes are for your own personal</p>

<p style="text-align: right;">125</p> <p>1 review. At the conclusion of this trial, your notes will be 2 collected and destroyed without review. 3 I'll give you details on the law at the end of 4 the case, and those instructions will control your 5 deliberation and decisions. 6 As I mentioned, to assist in your deliberations, 7 you've been provided with a notebook that contains the 8 following: A glossary of patent terms, a sample patent that 9 was mentioned in the video we just saw, the Court's claim 10 constructions and copies of the patents-in-suit. 11 These materials have been jointly submitted by 12 the parties, so please refer to them to assist you during 13 the trial. 14 During the trial, it may be necessary for me to 15 talk with the lawyers out of your hearing by having a bench 16 conference, which is also called a sidebar. If that 17 happens, please be patient. 18 We're not trying to keep important information 19 from you. These conferences are necessary for me to fulfill 20 my responsibility to be sure that evidence is presented to 21 you correctly under the law. If you would like to stand or 22 stretch or walk around the jury box while we're at sidebar, 23 you should feel free to do so. 24 This case will now begin after we break for 25 lunch and give you all time to deal with affairs.</p>	<p style="text-align: right;">127</p> <p>1 Though you have heard me say during the jury 2 selection process, I want to again outline the schedule I 3 expect to maintain during the course of this trial. 4 As I mentioned previously, the presentation of 5 evidence in this case is expected to be concluded Friday 6 this week or Monday of next week, with jury deliberations. 7 We will normally begin the day at 9:00 a.m. and 8 continue until 5:00 p.m. There will be at least one break 9 every morning and at least one break every afternoon. There 10 will also be a lunch break. 11 The only significant schedule is when the case 12 is submitted to you for your deliberations, at that point 13 you'll be able to deliberate as late as you wish. 14 Please keep in mind this is a timed trial. That 15 means I have allocated each party a maximum number of hours 16 in which to present all portions of its case. This allows 17 me to tell you that we expect to be completed with this case 18 by Monday, March 4th, or Tuesday, March 5th. 19 Of course you can help me keep on schedule by 20 being here promptly each morning and being ready to proceed 21 at the end of each break. 22 One final word. I told you when I intend to 23 take breaks and how often I aim to take breaks, but if any 24 of you need an additional break at any time, that's fine. 25 You just need to get my attention or my assistant's</p>
<p style="text-align: right;">126</p> <p>1 But when you -- after you come back after lunch, 2 first ME2C may make an opening statement outlining its case. 3 Then defendants may make an opening statement outlining 4 their case. 5 Opening statements are not evidence. Their only 6 purpose is to help you understand what the evidence will be. 7 Next, the parties will present their evidence. 8 ME2C will first introduce its evidence that it believes 9 supports its contention that defendants infringed the 10 asserted claims. 11 When ME2C is finished, defendants will introduce 12 evidence to defend against ME2C's allegation of infringement 13 and will introduce evidence that they believe supports their 14 contention that the asserted claims are invalid. 15 When defendants are finished, ME2C will have the 16 opportunity to introduce evidence to defend against 17 defendants' allegations of invalidity. 18 After all the evidence is in, I'll give you 19 instructions on the law and describe for you the matters you 20 must resolve. 21 The lawyers will then offer closing arguments. 22 The closing arguments are not evidence. Their purpose is to 23 summarize and interpret the evidence for you and to tie the 24 evidence to the issue. You'll then retire to the jury room 25 and deliberate on your verdict.</p>	<p style="text-align: right;">128</p> <p>1 attention. That can be done usually by waving your hand or 2 if need be stand. 3 So, ladies and gentlemen, those are the 4 preliminary instructions we have for you. 5 Now, we're going to have our jury removed so 6 they can have lunch and get situated back there and then 7 we'll take ours. 8 (The jury exited the courtroom.) 9 THE COURT: Please be seated, everybody. 10 It's 12:30 now. I'll ask counsel to be back and 11 ready to go by 1:00. In practice we take at least a half 12 hour for lunch. 13 Also I saw the parties submitted some -- you had 14 some disputes about depositions. It looks like they don't 15 need argument on that but want me to decide them for 16 tomorrow based on the papers. 17 I can do that. It may not be until the end of 18 day and get you decisions. If there was one of two of them, 19 I wouldn't charge you for it. But because there's many, I 20 will be charging you for the time it takes me to resolve the 21 disputes. 22 If between now and the end of the trial day you 23 can reduce the number of disputes, that's great, let me 24 know. Otherwise I'll expect at the end of the day I'll have 25 to resolve all these disputes, and the time will be charged</p>

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1 against whichever side.
2 Unless there's anything further, we'll take our
3 lunch break.
4 (A luncheon recess was taken, after which the
5 following proceedings were had:)
6 THE COURT: We'll bring the jury in.
7 MR. CALDWELL: Your Honor, in a half a second,
8 may I tell you something I want to do to make sure it's okay
9 quickly?
10 Well, I know the rule is going to be invoked, so
11 our plan is it applies to one witness. He won't be here for
12 any other witness testimony per Your Honor's instructions.
13 My expectation is he would watch openings and
14 then take him out of the room before any other witness
15 testifies. I just want to make sure that's okay with
16 Your Honor, and that comports with your understanding of how
17 we should -- how we should use the rule per Your Honor's
18 orders.
19 (Reporter clarification.)
20 THE COURT: So each side will have a client
21 representative that can be present throughout the trial
22 without invoking the rule, but is there some other witness
23 that you're talking about?
24 MR. CALDWELL: One other fact witness, the CEO
25 of Midwest Energy. We just want him in here for the

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1 opening, and then we would sequester him before he -- before
2 the other witness testimony, which is how we thought
3 Your Honor's order was.
4 We just didn't want to be surprising you if you
5 thought he should be gone for opening as well before the
6 evidence actually starts.
7 THE COURT: Okay. Is this objected to? Is
8 there any --
9 MR. CALDWELL: Just -- there's not an objection.
10 THE COURT: Okay. No worries.
11 Send the jury in.
12 (The jury entered the courtroom.)
13 THE COURT: We'll begin our trial, and I'll turn
14 to plaintiffs' side first to ask if they wish to make an
15 opening statement.
16 MR. CALDWELL: Yes, Your Honor.
17 THE COURT: Please come forward. Mr. Caldwell.
18 MR. CALDWELL: Thank you, Your Honor. May I
19 have just a moment to set up an easel I believe I expect to
20 use.
21 THE COURT: You may.
22 MR. CALDWELL: I'm guessing I'll start here. If
23 the Court or the jury can't see it, I'm obviously happy to
24 move it.
25 Thank you, Your Honor. May I proceed?

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1 THE COURT: You may.
2 MR. CALDWELL: Good afternoon. I'm grateful to
3 have this opportunity to introduce you guys to my client, to
4 the team, and to the case that you're here to listen to.
5 As His Honor said, this isn't evidence, what I'm
6 about to present. This is attempting to sort of organize
7 what we, from the plaintiffs' perspective, believe the
8 evidence will show.
9 I'll try to do that as efficiently as I can.
10 It's a fairly complicated matter, but throughout this trial
11 we'll try to be respectful of your time and do it as
12 efficiently as possible.
13 By way of background my, name is Brad Caldwell.
14 I have an engineering degree from -- undergrad and then I
15 went on to law school. Now I'm lucky enough to try these
16 kinds of cases with a lot of my friends, many of home are
17 here and present, Mr. Nemunaitis, Mr. McCarty,
18 Ms. Dellinger, Ms. Haley, and Mr. Pearson.
19 One of the neat things about this kind of case
20 is if you're somebody who's curious about how things work is
21 you get to see a lot of people's inventions, how they came
22 up with them, what their motivations were.
23 And you know, to be honest with you, sometimes
24 you'll find out that people's career choices were motivated
25 just by money, but other times you hear where somebody was

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1 inspired by something that was really meant to change the
2 world and make the world better for the rest of us, made us
3 healthier, made our families healthier, and that's the kind
4 of story that we have in this case. It's quite amazing.
5 What we're going to talk about is a team of
6 inventors who spent countless hours attempting to solve a
7 problem like removing a genuine severe toxin from the air
8 that we breathe, the water that we swim in and drink, and
9 the food we eat, and that toxin is mercury.
10 Now, sometimes the periodic table of the
11 elements make sense, and the letters kind of correlate, but
12 mercury is signified by the symbol Hg on the periodic table.
13 And you'll probably see this from time to time
14 in documents where somebody writes down Hg, and that's why
15 I'm previewing it now. It's mercury.
16 If you're old enough to remember when the doctor
17 would stick the glass thermometer under your tongue for like
18 two minutes and wait patiently, that was filled with
19 mercury, but you never really wanted to have that thing
20 break because you sure didn't want to adjust it or have it
21 sit on your scanner because mercury can be an incredibly
22 highly toxic chemical.
23 It leads to like kidney, liver, nervous system
24 problems. It's well known to lead to birth defects. And
25 it's even sort of inspired some literary notions like the

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1 Mad Hatter from Alice in Wonderland, and the context of the
 2 Mad Hatter comes because there was actually a time in
 3 Victorian England when hat makers used mercury to stiffen
 4 hats.
 5 And then they would suffer neurological problems
 6 later in life, and nobody knew what was causing it, but we
 7 do now.
 8 It turns out that the United States relies a lot
 9 on coal, and depending where the coal comes from and the
 10 ratio at which it needs to be burned to generate steam and
 11 make electricity, there are many plants for which mercury is
 12 a huge problem.
 13 What's interesting is a lot of these plants had
 14 really good sort of pollution control type stuff that got
 15 better over the years, but there's some unique chemical
 16 properties in mercury that kind of makes it just fly right
 17 through the flue gases, through a lot of the old filters and
 18 just right out.
 19 Then it ends up settling into groundwater, comes
 20 out in the rain and ends up in lakes with fish, and you may
 21 have seen things like, You should not eat these seven types
 22 of fish, right, that people say along those lines, and it's
 23 because of mercury.
 24 And I'm not saying that all of that is because
 25 of coal plants, but I'm saying that's the problem we're

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1 talking about.
 2 So I'd like to introduce you to my client,
 3 Mr. John Pavlish. Mr. Pavlish, will you stand up please?
 4 Thank you.
 5 So an appreciation of some of these mercury
 6 issues really take off in the late '90s and early 2000s.
 7 And if I can focus on Mr. Pavlish was trying to
 8 solve these problems, and what you're going to learn is they
 9 conceived of, tested, proved, and took to market a
 10 remarkable solution that has surprising results and had
 11 dramatic, dramatic effects on reduction of mercury, like
 12 90 plus percent kind of reduction of mercury from coal-fired
 13 plant emission.
 14 Now, while Mr. Pavlish and his colleagues were
 15 trying to build a business around, specifically, Congress
 16 was convinced that it should give a financial incentive to
 17 industry to address mercury and other pollutants like
 18 nitrogen based pollutants, like NOx, or nitrogen oxide, what
 19 Congress would give to companies who treated coal.
 20 Probably heard of tax deductions. Tax credit is
 21 a little different than a tax deduction. It's kind of like
 22 a coupon for whatever the value of that tax credit is.
 23 So, for example, if you were to start a small --
 24 a small business, and at the end of the year you made a
 25 little profit and you were going to owe say \$10,000 in taxes

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1 for your small business, a deduction might be even if you
 2 spent \$10,000 on marketing materials and computer papers and
 3 computers and your phone and your phone bill, the deduction
 4 for that might take your \$10,000 tax bill and reduce it a
 5 little. Like you'd still owe some of the taxes.
 6 But if you add \$10,000 in credits, now you owe
 7 none of those taxes. It just offsets your entire -- your
 8 entire tax bill in that case, and you'll hear that that's
 9 where the defendants in this case entered the picture.
 10 So the defendants, which kind of globally we're
 11 going to refer to as the CERT entities, and that will become
 12 clearer as we -- as we move forward, were right on time to
 13 get involved in the tax credit program when the government
 14 put tax credits on the line.
 15 And you'll see that we're here today because in
 16 order to keep running their tax credit business, the
 17 defendant had to induce infringement of Mr. Pavlish's
 18 patents for tens of millions of tons of coal.
 19 So we'll get into that evidence over the coming
 20 days, but now I want to give sort of a little primer of the
 21 technology that's at issue to put everything in context.
 22 The first thing I want to show is a coal-fired
 23 energy plant, and these things are huge. For visual
 24 context, I know it's hard to picture, but, you know, if we
 25 look at the visual context, we're seeing like garage doors

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1 that are here, right, big commercial garage doors? These
 2 things are huge.
 3 The boilers is -- it's like a -- twice the size
 4 of this building in terms of size and the height and that
 5 kind of thing.
 6 And this is a WA Parish coal plan. It happens
 7 to be sort of southwest of Houston. It's right down the
 8 road from where my wife's mom and dad live, and so we're
 9 going to talk about a lot of different parts on this.
 10 But right now I want to talk about the coal
 11 pile. You can start to see it right here. You know, if I
 12 go forward to give a little bit of context, this is the coal
 13 pile at that WA Parish coal plant southwest of Houston.
 14 And these gentlemen are here. I think maybe
 15 that's a Cat D9 up there. That's a big dozer. This is how
 16 they keep on hand the supply that will get them through
 17 maybe a month or 45 days, something like that.
 18 So how does all that coal get there? Have you
 19 ever been stuck behind one of these on a railroad crossing
 20 or something like that? These coal trains tend to have 100,
 21 115, 120 cars. Each car can be over a hundred tons of coal.
 22 For context, a hundred cars, a hundred tons.
 23 That WA Parish plant can go through three or four trains
 24 per day of coal. That's how much -- that's how much these
 25 some of these big plants are producing, and how much is used

<p style="text-align: right;">137</p> <p>1 to produce electricity, the evidence will go through that as 2 well.</p> <p>3 But essentially we'll hit the high points. That 4 coal enters on a conveyor belt. It is pulverized into a 5 dust. It's like a gigantic wear-in blender for coal. 6 Essentially it just turns it into talcum powder of coal. 7 It comes into this combustion chamber or boiler 8 or furnace, all sorts of names, and then what ends up 9 happening is water is sort of pumped through pipes that are 10 in the walls and structured around that and kind of transfer 11 heat into the water.</p> <p>12 The water gets heated up into steam, and the 13 steam blasts out into what looks like a jet turbine, and 14 it's kind of the inverse of what you do with the jet, of 15 spinning it to pull air through. Air is spinning. 16 When that steam pressurized air spins the 17 turbine, it turns a generator of essentially like metals and 18 magnets to basically create electricity that runs out on to 19 transmission lines. 20 Now, this fire reaction is kind of amazing. 21 It's like a ten-story tall fire tornado or fireball, very 22 violent reaction, and the exhaust gases are also just pushed 23 out, and eventually emitted. 24 And there are pollution control devices along 25 the way, so we'll talk about that. But to the point I made</p>	<p style="text-align: right;">139</p> <p>1 charger will work either place. You plug a toaster in over 2 there, you've got a problem. If -- a lot of things really 3 depend on the frequency.</p> <p>4 These things are very precisely controlled with 5 the steam to oscillate at 3,600 rotations per minute, 6 60 cycles per minute since there are 60 seconds in a minute, 7 and these essentially define the transmission frequency of 8 the alternating current system in the United States, super 9 critical.</p> <p>10 So don't get me wrong. I'm not trying to 11 endorse or minimize other types of the power. It's not 12 about that. It's not about what people prefer in terms of 13 different types. It's that we are using coal, and we will 14 still be using coal for the foreseeable future.</p> <p>15 So I already touched on this. Basically the 16 exhaust gases from the combustion chamber come on out. They 17 go through pollution control mechanisms that you'll hear 18 more about and then eventually out.</p> <p>19 So I'd like to talk about some stuff that's 20 going on in the mid to late 1990s. The EPA -- so we're 21 going to talk about a couple of different government 22 entities. So I mentioned tax credits, so there's IRS and 23 Congress.</p> <p>24 And then there's an agency whose job it is to 25 try to help the environment and/or reduce adverse effects on</p>
<p style="text-align: right;">138</p> <p>1 earlier, a lot of mercury flies through traditional 2 pollution control mechanisms at these plants.</p> <p>3 So kind of go by this quickly. This is a 4 turbine unit at -- one of the turbine units at the WA Parish 5 plant. The funny thing is, you know, we hear a lot about 6 clean energy, right? And people may wonder, Do we still 7 care about coal plants.</p> <p>8 Certainly places in communities where coal is 9 mined care a lot about them, but I mean, we, even if you 10 don't think about it, probably need to care more than we 11 realize.</p> <p>12 So when you have things like wind generation or 13 solar generation, the reality is it's not as reliable as 14 coal-fired energy plants, and they are sort of like the 15 backbone of the electric system in the United States. 16 So even over the last 20 years, let's say the 17 drop in percentage of electricity generated by coal might 18 have gone from like 50 percent to 20 percent. It's still 19 the fabric that the rest of the grid is sort of stitched to. 20 And part of that is because of these massive 21 turbines. If you've ever seen the lamps at hotels right 22 here say 110 volts, 60 hertz, 60 Hz, and that's talking 23 about the frequency of the alternating current that we have 24 in the United States. 25 Some sophisticated plug-in devices like an o</p>	<p style="text-align: right;">140</p> <p>1 the environment, and that is the EPA.</p> <p>2 So the EPA in the late '90s did a study of 3 hazardous air pollutants and identified that mercury from 4 coal-fired utilities is the hazardous air pollutant of 5 greatest concern and merits additional research and 6 monitoring.</p> <p>7 And like I said, they have not been able to 8 recognize -- they have not been able to identify any 9 demonstrated add on control technologies that effectively 10 remove mercury. We're going to -- we'll talk later about -- 11 about why that is when we get into the evidence.</p> <p>12 So what kind of a person goes to work and wrings 13 their hands over these problems? It's somebody like 14 Mr. Pavlish. In the late 1990s and early 2000s, Mr. Pavlish 15 was working for a nonprofit research center at the 16 University of North Dakota that is called the Energy and 17 Environmental Research Center.</p> <p>18 He will explain how he comes to the EERC for two 19 very good reasons: One, he'd be closer to family, and two, 20 to try to help some of these issues with the environment.</p> <p>21 But one thing that these guys knew having been 22 in industry that we may not realize is that not all coal is 23 the same. So Mr. Pavlish will explain that different types 24 of coal come from different parts of the country. 25 And the thing is that I'll admit prior to this</p>

<p style="text-align: center;">141</p> <p>1 case, when someone says something to me like a coal mine, my 2 first thought goes to where my mom grew up. She's from 3 West Virginia, and I have an image in my mind of this sort 4 of stereotypical coal mine from there.</p> <p>5 Well, it turns out that in the last several 6 decades, a stunning amount of the coal that leads to power 7 in our country actually comes from a western coal that is 8 quite different, largely in this area over here that's blue 9 and very specifically in something called the Powder River 10 basin which is pretty much northeast Wyoming, catches a 11 little bit of Eastern Montana.</p> <p>12 So just by sense of scale, Wyoming, which is 13 near and dear to my heart for an entirely different reason, 14 is the least populated state in the country, so you might 15 wonder why we care about that coal.</p> <p>16 That coal is so prevalent and due to its ability 17 to be mined, it is shipped by those trains to plants all 18 over. That's where the coal comes from that was in that 19 picture I showed you from a plant that's here in Houston.</p> <p>20 So a lot of the plants that were built to use 21 the Powder River Basin coal actually can't really work with 22 the coal on the eastern side of the United States because 23 they all have different chemical makeups.</p> <p>24 So some of the ones on the -- on the east coast, 25 they might be good at generating heat straight, but they</p>	<p style="text-align: center;">143</p> <p>1 meaning it might grab the bad stuff that's in your water and 2 sort of help it be pulled out into the --</p> <p>3 But one of the things they identified was 4 activated carbon might be a good part of the solution in the 5 exhaust gas. The problem was mercury, specifically this 6 elemental mercury that just came out of the burner, because 7 of its sort of chemical state, it still can just kind of fly 8 right through a lot of these -- a lot of these filters.</p> <p>9 And so what they set out to do was to see if 10 they could find some different chemical to induce the 11 mercury sort of in a courtship with that carbon to cause it 12 to latch on to the carbon where it could just fall out into 13 an ash they could collect instead of going up into the 14 environment.</p> <p>15 And once it's out in an ash, maybe you think, Is 16 that okay. Actually it's not that bad because we can use it 17 as a road base or something else that's like safe, then it 18 doesn't go into our food source. It doesn't go into 19 something -- something like that.</p> <p>20 So he's going to describe his idea and the whole 21 mental process for him. He's also going to describe how he 22 was able to test it because of his work at EERC, and that's 23 where this -- this thing comes into play, which we may call 24 the PTC or particulate testing buster.</p> <p>25 It's essentially like a miniature test power</p>
<p style="text-align: center;">142</p> <p>1 have really high sulfur problems. To deal with the sulfur 2 problem, you have to put in this \$300 million thing called a 3 scrubber.</p> <p>4 So if somebody builds a plant for that, great, 5 but if somebody builds one for western coal and they don't 6 have a scrubber, you can't really burn those. So we're 7 going to talk all about that day, and I don't want to 8 belabor it at this point.</p> <p>9 But Mr. Pavlish and his team recognize that 10 mercury was a tremendous problem from these Powder River 11 Basin coals and also lignite coals that are shown here in 12 orange. There's some large sources in North Dakota, a 13 little spottier in other parts of the country.</p> <p>14 And they set out to try to find a way to solve 15 that problem in coal-fired power plants. Now, one of the 16 things that they knew is you could use the stuff called 17 activated carbon, sort of in the exhaust gas. That's the 18 catch it.</p> <p>19 It's like a Britta filter for the exhaust gases 20 on a coal plant. So if you've ever gotten a Britta filter, 21 taken a pitcher. You fill it up the first time. That first 22 batch the water is kind of gray, and you pour it out once or 23 twice, then it's like ready to use.</p> <p>24 Essentially that that test is kind of like 25 activated carbon. It's good at adsorbing on to things,</p>	<p style="text-align: center;">144</p> <p>1 plant that they could run certain tests on, and initially 2 Mr. Pavlish is doing sort of the contracted work he was 3 supposed to be working on, which may be sponsored by the EPA 4 or Department of Energy, something like that.</p> <p>5 But if he had some extra hours after hours, he 6 might run tests and try to come up with a solution. He's 7 going to explain how his test led him and his coinventors to 8 a very surprising finding. It's a chemical known as a 9 halogen, specifically bromine.</p> <p>10 So we might be a little bit more familiar with 11 chlorine which is kind of well known and its use for a lot 12 of kind of cleaning things. It turns out chlorine may be 13 heavy on the right check, but chlorine is like super 14 corrosive. It's a big problem in high volumes with these 15 coal plants, and he's going to describe something remarkable 16 they discovered, and they tired to test other chemicals and 17 figure out what was causing certain things to work to grab 18 on to mercury.</p> <p>19 They hatched their idea in 2002, and what we'll 20 do is because it will -- we're going to do this not 21 gratuitously. We're going to do it because it matters. I 22 think the defendants are going to come in and say, I'm not 23 sure you actually had your invention, or maybe you had your 24 invention after somebody else did, that kind of thing.</p> <p>25 And so because we believe defendants will make</p>

<p style="text-align: center;">145</p> <p>1 that charge, Mr. Pavlish is going to go through and show you 2 how his conception of his invention was documented in 2002, 3 how they diligently tried to raise funds so they could keep 4 using the test environment, how it's documented after 5 additional experiments, how it's documented again and 6 reported to the Department of Energy who was sponsoring them 7 to do this, how it continues to be documented to the 8 Department of Energy, and then eventually when they filed a 9 patent application in 2004.</p> <p>10 At the time, the patent application was owned by 11 his employer, which was that EERC, and the lawyers and team 12 at the EERC kind of had some input on what types of -- parts 13 of his invention they wanted to pursue, and they did.</p> <p>14 And he's actually had a significant number of 15 patents that came out of this research. It's like a dozen, 16 but they all claim back to that original provisional 17 application in 2004. That was his stake in the ground to 18 the public that says, I've had these inventions.</p> <p>19 And what they did is they filed a type of patent 20 procedure called continuation where you keep it alive, and 21 you can issue opinions on different aspects of the 22 invention. He'll explain that to you.</p> <p>23 What we're going to talk about in this case -- 24 I'm just going to summarize, is an aspect of his invention 25 disclosed in that original application that we believe these</p>	<p style="text-align: center;">147</p> <p>1 the EERC center with Mr. Pavlish. He was actually working 2 with on a different -- a different business center that 3 was -- it was working with EERC to test them.</p> <p>4 And in the process of testing the thing he 5 wanted to test, he learned of this two-part invention of 6 Mr. Pavlish. He saw the value and importance of it and 7 wanted to get it out into the world and build a business 8 around it and get it to coal plants because the EERC was a 9 research center that didn't sell things. They didn't go to 10 the power plants and sell them the chemicals and install the 11 hardware to do it.</p> <p>12 So Mr. MacPherson initially negotiated 13 permission from the EERC called a license to take these 14 inventions and go implement them at coal plants. That's a 15 license that these defendants over here -- they've just 16 never gotten for this technology.</p> <p>17 But what's more is his company is now the 18 plaintiff in this lawsuit because in that original 19 agreement, he talked to the EERC and said, For now I want a 20 license to use your stuff, but if things start to take off, 21 I would like to ability to come back and kind of complete a 22 purchase transaction and actually buy the patent, so my -- 23 my business can own them, and EERC agreed.</p> <p>24 So as we move forward, early -- kind of in the 25 let's call it 2008 to 2015, sort of across that time, you'll</p>
<p style="text-align: center;">146</p> <p>1 defendants are causing to happen at several power plants. 2 So specifically, we'll go to the detail at other 3 times, but we're talking about injecting an additive, for 4 example, over here by the coal pulverizer. It's your 5 bromine, and then the sorbent described, which is described 6 as the activated carbon in the gaskets to cause the bromine 7 to essentially catalyze this reaction and help the carbon 8 grab the mercury, and it falls out of the gas.</p> <p>9 So what does that look like in one of these 10 plants? Bromine sprayer can be here on the coal or it could 11 after it's made into dust, and then in the flue gases, 12 activated carbon is injected.</p> <p>13 And in this very sort of turbulent section of 14 the flue gas, the bromine helps the carbon latch on to the 15 mercury before it gets here to a bag house, sort of a 16 filtering device that can catch that ash and pull it out of 17 the gases so that almost all of it is removed from the 18 exhaust gases.</p> <p>19 This was in Mr. Pavlish's original application, 20 and that's the invention for which we're here today.</p> <p>21 At this time, I'd like to introduce somebody 22 else. I'd like to introduce Mr. Whit MacPherson. 23 Mr. MacPherson, would you stand up?</p> <p>24 So this is -- Rick MacPherson is the CEO of my 25 client, MA2C. Now, Mr. MacPherson was not an employee at</p>	<p style="text-align: center;">148</p> <p>1 get more detail later, and Mr. MacPherson is going to tell 2 you his story of basically traveling the road, trying to 3 convince power plants to let him implement the invention and 4 help them reduce mercury.</p> <p>5 But there are some other timelines going on in 6 parallel. That's the inventors, that is Mr. MacPherson, 7 that is ME2C, their business.</p> <p>8 Remember the EPA, Environmental Protection 9 Agency. So like I said, back in 1998, they had long 10 recognized that mercury was a hazardous air pollutant of 11 great concern. And then as things start to move forward in 12 the 2000s, and things don't always move fast at the 13 government agencies, but they started realizing we're going 14 to have to put some rules in place that make plants comply.</p> <p>15 A lot of places aren't going to go install 16 something unless you make them. They just don't want to 17 change things, right? They don't want to introduce new 18 chemicals to their system.</p> <p>19 So around 2011, the EPA announced that it was 20 going to implement a program called MATS, and it's a mercury 21 toxin removal guideline, MATS.</p> <p>22 Here's the thing though: MATS wasn't going to 23 be mandatory for a few years. It started coming in more 24 like 2014, 2015, 2016, so plants had a little time to kind 25 of adjust and meet it, and this is the EPA. This is not</p>

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1 IRS. This is not Congress.
2 This is the EPA saying, When we implement MATS,
3 we want you to be taking 90 percent of the mercury out of
4 your emissions. So this is a fantastic glide path for
5 Midwest Energy, Mr. MacPherson and Mr. Pavlish, to be at
6 that point, right? Because they have the solution that can
7 get them there.
8 And what they started seeing in their business
9 is as they got closer to 2014/2015, in that time frame,
10 their business is really taking off. Their revenue is
11 taking off, showed up in the success of their bottom line,
12 and the dream was finally becoming real.
13 I failed to mention earlier, but ultimately
14 Mr. MacPherson convinced Mr. Pavlish to leave EERC and
15 actually join him at the company, Midwest Energy, to try and
16 implement the invention.
17 So you think you're on this glide path to
18 success, but what the evidence is going to show is that as
19 he should be hitting that crescendo of MATS coming into
20 effect and everybody needing the invention, some power
21 plants starting declining when he wanted to --, and more and
22 more of them started declining. And I think even some of
23 his existing customers said, Ahhh, we're changing.
24 So why was that? It's because somebody else was
25 giving them a better deal, but it's not just that the people

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1 were undercutting his prices. What you'll see is that often
2 there was somebody competing with him who was essentially
3 paying the power plant to take the bromine chemicals to
4 remove mercury so.
5 How is he going to compete with that? And
6 that's where we start to hear more about the defendants and
7 their business.
8 What you're going to hear is that Mr. MacPherson
9 and his team started to learn that someone would set up this
10 LLC, and they would put structure at the coal plant. The
11 coal plant already owns that pile of coal. They've already
12 paid for it to be there.
13 This LLC would buy it from the coal plant, spray
14 it with bromine, sell it back to the coal plant and lose
15 money in the process.
16 So if they're literally losing money, how is he
17 supposed to compete with that? And the evidence is going to
18 show they were losing -- those LLCs were setting up a system
19 to lose money on that transaction to incentivize the coal
20 plants to use their chemical solution, which was bromine
21 with regard to mercury.
22 They also had an additional chemical to address
23 another pollutant, but they were inducing them to use
24 bromine, the invention, to catch mercury.
25 So that brings us sort of to the second

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1 timeline, if I -- you'll indulge me where we got to 2015 or
2 so -- let me back up to 2010, whereas I've been focusing on
3 the EPA wanting to put this very tight restriction in place
4 at 90 percent.
5 If we get back here into kind of that 2009/10
6 time frame, Congress was convinced to give staggering tax
7 credits to companies that make a coal and claim a credit for
8 reducing 40 percent of the mercury or 20 percent of a
9 different -- different pollutant, and that's where the
10 defendants come in.
11 So there's these 12 defendant companies, and I
12 need to explain who they are and what they do the best I
13 can.
14 So you've heard me say CERT, and then you heard
15 some introduction of the parties like CERT Operations IV,
16 something like that. CERT is C-E-R-T, and that's an acronym
17 for combustion emission reduction technologies.
18 So if they are combustion emission reduction
19 technologies, you may think you'll hear that they have their
20 own technologies. No. You may hear that they have their
21 own inventors who discovered a different chemical process.
22 Also no. And maybe they make the chemicals. No.
23 So what do they do? And, Your Honor, may I just
24 kind of move about to use my foam board?
25 THE COURT: You may.

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1 MR. CALDWELL: Thank you. I'm sorry, Mr. Sykes.
2 I don't -- I don't know where to put this where you can see
3 it.
4 THE COURT: If defendants' counsel needs to step
5 around, they can do that.
6 MR. CALDWELL: So the second coal plant over
7 there is that WA Parish plant that I showed you pictures of
8 earlier, just for context, and the rest of these are coal
9 plants we're going to talk about in this case.
10 So in terms of who the defendants are, when we
11 look at the Big Cajun II coal plant. Defendants created an
12 LLC called Springhill Resources, and Springhill Resources
13 doesn't have any people that go out and prepare chemicals or
14 apply chemicals to coal or anything like that.
15 So they created another entity, another LLC
16 called CERT Operations IV LLC. Then for that WA Parish
17 plant that I mentioned earlier, they created an LLC that's
18 called Senescence Energy Products, and Senescence Energy
19 Products didn't spray coal, so they had another operations
20 company called CERT Operations RCB.
21 Then for the plant that is Coletto Creek, they
22 created an LLC called Bascobert (A) Holdings, and I
23 appreciate your indulgence and the time that it takes to do
24 this. I think we'll refer back to this board throughout the
25 trial, so I'm hopeful that it's ultimately helpful, and

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1 Coletto Creek used the same entity, the CERT Operations RCB.
2 For the limestone generation, they had created
3 an LLC called Rutledge Products, LLC, and that -- Rutledge
4 Products also used CERT operations RCB.
5 Then for the Labadie Energy Center, the last one
6 in this group, they created an LLC called Larkwood Energy,
7 and Larkwood Energy again used CERT Operations LLC.
8 Now, what these LLCs do is they lease a little
9 space at the plant. They buy the coal from the plant, spray
10 it, and sell it back at a loss.
11 So I think what we want to do to kind of give
12 some context of who these people are is these guys didn't
13 have anything -- any ability to spray the coal, so we have
14 these things here which I will call the operations LLCs.
15 So what is the point of an LLC that loses money?
16 You know, what was their motive for continuing to put
17 millions and millions of tons of brominated coal into these
18 coal plants?
19 The LLCs were claiming tax credits for putting
20 that bromine on the coal, so hundreds of millions of dollars
21 worth of tax credits, just even in the -- even in the final
22 couple of years, and that was after our patents issued,
23 after we told them what we thought was going on.
24 So you might wonder: Why would these LLCs that
25 they set up care about tax credits if they lose money,

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1 right? If you lose money, well, what tax bill do you have
2 anyway?
3 So the evidence is going to answer that question
4 too. These companies were set up so somebody who might
5 otherwise have a big tax bill can invest in those LLCs and
6 claim the tax credits for themselves. So these entities
7 across the top here, these LLCs, are the ones that are meant
8 to be invested in, so we're going to call those the
9 investment vehicle LLCs.
10 Why did I group those together before I went on
11 to the others? Because for those investment vehicle LLCs,
12 what you'll learn is that the folks who originally set them
13 up sold off 99 percent of them to JPMorgan Chase so that
14 JPMorgan Chase could claim environmental tax credits from
15 the coal program.
16 A similar thing continues for the remainder of
17 these for the Laramie River, a company set up called Cottbus
18 Associates, LLC, and these use CERT Operations RCB for the
19 Rush Island project. An entity was set up called Buffington
20 Partners, LLC, and a new operations LLC or different
21 operations LLC called CERT Operations V LLC was set up to
22 run their sprayers.
23 Those investments were sold off to a different
24 entity called -- I believe it's pronounced Kiewit. It's a
25 large construction, and they do other heavy industrial type

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1 things.
2 And then here on the far right, there's two
3 more. We have this one called Powerton, and an LLC was
4 created called Alistar, and Alistar was working with another
5 entity set up called CERT Operations II.
6 And finally, the last LLC that I'm going to have
7 to go through at this point is one called Marquis Industrial
8 for the Antelope Valley Plant which also used
9 CERT Operations II.
10 The elephant in the room on this is that
11 Alistar is grayed out, and I'd like to explain the reason
12 for that. Because CERT sold them off in their entirety, and
13 later Alistar did what we think the evidence will show is
14 the right thing and paid ME2C for the right to use the
15 technology. So they are not a defendant in this case. They
16 will not be at issue in this trial.
17 So who set all this up? It's -- it's a group
18 often referred to as CERT or the CERT partners. Now, as you
19 might expect, like if you want to know the ownership of
20 that, there's more LLCs involved and things like that.
21 But at base, when you start to trace it to
22 humans, it's four folks. It's first a Mr. Jeff Green, who I
23 believe is here and will testify for the defendants. It's a
24 Ms. Leah Schaatt. She may or may not come to the trial.
25 It's a gentleman T. Barr Linton who

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1 unfortunately passed away recently, and another gentleman
2 Mr. Raymond Bane, who will not come to testify.
3 So that is the CERT partners. And I'll tell you
4 what, I forgot something. I didn't tell you who invested in
5 these. The party who invested in Marquis and Alistar is
6 called Mylan. It's a pharmaceutical venture.
7 So why did the CERT partners, the four people I
8 told you about, set this up for the other people? Because
9 these people, JPMorgan, Kiewit, Mylan, paid them very large
10 amounts of money to set this up for them and run it and let
11 those companies claim the tax credits.
12 So what you're going to hear is that stretches
13 many, many tens into the well over hundred million dollars
14 that these companies paid to the CERT partners to set all
15 this up.
16 So why continue to cause the plants to infringe
17 even after they learned about the patents and learned about
18 Mr. Pavlish. It's money for themselves. That's the motive,
19 plain and simple, but it's also tax credits for their
20 investors, these companies that those folks convinced, I've
21 got a tax credit system that I can set up for you, and they
22 sold it to them.
23 In maintaining that system for their investors
24 and maintaining the cash flow for themselves, that's what
25 motivated them to induce the power plants to infringe.

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1 So something else that we're going to talk about
2 in this case is obviously patent infringement, and sometimes
3 in a case, there's a big fight over whether the technology
4 meets the claims, that kind of thing. Does the software
5 code do exactly what the patent claim says, that kind of
6 thing.

7 I believe the evidence in this case is going to
8 show that there's not really a question as to whether
9 they're meeting the patent claim elements, okay? So I'm not
10 going to belabor that now.

11 But I just wanted to show you that later on, for
12 the sake of completeness of our proof, we're going to go
13 through the requirements of the patent claims that are at
14 issue. It's kind of like that thing you saw on the Federal
15 Judicial Center video. These are the claims. It's like a
16 checklist of what must be done to infringe. You'll have
17 plenty of time to see this later.

18 But the thing is in this case, there's not going
19 to be a dispute as to what's called direct infringement, and
20 that is: Is there an entity who is performing this method
21 like spraying with the bromine, injecting -- injecting the
22 activated carbon, not really in dispute.

23 So what will be disputed is that in this case,
24 the kind of infringement at issue -- that's at issue is
25 called indirect infringement. And Judge Burke is going to

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1 instruct you on this law. That is the Court's job. It
2 is -- it is not mine.

3 But at a fundamental level, indirect
4 infringement is kind of a notion that the law provides that
5 in certain circumstances, one entity might be responsible
6 for the infringing acts of another. And you can think of
7 this one notion of contributory infringement sort of like if
8 I give you that missing piece and know that it's going to
9 result in infringement and that that's all it's going to do,
10 well, that can be contributory infringement.

11 Or it's like if I act like giving you incentives
12 and giving you chemicals to incentivize you to do the steps
13 that result in infringement, I'm liable?

14 So we don't have to go see individual coal
15 plants who have enlisted the help of the CERT Operations.
16 CERT is liable if they contribute to that infringement or
17 inducement. Like I say, that's going to be in the law that
18 the -- that the Court will give you.

19 What you're going to hear in this case instead
20 of like, Oh, we don't do bromine or there's no activated
21 carbon -- what you're going to hear in this case is a
22 different set of defenses, and I'll talk about those
23 defenses in just a second.

24 But I want to talk about how we're going to
25 prove this, and I want to introduce someone else.

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1 Mr. O'Keefe, will you please stand up? Thank you. I thank
2 you very much.

3 This is Mr. Philips O'Keefe. He used to work as
4 a large power plant operator, and he's an engineering
5 consultant, and he's going to -- he's what's called an
6 expert witness, and he's going to testify in this case.

7 Something that's different about him and
8 Mr. Pavlish, because certainly someone could say he has the
9 the expertise Mr. Pavlish has. Mr. Pavlish as part of the
10 client doesn't get to see their confidential documents, but
11 through the Court process Mr. O'Keefe does.

12 So that's why he can come back and tick certain
13 boxes about what was going on, what they knew and what they
14 saw -- I mean, you know, what was in their documents or what
15 kind of e-mails did they get and that kind of thing that
16 Mr. Pavlish can't do. And so he's going to do that to run
17 the technical side.

18 Now, someone else that will present is Mr. Phil
19 Green. Please stand up. Thank you.

20 So there's going to be -- I know you're meeting
21 a lot of people. It's like drinking from a fire hose. I
22 get it. I just introduced you to two Phils, so Mr. O'Keefe
23 and Mr. Green, and then there's two greens. There's Mr.
24 Phil Green, who I'm introducing now, and there's Mr. Jeffrey
25 Green who's on there somewhere, so we'll do our best to keep

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1 that not jumbled up.

2 But Mr. Phil Green is -- he's an expert in
3 patent valuation, and he's going to explain to you how you
4 look at this from the sort of money damages standpoint under
5 the law, which again will be provided by Judge Burke.

6 So I previewed this, but what are the defendants
7 going to say? They're going to say things like, u, we
8 didn't know about the patent, but that -- we sued you on it
9 and served you.

10 And then they'll say things like, Yeah, but we
11 didn't know, like maybe you sued one of our companies but we
12 didn't know, but it's like the same guy sort of running all
13 the different companies. Maybe I knew it in this part of
14 the brain, not that part of the brain, that kind of thing.

15 Then it will be like, Well, we didn't encourage
16 infringement. They pay the plants essentially to take this
17 stuff. And then they'll say, Well, we don't know about
18 activated carbon, that's our -- we didn't know they were
19 going to go back to being carbon months later, and that's
20 where the evidence shows up, right? Because there's e-mails
21 and documents, and they pay for reports.

22 They pay someone to go out and look and say, How
23 does the plant work and write them a report, and it says
24 they use activated carbon, and that's going to be the fight
25 that takes place on what they knew.

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1 But even more, after we filed this lawsuit and
 2 they knew what their allegations were, they called the
 3 plants and said, You guys using activated carbon? And
 4 they'd say, Yep, kept on infringing, and that's why we
 5 believe the money side of this is a pretty powerful motive
 6 to keep going.

7 Then those don't work. They might say, Well,
 8 the patented value -- the patent invention has no value
 9 because we were losing money when we were encouraging
 10 infringement. I mean, yeah, if we sort of ignore the rest
 11 of it. I mean, they were -- they were doing all right.

12 So then what we're going to do is we're going to
 13 show you what's a fair licensing rate. It's not just, Hey,
 14 give us everything you made.

15 We're going to show you what a comparable
 16 license rate would look like based on other licenses paid
 17 for similar technologies in this industry, and they might
 18 argue, Well, you know what, we can't infringe because we got
 19 a license to do this from somebody else.

20 Now, we'll see if they make that argument. I'm
 21 not 100 percent sure. But in any event the law and the
 22 evidence in the case is going to show you that getting a
 23 license from somebody else is certainly no permission to use
 24 our intellectual property.

25 And we're going to show you that the people that

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1 they got a license from are amongst a group of other folks
 2 in the industry who have recognized -- even the people they
 3 got license from recognize they needed to come to us to get
 4 a license. We'll present that to you too.

5 I know that was a lot. Thank you for being
 6 super attentive. I get called for jury duty also. I
 7 understand -- I understand the feeling, the apprehension,
 8 and all that.

9 We appreciate your time and attention. We'll do
 10 our best to make it sort of interesting and efficient, but I
 11 can just say sincerely on behalf of my colleagues and
 12 client, thank you so much for being here in this sort of
 13 uniquely American endeavor of jury trials in civil cases.

14 We look forward to presenting you the evidence
 15 thanks.

16 THE COURT: Thank you, Mr. Caldwell. We'll ask
 17 plaintiffs' counsel if they can clear the well for
 18 defendants' side.

19 MR. CALDWELL: Certainly. Your Honor, at the
 20 appropriate time, we may wish to mark some of these as
 21 demonstratives, but for now, we'll just expeditiously get
 22 them out of the way.

23 THE COURT: Thank you.

24 Let me call on defendants' counsel and ask if
 25 they wish to make an opening statement. Mr. Sykes?

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1 MR. SYKES: Thank you.

2 Ladies and gentlemen, I'm excited to be here to
 3 tell our side of the story. First, I want to thank you.
 4 Thank you for your service and your time, and Mr. Caldwell
 5 alluded to sometimes we're not all happy to be called to
 6 jury duty, but it is important. It's a service that goes
 7 back to the actual founding, the Constitution, so thank you
 8 for being here, your attention and your time, and we do
 9 appreciate it.

10 Now I'm going to comment, again my name is
 11 Paul Sykes, counsel for the defendant. You probably can
 12 tell already I'm not from around here. Let me introduce my
 13 client, Jeff Green.

14 He is one of the partners in the CERT companies.
 15 Mr. Green was vice president of engineering. He's a -- he
 16 has a mechanical engineering degree from Texas A&M, and he
 17 kind of -- we'll get into this, but he designed and set up
 18 and had constructed the refined coal facilities.

19 Also in our team, we have our legal assistant,
 20 Melinda Washington, who we couldn't do this without; my
 21 colleague, Ashley Robinson, partner Ben Wilson, my partner
 22 Jeff Dyess, and they're with my firm from Alabama.

23 And then we have Ken Dorsney from Morris James
 24 here in Wilmington, and Cortlan Hitch.

25 And I'm going to go ahead and tell you, I'm in

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1 this terrible -- I don't know if it's abolition or
 2 devolution of my eyes where I'm sort of in between reading
 3 glasses, and you'll see me take my glasses on and off
 4 throughout the presentation.

5 The interesting thing about these cases is that
 6 there are two sides to every story, and I'm going to ask you
 7 to keep an open mind because you've only heard their side,
 8 and what this story is really about and what the legal
 9 claims here require is proof of CERT's the defendant company
 10 CERT's state of mind.

11 That's what Jeff Green, Leah Schaatt and their
 12 business partner, Barr Linton, what they knew and believed
 13 and what their intentions were. You really can only get
 14 that from us.

15 And as with anyone in this part of life,
 16 whatever it is, if we're asked to evaluate what the person
 17 knew or believed and what that person's intentions were, I
 18 don't know if that someone was me, and if someone was asked
 19 to evaluate my state of mind, what I knew and what I
 20 believed, I'd want them to walk a mile in my shoes, walk a
 21 mile in my shoes before coming to a decision about my state
 22 of mind.

23 In this case, in this opening statement, we're
 24 going to respectfully ask you, if you could, to walk a mile
 25 in CERT's shoes. I'm going to try to put you in the

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1 position of Jeff Green and his colleagues when they got sued
2 and what they knew and what their business was doing.
3 And -- and so we're going to try to do that so
4 you can help them understand sort of what we believed and
5 what we knew to be the truth and what our intentions were.
6 And of course I'm going to tell you more about
7 CERT and a whole lot more about this case, a lot more about
8 certain evidence, but, you know, Mr. Caldwell ended with
9 this sort of discussion about the motivation of money.
10 And I believe you're going to be hearing a very
11 large -- very, very, large, tens of millions dollar damages
12 demand from ME2C and their lawyers in this case.
13 And so I'm going to do something just a little
14 bit unconventional. I'm going to jump right here to the end
15 of the story to just give you a glimpse, a peek at the other
16 side of that story.
17 Right here is an exhibit, Defendants'
18 Exhibit 23, and I failed to introduce the man in the hot
19 seat, Mr. Brown, Jesse Brown, who will be running all the
20 technology for us.
21 What Exhibit 23 is, this is an agreement by ME2C
22 with the utility Talen, a large utility that ran a bunch of
23 power plants, I believe seven in this case. It's a license
24 for these patents.
25 You heard this discussion about we're going to

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1 go through this whole accounting expert presentation about
2 comparable licenses, and the neat thing about the jury
3 system is you don't have to check your common sense at the
4 door.
5 This isn't similar technology. These are these
6 patents in this case, but the utility was being supplied
7 refined coal in this case.
8 If we can jump over to paragraph 4.3 of the
9 agreement -- well, let's go up to paragraph 2.1 real quick
10 so you can see.
11 You have a license of these patents. ME2C
12 grants a license to these different power plants that were
13 at issue, receiving refined coal we talked about, and jump
14 down to paragraph 4.3.
15 You can zoom in on paragraph 4.3. You'll see
16 that it was a single, one-time lump payment of \$200,000, so
17 that was a paid up, all-you-can-eat license to all ME2C's
18 patents for all the refined coal, every power plant Talen, a
19 big utility, could use.
20 So just counting the three that were at issue,
21 that's \$67,000 a month, and that's this plan, ME2C, these
22 patents in this case, and they were being supplied by
23 Chem-Mod refined coal, which we'll talk about.
24 So if we look at paragraph 9.1, they -- Talen
25 still denied infringement, so there are two sides to every

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1 story, so we would respectfully submit to you, when you hear
2 this enormous multimillion dollar damages award, demand --
3 not award, demand, that you will remember what Mr. Caldwell
4 said about being motivated by money because we think that's
5 what's going on here.
6 And this Talen agreement is not an outlier. We
7 will see other agreements this week with utility NRG, also a
8 defendant in this case, about \$600,000 for all of its power
9 plants, and another agreement with -- with a company called
10 Vistra, a couple of million, \$3 million for all of its power
11 plants across a huge swath of the United States.
12 So the point there is just right off the bat to
13 tell you there's two sides to every story, and that's
14 just -- and I think once you hear the evidence from our
15 side, you'll see why CERT does not infringe the patents.
16 And I think your verdict will be for the
17 defendants.
18 Let's get going. So who are we? Who is CERT?
19 And as Mr. Caldwell alluded to, there are four partners who
20 founded CERT, and these individuals have worked together and
21 known each other a long time.
22 The first person here on the left, Barr Linton.
23 Mr. Linton, a few years older than me, he's 59 years old, he
24 died suddenly and unexpectedly just in January, left three
25 preteen teenage girls. He was a -- the title in the company

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1 was business development and a little bit of a jack of all
2 hands.
3 Leah Schaatt, Leah is in accounting and finance.
4 She's a CPA, and so she ran that aspect of the business.
5 And then Jeffrey who is here today, and Jeff was
6 involved in -- you'll hear a lot about EERC and refined coal
7 testing. He's a mechanical engineer. He designed our
8 refined coal plants. We did our own design for our refined
9 coal plants, how we put them together, coal handling. Jeff
10 did all of that, all of that work.
11 And then he managed the Operations companies
12 that made and manufactured the coal for all these years, and
13 it was touchstone. You have these power plants burning
14 literally trainloads of coal. You get a little bit
15 anesthetized in this case. We talk about millions of tons.
16 That's millions of 2,000 pounds of coal. It's a huge amount
17 of equipment or way that he -- he designed and managed the
18 folks that handle all the equipment to do that. And so he
19 is the one who really had the hands on knowledge all of the
20 issues in this case.
21 Last is Mr. Raymond Bane, and he's your true
22 sort of serial American entrepreneur. He's now in his
23 mid80s. He's unfortunately suffering from terminal
24 leukemia. Obviously he can't be here, but Mr. Bane, he'd
25 been in the coal business and mining a long time.

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1 A lot of people don't know that Birmingham,
2 Alabama where we're from, it's founded and put there because
3 of the coal in Jefferson County, Alabama. That's why they
4 drew a dot on the map for Birmingham, lots and lots of coal.
5 In fact, where I live, I live about a hundred
6 yards from the entrance to an old coal mine on Red Mountain
7 in Birmingham, and so that's sort of how you wonder how
8 these Alabama folks -- what are they doing in the coal
9 business. It's a lot of coal in that part of the world.
10 And so Mr. Bane had been involved in that
11 business, the coal business, a long time. He knew the other
12 folks, and that's how the business got together.
13 So what is CERT's business? What do they do.
14 And what they did is they implemented a Congressional clean
15 coal program passed into law by President Obama and the
16 Obama administration, to treat the coal before combustion,
17 before it's burned, to create a self-contained fuel so that
18 when the fuel is burned at the power plant, it will result
19 in a reduction of emissions of mercury and nitrous oxide.
20 So that's a second -- or a second chemical
21 that's not desirable in the environment. Nitrous oxide, we
22 call that NOx, N-O-X, for short.
23 And so what CERT did is they set up projects,
24 met the requirements of the law. They met with and
25 recruited power plants to let them build and install the

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1 facilities on their property to make refined coal. They had
2 to lease land on the power plants.
3 And maybe we can see one, a picture of a --
4 there's a refined coal facility. So you can see these
5 aren't, you know, just trivial structures. We're going to
6 look at a number of these very large facilities. They had
7 to get permission to build these enormous structures and
8 have them reside on the land of the power plant.
9 And then they had to get investors on the
10 projects after they had gotten them built and installed and
11 had customers ready to go, which is a tremendous risk.
12 Investors came later to set the projects or to get the
13 projects running to buy the coal and get them to sell it.
14 And I'm going to explain to you briefly why CERT
15 should win in this case, why your verdict should be for
16 CERT. It will be straightforward. It's going to take about
17 three minutes.
18 Then I'm going to go through and orient you with
19 the timeline. There are a lot of dates and moving parts in
20 these cases. There's a sort of timeline on their side and a
21 timeline on our side. We work on these things for years, and
22 we get it all in our head, and realize we come in here and
23 throw all this information at you. So I'm going to try to
24 get you a just a quick overview timeline. Then I'm going to
25 go back through and walk you through the evidence in detail

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1 and go over the history of how we got here.
2 So you've already heard it, but the gist of what
3 their patent is what they call a two-step process to reduce
4 mercury. That's sort of shorthand, the two-step process,
5 and as Judge Burke instructed you, in a patent case, you
6 look at the claims. The claims are these detailed sentences
7 that define the invention, and that's what infringement is
8 evaluated based on the patent, but sort of for a shorthand,
9 we'll call it or they call it a two-part process.
10 And the two-part or two-step process is to treat
11 coal with bromine, and then after it's burned, after the
12 coal is burned downstream in the furnace, you have the --
13 coal is burned in the furnace, the giant fireball. Then it
14 goes into, you know, ductwork, the flue is what it's called
15 like chimneys, if you will.
16 And then it flows through the power plant. It
17 goes through a number of treatment processes to treat the
18 flue gas, so when it comes out the stacks, it's much less
19 harmful than it otherwise would be.
20 So after the coal is burned, it travels down the
21 flue, and then once it's down the flue, they add activated
22 carbon to capture and reduce the mercury. That's what their
23 patents are about. So they reduce mercury with added
24 bromine, and they have to get a boost from activated carbon
25 to do so.

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1 Those are the basics that our people, Jeff Green
2 and Leah Schaatt, Barr Linton and Mr. Bane understood
3 shortly after the lawsuit was filed.
4 So what does CERT do? CERT makes a fuel that
5 chemically treats the coal to make a self-contained clean
6 burning coal that the power plant can use. And we have to
7 comply. We're implementing this Congressional clean coal
8 program. In Congress, it's in the Tax Code. Have you ever
9 heard Section 45? You'll hear that more times than you'd
10 like this week.
11 Section 45 of the Tax Code, that's Title 26 of
12 the United States Code, Section 45. 26 USC 45 is what we
13 lawyers call it.
14 And so we had to certify our refined coal under
15 the law that it met requirements of the Tax Code every
16 six months, ^ can't hear beginning in 2011, eight years
17 before these patents even existed, and we had to do that for
18 every plant we dealt with.
19 And the law again requires our coal to remove
20 two pollutants, mercury and nitrous oxide, which we call
21 NOx, and we have to get an 40 percent reduction of mercury
22 and a 20 percent reduction of NOx.
23 And so there it is on the slide. It's a
24 printout of the -- the code, the laws -- the law, the
25 United States statute, we all have to abide by it, but we

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1 especially since we're in this business, so that's what we
2 had to the under the law.
3 And so from our perspective in July 2019, we
4 started in 2011, and we got sued in 2019, we understood, you
5 know, fairly early on in the case that their patents and
6 their patented process only reduces mercury. That's what it
7 deals with.
8 Let's go to the next slide, Jesse, the one you
9 had before. My apologies.
10 So ours is that we learn -- ours is a
11 self-contained fuel, and they're dealing with a process that
12 happens inside the plant. Ours is a self-contained fuel
13 that's made outside of the plant out by the coal pile.
14 It's kind of funny when we started working on
15 this, it's literally a mountain of coal, and they call it
16 the coal pile. So that's what we're near the coal pile, and
17 it's -- it could be hundreds and hundreds of yards from the
18 actual power plant.
19 So that's -- we're outside this coal pile.
20 Theirs is a process that happens in the furnace and in the
21 flue, and then ours requires 40 percent mercury reduction,
22 and their patents talk about reducing mercury.
23 That is what Mr. Pavlish claims to have invented
24 is mercury reduction, and then we have to meet under the law
25 this 20 percent NOx reduction, and their patents don't talk

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1 about a 20 percent Nox reduction.
2 They really don't talk about reducing NOx at
3 all, and that's not something that we see advertises its
4 patented process ^ product?
5 And then last, we -- this is very important. To
6 qualify our coal, we have to do it without activated carbon.
7 We have to show that we make the 40 percent and 20 percent
8 reduction without the boost of activated carbon that the
9 power plant may add later, and of course they -- they
10 require activated carbon.
11 And so with those basic facts, this is what we
12 came to understand about their case and their claims on
13 infringement. And I'm going to explain to you how these
14 basic facts demonstrate why my clients knew they did not and
15 could not contribute to infringement of these patents or why
16 they couldn't induce infringement, why it was never their
17 intention to induce or cause a power plant to infringe.
18 And this is really just the tip of the iceberg
19 of the evidence that's going to show you, you know, our
20 perspective and why we believe you should enter a verdict or
21 the defendants.
22 Let's go through it. I'm going to try to get
23 you oriented with the timeline I mentioned. So what we have
24 here is in 2009 and 2010, that's when CERT begins, and we'll
25 talk a little bit about this process and getting customers

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1 ^ listen and what the law requires.
2 The law required us to be in operation by
3 December 31, 2011. Congress put a deadline in the code, in
4 the Tax Code that said these facilities had to be in service
5 by December 2011, so that's when we got started.
6 We got sued over here in 2019, and the program
7 was a ten-year program, from 2011 to December 2021. That
8 was the statutory period that Congress was running this coal
9 program.
10 And as you'll see, as the evidence will show,
11 72 percent of our refined coal was manufactured before these
12 asserted patents even existed. The one that we're sued
13 under, the first one, the '114, it issued in July 2019, and
14 they filed the lawsuit about a week or ten days later, in
15 July 2019.
16 So that's kind of our basic timeline, and during
17 this time period up to the filing of the lawsuit or maybe
18 this is over the whole period, the CERT entities produced
19 375 million tons -- 375 million tons of refined coal
20 including 182 million tons. That's almost 50 percent of
21 refined coal ever made was sold to plants that did not have
22 activated carbon equipment installed at all, were not and
23 did not use activated carbon.
24 Because they were selling to plants that did not
25 use activated carbon all the way through the lawsuit, and

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1 why that's important as to why we couldn't have believed we
2 were contributing to or inducing infringement.
3 So in -- down here, the plaintiffs kind of --
4 this is sort of what they were doing, what they were up to.
5 So the two patent applications at issue in this case, they
6 were filed in 2018 for the two patent applications that
7 issued in what we call this is another patent lawyer nerd
8 thing, I think Mr. Caldwell said he has an electrical
9 engineering degree. I think do too.
10 So you're dealing with probably the nerdiest
11 class of lawyers here. We call the patents by numbers, so
12 the '517 patent is one of the two patents-at-issue, and the
13 '114 -- those are the last three digits in the patent
14 number.
15 So those applications were filed in 2018. '114
16 patent issues in '19 ^ listen, and the '517 patent issued in
17 March 2020, and as -- as Mr. Caldwell discussed,
18 Mr. Pavlish, he will testify he invented these inventions in
19 2002/2003, was working at the EERC and running various
20 tests.
21 And so they filed a provisional application.
22 That's their original first filing in 2004. It was
23 August 2004, and in between were additional patent
24 applications, these continuing applications that I think
25 there may be a continuation in ours.

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1 And so the sort of gist of this is that their
 2 contention is that their 2018 filing related all the way
 3 back to 2004, and that is important because in order for
 4 their 2018 filings to relate back to 2004, each of the
 5 intervening applications in this chain, we call it a
 6 priority chain -- and we'll hit on this a little bit later.
 7 Each one has to have written description -- a description of
 8 the invention that they set forth and claimed in the 2018
 9 applications.

10 And as we will show you through expert
 11 testimony, and I'll introduce the experts in a bit, you know
 12 the thing that was different in the 2018 applications from
 13 our perspective, and our expert will testify about, is that
 14 the 2018 applications were the first applications that
 15 claimed and that they described adding bromine directly to
 16 coal.

17 If you go back a few applications before,
 18 there's a break in that priority chain, and so we'll touch
 19 on that later.

20 So the two claims at issue in this case, I
 21 was -- now, I didn't realize we would be sort of trying
 22 Congressional policy and the wisdom of Congress in
 23 Section 45 or Delaware LLC law and the Tax Code and the
 24 business organizations that it encourages.

25 What we're really here about is patent

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1 infringement, and the two claims are contributory
 2 infringement and actively inducing infringement. Okay.

3 So again the two-part process that ME2C calls
 4 it, adding bromine to coal and treating the flue gas with
 5 activated carbon, and it's not enough that they power --
 6 that they show or prove direct infringement of a power
 7 plant. It's not enough that a power plant burned coal and
 8 added bromine, treated the flue gas with activated carbon.

9 They have to prove that, and they have to prove
 10 that by a preponderance of the evidence to your
 11 satisfaction. You're the jury. That's not enough. If you
 12 decide that they have not proven by a preponderance of the
 13 evidence to your satisfaction that each power plant at
 14 issue -- each one of the power plants at issue infringe
 15 their patents, then we would stop right there.

16 And I heard that they said that's not a dispute.
 17 Well, there's not a single witness, not one witness from a
 18 single one of these power plants who is actually going to
 19 say and describe what the power plants did.

20 They're going to rely solely upon inferences
 21 that their expert, Mr. O'Keefe, draws from looking at
 22 certain documents he found. But Mr. O'Keefe, he did work in
 23 a power plant in the 1980s up to about 1995, and he left the
 24 industry 20 years before these MATS regulations were
 25 promulgated or put into effect.

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1 He's never actually worked with mercury control,
 2 mercury bromine or anything ^ listen , so that is a disputed
 3 fact.

4 So for inducement, that's the first claim
 5 against my clients. We'll get into this in more detail, but
 6 to show liability for active inducement, the plaintiff has
 7 to show, and the Judge will give you detailed instructions,
 8 that we specifically intended -- it's a specific intent on
 9 our part that the power plant would infringe, and we're
 10 willfully blind to that.

11 It's not enough that we caused a power plant to
 12 engage in some conduct like burning coal that happened to
 13 amount to direct infringement. It's not sufficient that we
 14 were just aware of the power plant's actions that ME2C
 15 alleges to infringe.

16 So knowledge isn't enough, and just causing
 17 something that happens to result in infringement is not
 18 enough. It has to be our specific intent to encourage and
 19 induce infringement.

20 And they have to show -- the burden is on ME2C.
 21 You didn't hear a lot about the burden I noticed in the
 22 opening statement of the plaintiff to show that CERT's
 23 actions actually caused the power plant to perform each and
 24 every step of the asserted claims.

25 These are the detailed statements of the patent

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1 claims. The two-part -- quote, the two-part process is
 2 shorthand. It's the detail -- I think you've got them in
 3 your jury notebooks. They have to show that we encouraged
 4 the power plants and caused them to perform each and every
 5 step of the asserted claim. And so, for example, they would
 6 have to show that it was CERT that actually caused the power
 7 plants to use activated carbon. So we believe there's no
 8 evidence of that. Our specific intent in selling refined
 9 coal to the power plants is exactly what we certified under
 10 the law every six months since 2011 was our intent before
 11 these patents existed.

12 The Section 45 of the code required CERT to do a
 13 certification that its fuel as refined coal met the
 14 requirements from the Tax Code, had to do it every
 15 six months.

16 And so we certified every six months what our
 17 purpose was to and that was to sell a self-contained fuel
 18 that met the mercury requirements of Section 45 without
 19 requiring a boost from activated carbon to get there.

20 So from our perspective, it really didn't matter
 21 if the plaintiffs actually used carbon or not, and we didn't
 22 cause them to use activated carbon, and we back that up.

23 We sold over a hundred million tons of refined
 24 coal to plants that didn't use activated carbon at all. So
 25 it wasn't our intention and we weren't trying to cause

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1 anybody to use activated carbon. So that's the first claim.
 2 The second claim, contributory infringement, the
 3 plaintiff has to prove that we actually knew -- Okay, they
 4 have to prove that CERT, who's represented here by
 5 Mr. Green, actually knew our state of mind that the accused
 6 acts, making and selling refined coal to power plants, was
 7 infringing. And -- and it's a high standard. It's that we
 8 actually knew, not that we just might have known, and if we
 9 had a reasonable belief that we did not infringe, even if
 10 that belief turned out ultimately to be incorrect, then we
 11 do not have the knowledge of infringement required under the
 12 law.
 13 So ME2C as part of that contributory
 14 infringement breaks down to a couple of pieces and one of
 15 those pieces is called substantial non-infringing uses. And
 16 the other piece is called specially made and adapted.
 17 So the first part is they have to prove that we
 18 knew or were willfully blind that our refined coal was
 19 specially made and adapted, so specially formulated designed
 20 to be used, specially made and adapted to be used with
 21 activated carbon in the power plant, so that's how we
 22 designed it.
 23 Secondly, they have to prove that our refined
 24 coal had no uses except for activated carbon.
 25 Well, I think what you'll see in a few minutes

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1 is the evidence that we'll present to you is the opposite.
 2 We sold refined coal at the very same formulation, a
 3 formulation to reduce mercury and NOx without activated
 4 carbon that was set years before these patents even existed,
 5 and again talking about substantial uses, substantial
 6 non-infringing uses.
 7 We knew when this lawsuit was filed we've got an
 8 understanding what the claims were, that we had sold and
 9 were continuing to sell thousands and actually tens of
 10 millions of tons of refined coal to power plants that
 11 weren't using activated carbon at all.
 12 So how could our product be specially made to be
 13 used with it, and how could there be no uses except
 14 activated carbon? It did not make any sense to us.
 15 Okay. I'm going to come back and go a little
 16 bit more through the history, kind of peel the layers of the
 17 onion off one at a time and try to get you oriented, and
 18 we'll walk back, and I apologize if I repeat myself. I
 19 sometimes practice this -- these things with my wife, and
 20 she is the artistic, creative type, and she stops me and
 21 says, What did you say, and can you say that again, that
 22 didn't make sense to me, sort of in the habit of repeating.
 23 Again, I want to put you in our shoes when you
 24 go back decades before these patents existed, so you can
 25 understand for that decade of what we've been doing, what

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1 was it that we knew and believed in 2019 when we finally got
 2 sued.
 3 And when we got sued, it was out of the blue.
 4 Lawyers send demand letters sometimes. We get a demand
 5 letter. We had not heard or were familiar with ME2C or the
 6 patents. It was just a lawsuit out of the blue in 2019
 7 ^ listen, what we had been doing for an entire decade.
 8 So again, refined code, Section 45 of the Tax
 9 Code, it's not just any laws, it's the Tax Code says what it
 10 must do. It has to reduce NOx by 20 percent, mercury by
 11 40 percent when combusted. It's a self-contained fuel
 12 outside the power plant. That's the law.
 13 We've got two chemical additives to help to do
 14 that. One is called S-Sorb, S-Sorb, it reduced NOx, and the
 15 other chemical was called MerSorb and that used mercury.
 16 We have -- one of the witnesses who will talk
 17 about refined coal and how it's made to some extent, she
 18 also has extensive experience in the industry.
 19 If you could put up slide 4, Mr. Brown.
 20 Dr. Senior, Connie Senior, I believe she's
 21 probably in the courtroom. Dr. Senior is -- she was --
 22 she's a Ph.D. from Cal Tech environmental science. She has
 23 been in this industry for 30, 35 years, and she has worked
 24 on the energy space, emissions reductions, coal combustion,
 25 including with a particular emphasis on mercury and NOx

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1 reduction.
 2 She holds numerous patents on mercury and NOx,
 3 and, you know she -- this has sort of been her life, and
 4 this is what she has done in this field for decades so
 5 probably longer than she might want to admit.
 6 And so she will talk a bit about refined coal
 7 because she actually dealt with it and studied it in the
 8 real world in the 20 teens and while this was going on, and
 9 she will also -- she's extremely knowledgeable about power
 10 plants and their operation, and she can talk more about the
 11 emission control equipment and what goes on in the decision
 12 making in that aspect.
 13 And so the -- something that -- so in addition
 14 to the two requirements hh -- that activated carbon must do
 15 and those reductions, it has to -- the law, the IRS, they
 16 gave guidance, and this is DTX 1980, Mr. Brown.
 17 And this was -- you know, this looks like a nice
 18 IRS government publication. This is a bulletin, a notice
 19 that they put out in 2010 right here. This is when the
 20 program was just getting started, and they're explaining to
 21 the people who are trying to get involved in this a lot of
 22 details.
 23 Often what you see -- and you may have heard of
 24 this. Congress passes a law. The law is pretty short, and
 25 then the EPA or the FDA, the different administrative

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1 agencies, they -- they issue regulations that add a lot of
2 detail, and that's what this is.
3 And if we can just page down to the second page,
4 and let's go down on to the next page, and if we look at VI
5 down here, I believe that's where it is, it's talking about
6 the testing and measurement of how you to do this, and it
7 says: The emissions of mercury are measured upstream before
8 any SO2 scrubber or mercury -- Hg is mercury -- control
9 device such as activated carbon injection.
10 So there's your -- there's your -- when we kept
11 saying it had to be done without meeting activated carbon,
12 and it had to meet the law without activated carbon, this is
13 the notice that we complied with. As you'll see, it's the
14 notice that the EERC, who certified and set our formula,
15 they -- they certified with the professional engineer that
16 they were testing without activated carbon.
17 So okay. Just remember, turn back to the
18 patents, patents on the other hand, you must use activated
19 carbon. So the patent requires you to use the very thing
20 that would disqualify our refined coal from being certified
21 under the law, so why would there be a specific intent to
22 make a power plant use that.
23 And then secondly, we're not aware of any
24 evidence that using the patent produces a self-contained
25 fuel that would reduce NOx by 20 percent as required by the

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1 tax law, Section 45.
2 So from my folk's perspective, when they
3 understood what this case was about, the patents in the
4 refined coal missed each other coming and going, and that's
5 still our view and our belief.
6 So we got going in 2009. We ramped up in 2010
7 and 2011, and again we had to be in operation by
8 December 31, 2011, under the law. And that was about eight
9 to nine years years before these patents even existed.
10 So what we had to do is we had to go out and
11 meet with power plants and try to convince them to use our
12 product, and that's hard to do.
13 Now, they make it sound like it's just a money
14 printing operation, you know, selling to the power plants at
15 a loss and the power plant can buy the coal from us cheaper
16 that it can otherwise, but why might that be, right? Why
17 might that be?
18 Well, the object of the program is to try to
19 reduce mercury emissions in the environment, which can be
20 harmful, and there's no dispute about that. It's something
21 everybody wants to reduce. And bromine had been proven to
22 be a good way to capture mercury in the coal fire process.
23 Well, bromine and the other halogens on the
24 periodic table that Mr. Caldwell showed -- halogens, they
25 can be corrosive furnaces, and as we learned, and I don't

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1 think it's disputed, I think I heard Mr. Caldwell say it,
2 power plants don't want to mess with their process.
3 They're not real fired up about putting
4 chemicals into these massive, enormous facilities that are
5 football fields in size. They have to run 24/7 seven days a
6 week all the time. ^ Listen so they have to -- right?
7 So they're going to be running all the time and
8 just like -- just like you would think twice about putting
9 some additive in the fuel in your gas tank in your car to
10 reduce emissions if it might corrode your engine. You'd
11 probably think twice about that.
12 So power plants are cautious about putting
13 additives into their furnaces even if it produced emissions
14 because it was shown that bromine could be corrosive, so if
15 you think about it, that's why Congress -- one of the
16 reasons Congress created Section 45 program, to put an
17 incentive in place that combustion is a cleaner burning
18 fuel.
19 And Congress, in its wisdom, made the
20 requirement that somebody else -- a third party, not the
21 power plant, had to treat and qualify the fuel. That's the
22 way Congress set it up. Bipartisan legislation passed it
23 the end of 2008 or 2009.
24 And the way it was set up is when the tax credit
25 would go to the third party, okay, and that third party as

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1 it comes in this case, ^ listen the refined coal companies
2 like the CERT project company. We'll look at the
3 organization in a minute.
4 And then this allowed the CERT project company
5 to effectively pass along some portion of that tax credit,
6 that value -- effectively pass on some of that value to the
7 power plant in the form of a discounted price for the
8 cleaner burning coal.
9 So the way Congress set up the program, the way
10 that the Tax Code is written and the way that partnership
11 law exists and, you know, it incentivized the formation of
12 these LLCs.
13 And then the power plant was incentivized by
14 companies like CERT to use the program to get the power
15 plants to buy the refined coal, reduce their emissions, at a
16 discount. Otherwise, they wouldn't do it.
17 And that was borne out and proven because when
18 was Section 45 program ended in 2021, the power plants
19 basically stopped burning refined coal, and there was risk
20 in this. There's e.
21 Again this suggestion that this was just a no
22 brainer freebie. I'm not going to go through all of it
23 here. We don't think it's relevant to infringement, which
24 is what you guys are here to evaluate.
25 But as I'll show you a minute, these power --

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1 these coal plants are large facilities. They handle
2 thousands of tons of coal every day, and they had to be
3 designed and built. These are enormous, and we had power
4 plants that had shut down our project after we had built
5 these and invested money in building these plants.
6 Duke Energy, we had several for them early on,
7 and they shut all things -- three down, and we had other
8 ones that just got -- were put on idle mode and had to be on
9 standstill for a period of time.
10 So it was an investment, and it was a risk and
11 had to move projects around, but we got it going.
12 Yes, go to slide 3.
13 So this is sort of the breakdown, and I guess
14 it's a different version of what was drawn earlier, so you
15 would have an operations company, and then you would have
16 the refined coal company, and you have the power plants.
17 So let's start on the right. These are power
18 plants in different parts of the United States, and
19 typically, you know, a utility may own 3 or 5 or 20 or 25
20 different power plants depending on the size of the utility.
21 So you hear all these names, Chesterfield, NOX,
22 Storm ^ listen, WA Parish, Laramie, Intermountain. Then the
23 organization was that a separate entity, separate company
24 was formed -- was paired with each power plant.
25 So that company was the one that bought the coal

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1 and sold the coal, and it was the third party under the
2 Tax Code the way Congress set it up, and then as an LLC
3 under Delaware law, they could be a limited liability
4 company, and that would allow investors to invest, and that
5 was sort of the policy of this.
6 And then back here you had an operations
7 company, and let me just pause. The refined coal companies,
8 they actually -- they -- they were the ones that signed the
9 contracts with the power plants to buy and sell the coal.
10 They leased the land. They paid the rent,
11 leased the land on the facilities. They paid for these
12 enormous multistory very huge refined coal facilities, so --
13 so, you know they weren't sort of just doing nothing as was
14 suggested earlier.
15 And then operations companies, they ran them.
16 They staffed them, and operations companies had folks, you
17 know run the equipment doing all the coal handling, and so
18 they were the feet on the ground, and that was the way this
19 was set up for.
20 And then for various reasons, you'd have -- one
21 operations company would have its employees staffing
22 multiple refined coal plants.
23 So let's just look at some of these pictures of
24 a couple of these plants. Here's one in Antelope Valley in
25 North Dakota, Big Cajun II, in Louisiana you can see it

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1 had -- yeah, it had CERT Operations IV.
2 And then it's refined coal entity. We sometimes
3 call these project companies. You'll probably hear
4 Mr. Green call them a project company because that's what we
5 refer to them internally as, and I think you get a sense of
6 how big these are. See that crane, and these are multistory
7 buildings. These are very large structures that we had to
8 invest in to advance this product.
9 Let's look at another one: Chesterfield,
10 West Virginia, the coal pile. You can see the outline of
11 the coal pile and CERT operations. They were sued early in
12 the case, but not currently.
13 Let's go to another one. Coletto Creek in
14 Fannin, Texas. That's an aerial shot. That's ^ listen
15 where CERT Operations RCB. You can see where we are right
16 here. That's our refine- -- there's the coal pile. There's
17 your mountain of coal. You can see we are way over here,
18 and here's the power plant.
19 And these things -- I guess you can get a sense
20 that these are, what, a couple of city blocks, and so we are
21 spaced way apart, and we're out here where we do our work.
22 I think as Mr. Green will testify, we didn't go
23 in the power plant. We worked on our lease space. That's
24 where we work.
25 Let's take a look at another one. There's

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1 Intermountain. That's in Utah, CERT Operations in DeJogun
2 ^ ? Manufacturing.
3 Go to the next one. Labadie in Missouri,
4 CERT Operations and Larkwood Energy.
5 Next one. Lab Tree South. That's Franklin
6 County, Missouri. Larkwood and CERT Ops, and Limestone
7 Limestone County, Texas.
8 This gives you a sense of the scale of the
9 construction trailer. You can see it, and it disappears out
10 of the sky, and these large coal conveyers that are
11 handling, and then we talk about -- some of these, it's
12 arithmetic, but 7,000, 8,000, 9,000 tons a day, so that's
13 7,000 times 14, 15 million pounds of coal a day running
14 through these. These are big operations.
15 Laramie River in Wyoming. That's Cottbus CERT
16 Operations RCB. Mount Storm in West Virginia
17 CERT Operations. This entity was -- ^ listen we'll talk
18 about why that's important to our client's beliefs.
19 Rush Island in Jefferson County, Missouri, has
20 got the Buffington Partners CERT Operations V.
21 WA Parish, Fort Bend County, Texas, that was one
22 that you saw an aerial view of Mr. Caldwell.
23 This is again -- this is an aerial view of
24 Big Cajun, and you can see this is another good example,
25 we're way out here where the green is. So we're spaced

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1 pretty far apart, kind of right here by the coal pile.
 2 We're way apart from the -- these are -- these are big
 3 spaces plant, from the furnace. The furnaces are down in
 4 here.
 5 So next I want to show you what we were able to
 6 do over the years. I'm going to put on the screen DTX 1969.
 7 This is a chart showing the tonnages of refined coal.
 8 This chart has a lot of information, kind of
 9 peel it back a layer at a time that we sold -- these various
 10 projects we sold to the power plants.
 11 So the ones at the top in the white are the
 12 current defendants in the case, and then the ones shaded are
 13 other CERT companies, and of course the same individuals
 14 were the managers and partners.
 15 We manage these, and so sort of what we knew as
 16 to one we knew as to the other, and so that's why these
 17 guys -- some of them were defendants, but that's why it's
 18 relevant to our state of mind.
 19 So what you'll see here, it's going across over
 20 the tonnages from the years 2011, '12, '13 and '14, if we
 21 could zoom in on that just a bit, Mr. Brown.
 22 You can kind of see over here you've got some
 23 gaps, and if you kind of scroll across, there's some other
 24 gaps here and there. That's when we had plants that would
 25 have to be shut down or they would be idle for some period

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1 of time, there's various causes for that.
 2 But if we kind of zoom back out, you know, you
 3 can see that we had some fits and starts, but the defendant
 4 companies produced literally hundreds of millions of tons of
 5 refined coal before these patents even existed. So if we
 6 kind of look right here, this is the dividing line when the
 7 lawsuit was filed.
 8 So let's scroll over a bit, the other way, kind
 9 of get all that -- all that right-hand stuff off the screen,
 10 up to the -- let's kind of put this on the edge. Yeah.
 11 So this is where we were when the lawsuit -- or
 12 maybe this is when the second patent -- the first patent
 13 issued. This is what we've been doing since 2011.
 14 And so this is kind of the history -- this is
 15 what's in our minds. This is our history of what we were
 16 doing when we had been sued, and so we knew, you know,
 17 pretty quickly as I'm going to get to that, we didn't have
 18 any reason to believe that we infringed these patents.
 19 So ME2C filed suit in July 2019. They sued
 20 various CERT entities. We hired counsel and get an using
 21 what this lawsuit is about and understanding basically that
 22 the lawsuit, as you heard -- that at a basic level is what
 23 the plaintiff calls a two-part process to treat coal with
 24 bromine, and after combustion you add activated carbon and
 25 flue gas.

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1 So we understand the act of adding bromine to
 2 coal, that's something that we do. That's just half of it,
 3 nothing about producing NOx, but also that coal had the flue
 4 gas treated with activated carbon.
 5 That's not something that we use. That's the
 6 self-contained product that produced mercury and NOx.
 7 And the case seemed to be saying that we were
 8 encouraging power plants to use activated carbon and that we
 9 knew our refined coal were specially made and adapted to be
 10 used with activated carbons, and that there were no
 11 substantial uses of our product except ^ listen.
 12 There's a rumor our product is certified to meet
 13 its emission reductions without the use of activated carbon,
 14 so this is puzzling to us. We understand -- but we
 15 understand that the power plant's activated carbon usage is
 16 at issue, and that's not something that we typically track,
 17 and so we did some due diligence to find out.
 18 Let me stop right there. When this lawsuit was
 19 filed, we really didn't know which power plants in
 20 particular were using activated carbon and which weren't.
 21 We of course heard of that in the industry. We were aware
 22 of that here obviously.
 23 And there were a smattering of e-mails that --
 24 claims of e-mails over the years about them installing or
 25 maintaining an activated carbon system, but it wasn't

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1 something that we had sort of tracked and focused on.
 2 And so, you know in this case in this courtroom,
 3 it's sort of like all ME2C is going to want to talk about is
 4 bromine and activated carbon as if those are the only two
 5 things in the world that matter to power plants.
 6 What you have heard and what you will hear is
 7 these plants are -- they are enormous facilities, enormously
 8 complex, incredibly complicated chemistry chemical reactions
 9 ^ listen.
 10 When they've grown and added various kinds of
 11 emission control systems over the decades, that's why they
 12 take up blocks. We've got selective catalytic reducing,
 13 flue gas desulfurized, wet scrubbers, Reporter check%o dry
 14 scrubbers, bag houses, electrostatic precipitators, and some
 15 of these things are like buildings.
 16 They cost tens of millions or maybe hundreds of
 17 millions of dollars, these different devices. You have
 18 engineers and technicians who do nothing but work on one
 19 particular part of these systems, do maintenance, keep them
 20 running, and so forth.
 21 And among all these many systems in this, you
 22 know multiblock very large facility, there may be an
 23 activated carbon injection system.
 24 But just because a power plant has all these
 25 emission control systems to deal with the environmental

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1 regulations it deals with, it doesn't mean that CERT by
2 selling them refined coal was the one that caused them to
3 use the systems.

4 And importantly, I think as we've shown and may
5 have picked up on, all that stuff is inside the walls of the
6 power plant, and that's really where we didn't go. How the
7 power plant ran its overall emissions controls for all kinds
8 of pollutants, not just the ones at issue here, that's not
9 something we were involved in.

10 And that's an area that -- Dr. Senior in
11 particular has a great deal of expertise in overall
12 emissions control strategies and sort of what these
13 different devices were doing and how those power plants can
14 go about that compliance.

15 So, you know, we're a fuel supplier. That's
16 what we are. We are a fuel supplier, and just like it
17 wasn't our place to tell a power plant it needed to use a
18 selective catalytic reducer or wet scrubber or electrostatic
19 precipitator, it wasn't our place to tell the power plant,
20 these very sophisticated entities, whether or not to use
21 activated carbon.

22 And Jeff Green -- Mr. Green, he will testify
23 that he never encouraged a power plant to use activated
24 carbon, never asked them to, never instructed them to, never
25 leaned on them, never persuaded them to use activated carbon

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1 at all. It's just not our business.

2 Get this: No power plant operator -- none of
3 our power plant operators will testify, you won't hear from
4 a single witness, live or by deposition, at one of our power
5 plants that CERT encouraged them to use activated carbon.

6 I think they may play some testimony from some
7 power plants that aren't at issue in the case. Remember,
8 ME2C as the plaintiff has the burden of proof. And again
9 you won't hear from a single witness from one of these power
10 plants, either live or by deposition, that anyone from CERT
11 encouraged them to use activated carbon or had anything to
12 do with that decision.

13 And in the lawsuit, the parties have a year or
14 more to engage in what we call discovery. That's serving
15 interrogatories and taking depositions, and then one of the
16 things you can do is you can serve subpoenas, and that's
17 sort of like a Court order to force someone to show up at a
18 deposition and to show up under the authority of the Court
19 for the deposition.

20 And even with the subpoena power, ME2C won't
21 present a single power plant witness from any one of these
22 power plants, and they're not hard to find. They're huge
23 facilities that take up city blocks. That's going to
24 testify that CERT encouraged the plant to use activated
25 carbon, and that's their burden of proof.

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1 And so, yeah, after the lawsuit was filed, we
2 didn't know for sure who was using activated carbon and who
3 wasn't, but we asked them, and that's important. Think
4 about that. We had to ask them.

5 You'd think that if it had been our specific
6 intent to cause a power plant to infringe by using activated
7 carbon that, we'd know about it, and we would have to ask
8 them but we did.

9 And so let's go back to DTX 1969 if we can. So
10 the ones in white up here are the ones that confirmed to us
11 early in the case when we asked, we did our due diligence,
12 we did not stick our heads in the sand like an ostrich, and
13 we found out the power plants in white had to use activated
14 carbon at least at some point in time. We don't know how
15 much, how often but they said they had the equipment and
16 they had used it. And then the shaded ones below confirmed
17 that they did not or had never used activated carbon.

18 So looking at that, assuming the top set of
19 plants was using activated carbon the whole time and they
20 weren't -- I'll get to that in a minute -- we confirmed from
21 the get-go that the entire time of the program since 2011,
22 every single day for eight and a half years we've been
23 making and selling refined coal to power plants that weren't
24 using activated carbon.

25 Let's just look at one of them, Intermountain,

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1 on the bottom. And if we scroll over, with Intermountain
2 you can see that .12, .3 million tons, 2.0 million tons, 5
3 million tons. Let's jump over to 2019, 2020, and 2021.

4 Right there. I'm underlining over here that's when the
5 lawsuit was going on, and while this lawsuit was going on in
6 2019, it says 1.6 million tons after July of 2019 and then
7 there's about 1.6 million before 2.8 million in 2020 and
8 2.8 million in 2021. That's all refined coal, our refined
9 coal that we were selling to a power plant that's burning it
10 without activated carbon, 7500 tons a day. Remember, one of
11 the issues is did we, you know, believe there was a
12 substantial amount non-infringing uses and did we know and
13 believe our coal was specially made and adapted to be used
14 with refined carbon or activated carbon. And so that's 15
15 million tons -- or 15 million pounds of refined coal every
16 day this lawsuit is going on, burning without activated
17 carbon. And the evidence will show the CERT companies that
18 made refined coal for Chesterfield, Mount Storm and
19 Intermountain at the bottom of the chart down here that ME2C
20 sued them in 2019 and they remained defendants in this case
21 until May 2022.

22 Now, remember the refined coal program ended in
23 December of 2021. And so every day that refined coal is
24 being made during this lawsuit, we knew that over 7500 tons
25 of refined coal was being sold and burned without activated

<p style="text-align: center;">201</p> <p>1 carbon every day by a defendant company. Every day, it's 2 undisputed. So of course we knew and we reasonably believed 3 there were tremendous substantial non-infringing uses of 4 this refined coal that was the subject of this lawsuit. 5 So our state of mind is at issue and what we 6 knew and believed at the time of the alleged infringement is 7 very important, and I think as you'll be instructed if the 8 defendant reasonably believed it did not infringe, even if 9 that belief turned out to be incorrect at the end, the 10 defendant doesn't have the level of sufficient knowledge of 11 infringement to hold them liable for contributory 12 infringement. 13 So you might be wondering if these power plants 14 are using activated carbon all the time as ME2C says and we 15 say we didn't encourage them to use it, then who did? 16 Activated carbon is a substance. I mean, it's a black 17 powder. These big power plants use tons of it, costs lots 18 of money and they've got to get it from somewhere. So why 19 are they using it and how did they get it? ME2C tells us. 20 The federal government, the EPA law is passed called MATS 21 and I think it's mercury air toxic standard. Passed -- they 22 issued the regulation in notice form in 2011 or 2012 or so 23 for it to take effect in 2015, and then there were 24 extensions granted in 2016. And MATS required all cal-fired 25 power plants to reduce mercury emissions by about 90 percent</p>	<p style="text-align: center;">203</p> <p>1 competitors activated carbon suppliers in its publicly filed 2 security taments. ME2C is a publicly traded company buy and 3 sell stock on the exchanges and like all public companies 4 they have to file statements with the government and 5 Securities and Exchange Commission with certain information 6 about their business and they swear under oath that the 7 information in their filings is true. So let's take a quick 8 look at one of them. DTX 376, this is the annual form filed 9 the year ended 2018. It was filed I believe it says on here 10 April 2019, but let's jump down to page 9. I'm just gonna 11 move through this. And our competition, right there at the 12 bottom of the screen, that's their competition. That's the 13 companies they list to the public that they compete with 14 Cabot, Calgon, Albemarle, Carbonxt, Nalco, Davinda and 15 several others. The evidence will show that these companies 16 are activated carbon suppliers. There's no dispute about 17 that. And look at the next slide, these companies employ 18 large sales staff and are well positioned in the market. 19 And ME2C says it thinks it's got better technology. 20 All right. And I'm going to skip in the 21 interest of time, but in 2020 10-K filed during this lawsuit 22 says I think word for word exactly the same thing. What do 23 sales forces do? Sales forces sell. Sales forces 24 encourage, persuade, lean upon, they pester their customers 25 to buy their products. What's their product? Activated</p>
<p style="text-align: center;">202</p> <p>1 by 201r or 2016 and that required many power plants, not all 2 of them but many to adopt activated carbon as part of their 3 emission control strategy. And the plaintiffs' technical 4 expert, Mr. O'Keefe, his testimony is that the only reason 5 the power plants use activated carbon is to comply with MATS 6 and that there is no other reason they use activated carbon. 7 Repeat that, the plaintiffs' own expert has testified -- 8 remember, it's your job to find who's causing the power 9 plants to use activated carbon -- he's testified that the 10 only reason a power plant uses activated carbon is to comply 11 with MATS and that there's no other reason. 12 And so some plants needed the boost from 13 activated carbon to get their 90 percent, some didn't in 14 relation to coal grade, but the only reason they used it was 15 to comply with MATS, and we were not involved in any of 16 these decisions at the power plants. So that's the why, 17 federal government mandated it. 18 What about the how, how and where did they get 19 it? We don't sell activated carbon or activated carbon 20 injection equipment. Why would we? It's not anything we're 21 involved with, it's the stuff the law says our coal has to 22 meet its emission requirements without. ME2C tells us that 23 too. 24 Remember, ME2C sells activated carbon itself, 25 that's its sorbents in its products, and it lists its</p>	<p style="text-align: center;">204</p> <p>1 carbon? Who are their customers? Power plants. 2 So I would respectfully suggest to you between 3 the government mandating power plants to use activated 4 carbon as Mr. O'Keefe says and Albemarle and Cabot and 5 Calgon, these are large companies employing large sales 6 forces that are well positioned in the market selling it to 7 power plants, that's who's inducing power plants to use 8 activated carbon, not CERT. It's not our business. 9 Thank you for sticking with me. I know this is 10 a lot of information, and as the defendant we have to go 11 second so you hear their whole case and their evidence 12 before you get to us, so I really want to give you an 13 overview, get you oriented so when you're hearing their case 14 and their witnesses, you can perhaps put it in the context 15 what you're hearing from me now. Thank you so much for your 16 attention. 17 So as the case progressed 2019, 2020, 2021 CERT 18 sort of sorted things out even further. Remember what I 19 told you in the lawsuit about getting discovery? And as 20 part of the discovery process, we were able to learn the 21 year when the accused power plants in this case installed 22 activated carbon equipment. 23 Now mind you, we don't have the hard data on how 24 often they used it, how much they used. Activated carbon is 25 expensive so they want to minimize it. They run on these</p>

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1 30-day rolling averages which don't require them to run it
2 all the time. Dr. Senior will testify a little bit about
3 how that's done. But anyway, it would be ME2C's burden of
4 proof to show refined coal is burned continuously with
5 activated carbon, and the power plants keep detailed records
6 of that. ME2C didn't get in and aren't going to present any
7 to you.

8 But at any rate, the year in which the accused
9 power plants installed activated carbon equipment was
10 established and stipulated by the parties. And so now
11 looking back at DTX 1969 what I call the coal chart, the
12 tonnage chart where the italics begin were given with the
13 plant, that's the year that the plant started using or
14 installed activated carbon equipment, okay> and we gave
15 ME2C the benefit of the doubt if they installed the
16 equipment any time of the year. We marked the whole year as
17 an activated carbon year, and then we assumed that they were
18 running at 100 percent of the time which, you know, we don't
19 know -- I don't think anybody will testify that's the case
20 because at a minimum the systems had to be maintained.

21 But so if you look at the percentages now that
22 you can see the coal burn before we look at before and after
23 the patents and now we can see what we learned as the case
24 went on of the coal burned with and without activated
25 carbon. So even at the accused plants from about 14 percent

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1 to 60 percent of refined coal was combusted without
2 activated carbon. That's the bare minimum, and it averages
3 out to 35 percent. You know, this is tens of millions of
4 tons of refined coal at the accused plants had been burned
5 without activated carbon. And this is, again, assuming they
6 did it all the time.

7 And now let's look at the bottom of the chart,
8 the bottom of this column the color region. Yeah, that
9 right-hand side, those three years on the right. These were
10 some heavy hitters.

11 Mr. Brown, if we could catch the far right two
12 columns as well.

13 You know, you've got Intermountain one plant
14 that burned 7 million tons over the time period -- or 70
15 million tons with these plants, 38 million at Intermountain,
16 that's at the bottom, that was burned without activated
17 carbon, 100 percent of it without, and this is important.
18 The CERT entity, the CERT Operations company that made that
19 refined coal was a defendant in this lawsuit every single
20 day that the refined coal program was going on through 2021.

21 And so while the lawsuit is going on, we have a
22 defendant company that is making, you know, things work out
23 to 7500 tons a day of coal without any activated carbon at
24 all. And that's what we believe. It's not just what we
25 believe, but what we knew absolutely, and there's no

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1 contrary evidence. And that's why we believe there was
2 substantial non-infringing uses of refined coal and we
3 didn't infringe.

4 Okay. The formulation. Wait, there's more. I
5 haven't told you about the formula yet, but refined coal --
6 remember, you add MerSorb and S-Sorb to it to get the
7 reduction. And it's certified at this facility called the
8 EERC, the same place Mr. Pavlish started his career or went
9 to, I don't know if he started there, he was there for a
10 good while. So the EERC has this small-scale coal-burning
11 furnace that Mr. Caldwell talked about. They could kind of
12 switch in and out equipment at different power plants. So
13 what they would do is they would take a sample of the
14 feedstock coal from the power plant and they would run it
15 through and burn it, measure the emissions without using
16 activated carbon and they would treat it with MerSorb and
17 S-Sorb and then run that through and measure the emissions
18 again and then with the testing they could determine how
19 much of the MerSorb chemical and S-Sorb chemical needed to
20 be added to get the required NOx and mercury reductions
21 under the law and to get those reductions without the use of
22 activated carbon.

23 So importantly, the EERC the Energy and
24 Environmental Research Center, which is a division of the
25 University of North Dakota, they were the ones who would do

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1 the testing, they set the formula, not us, so meet the
2 requirements. And they did this every six months for every
3 power plant at issue over this ten-year period. And I'm
4 just going to show you one report quickly. Let's look at
5 DTX 1692.

6 So this is your typical report signed by a
7 research engineer at the EERC. This one is from 2014 and
8 it's addressed to Mr. Jeff Green. Jeff received every one
9 of these over all these years. Jeff traveled with the EERC
10 many, many times supervised these tests, back and forth,
11 coordinated all this, this was his job, that's what he did.
12 And let's just kind of page down just kind of scroll through
13 the report.

14 You have this test report, it goes through a lot
15 of technical details.

16 Keep going. Keep going. Page down.

17 We're not going to try to read all this, but
18 they describe the facilities.

19 Keep going down.

20 Here's a diagram of the furnace.

21 Page down.

22 Some different settings. And if we can -- so it
23 goes through. And fuel preparation describes how they set
24 it up, analysis of the fuel. You look at the -- do learn
25 about things. Coal is different in different places, so

<p style="text-align: center;">209</p> <p>1 they analyze the coal. 2 And scroll down. 3 These are some of the emissions measurements, 4 and that's from the feedstock coal, refined coal showing the 5 reductions. 6 And scroll down. 7 So this is incredibly detailed. You can see it 8 looking at all kinds of ash analysis and chemicals. 9 And scroll down a little bit more. Keep going. 10 Keep going. 11 This is the NOx emissions part. When you 12 finally get towards the end of the report, they're saying 13 that we -- this is going to the last page or the next page. 14 Yeah. So you look at this bottom paragraph 15 right here. You talk about the feedstock coal treated with 16 .2 ^ listen to whole sentence percent S-Sorb .22 percent 17 MerSorb and Reporter check% average mercury at 43.73. 18 That's our 20 and 40 percent we were aiming for, 19 and then the next page, there's a certification, and 20 attached to this report as appendix A is a certification by 21 notice 201054. 22 Remember we looked at the IRS notice earlier we 23 look at the certification by a professional engineer -- 24 registered professional engineer in the state of 25 North Dakota who is signing off and certifying as to that</p>	<p style="text-align: center;">211</p> <p>1 It's exactly the same formulation over all these 2 many years, and it burns an entirely different grade of 3 coal, bituminous and sub bituminous, Utah and Colorado 4 based, and it's a higher grade, better quality coal. 5 So you have -- so what this shows is that the 6 formula, specially made and adapted -- the formula was set 7 before these patents -- long before these patents ever 8 existed. It's the same everywhere or same in all of these. 9 How could our refined coal be especially made and adapted to 10 infringe a patent that didn't exist when the formula was 11 set; right? How could it be made to designed to infringe a 12 patent that didn't exist when we set the formula? 13 More importantly, how could CERT know or believe 14 their refined coal formulation was specially made or adapted 15 to infringe when the formula had been set before the patents 16 existed? 17 And then last, how could you -- how could they 18 believe the formula was made and adapted, designed to be 19 used on activated carbon when you had the same formula used 20 at a plant without activated carbon, and then, you know, 21 some of these plants installed activated carbon at some of 22 these periods in between, and the formula didn't change. 23 So we have the same formula before and after the 24 patent issued, the same before and after before we know 25 about the patent, the same formula at a plant burning an</p>
<p style="text-align: center;">210</p> <p>1 formulation meets those reductions. So that's kind of how 2 it worked. 3 Well, let's take a look at DTX 1968. By the 4 time that these by the time the first patent issued in 2019, 5 we were running the same formula at each of these accused 6 power plants, and almost all of them we've been running the 7 same formula for years. 8 And it's documented in big binders. We can show 9 you of these Section 45 test reports, or EERC certification 10 reports. 11 So if we can scroll down, go to just -- let's 12 just kind of look -- page through the different pages of it. 13 We've got Big Cajun II, Coletto Creek, and they're all the 14 same formulations over all the years, and this is the 15 document of reductions, and so you've got -- PRB is Powder 16 River Basin coal, and there's Brigham Basin coal. 17 So it didn't vary with the coal type, and the 18 power plants, they're all a little bit different from each 19 other, and the EERC can switch in and out certain equipment. 20 And so it didn't vary from power plant to power plant. 21 , and then very importantly let's just look at 22 the last page of this. This Intermountain Company, again 23 this was one that was accused of infringement from 2019 24 through 2022. This is a power plant that never used 25 activated carbon at all.</p>	<p style="text-align: center;">212</p> <p>1 entirely different grade of coal that never used activate 2 carbon and ^ listen. 3 So now I want to emphasize that. That puts you 4 in our state of mind. We knew that every single day we were 5 making refined coal while this lawsuit was pending we were 6 using the same formula to make thousands of tons, millions 7 of pounds a day, at Intermountain which had never used 8 activated carbon, same formula there as all the other 9 plants. 10 And remember, they were accusing CERT 11 Operations III who was making the refined coal with 12 Intermountain. 13 So history matters. All of that matters. 14 That's our state of mind. That's what we knew when we were 15 sued, and then as the lawsuit goes on because they're 16 accusing us of willful infringement. 17 They're accusing us of being will -- willful 18 blindness, and I think those facts show why we had a very 19 strong reason to believe we didn't infringe, and there's no 20 way we could be willfully blind. We checked it out, and we 21 confirmed. 22 There was no specially made and adapted, and 23 there was substantial non-infringing uses by defendants in 24 the lawsuit the whole time the Section 45 program was going 25 on. And, you know, we got sued in 2019 -- I'm just going to</p>

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1 run through this quickly.

2 Refined coal production ended in 2021. This

3 goes to this willfulness allegation. I'm not going to go

4 into all the details, but they filed their complaint

5 July 2019, sued various CERT entities. One of the things

6 you can do as the defendant is say, Even taking what the

7 complaint said is true, we don't think it makes out a legal

8 claim, you can request the Court to dismiss it, file a

9 motion to dismiss.

10 We did that. We filed a motion to dismiss, and

11 then in May of 2020 the first judge that reviewed it agreed

12 it and thought the motion to dismiss should be granted, and

13 then in July of 2020 or June of 2020, about a full year

14 later -- no, it was July of 2020, the second judge who

15 looked at it agreed and ordered all the contributory

16 infringement claims and inducement claims of the CERT

17 entities dismissed without prejudice, gave the plaintiff

18 opportunity to refile, which they did in July.

19 And so this timeline of these complaints is --

20 matters because they filed their original complaint, a

21 motion to dismiss, order granting it, and then they filed a

22 first amended complaint, second and a third.

23 And then the current the current operative

24 complaint is this one here in 2022. Refined coal program

25 had ended. The entire time that the refined coal is being

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1 made, every day, there is a defendant company making refined

2 coal without any activated carbon at all.

3 So that was very puzzling to us. None of that

4 made any sense to us. It may not make sense to you. That's

5 why we had very good grounds to believe and still believe

6 and know that we did not infringe these patents.

7 So you heard sort of our side of it, and ME2C is

8 asking you to rely on the opinions of Mr. O'Keefe as their

9 technical expert for infringement. It's up to you to assess

10 the credibility of his testimony.

11 He did work at Commonwealth Edison Utility in

12 the '80s, up to 1995, but he left industry in '95. We're

13 almost three decades from that now. No aspect of his work

14 in the '80s or '90s involved mercury emissions control.

15 The ^ listen were MATS regulations are a

16 fundamental basis of his opinions, but he left the industry

17 20 years before those regulations went into effect. None of

18 the power plants he worked, Comm Ed and KPAC had a mercury

19 control system or an activated carbon injection system.

20 And that means he -- he acquired all his

21 knowledge about mercury control and activated carbon

22 injections systems between the summer of 2022 when he was

23 hired for this case, and when he gave his expert report in

24 October, 60 to 90 days.

25 He's didn't visit a power plant with an

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1 activated carbon injection system in place. He's never

2 visited the power plant that used refined coal. He didn't

3 even talk to a power plant operator that burned refined coal

4 or a power plant that used activated carbon before he gave

5 his deposition testimony.

6 At the time he gave his opinions, he'd never

7 even seen activated carbon or refined coal in use or a

8 refined coal facility. So the pictures you saw a little

9 while ago, you saw more refined coal facilities than

10 Mr. O'Keefe when he rendered his opinions in this case.

11 So it will be up to you to decide if you find

12 him credible and if you are going to rely upon his opinions

13 to find that each of the eight different power plants in

14 this case infringed, and then further to rely on his

15 opinions and his inferences to find CERT liable for

16 infringement and award money damages.

17 And I know this is taking a while, so I'm not

18 going to talk any more about the damages at this point.

19 They did touch on Alistar. Alistar was at one

20 time a CERT company. They pointed out that they did settle.

21 They were sued in this case. They were sold to a different

22 company, and they settled a few days before the trial was

23 scheduled a few months ago for \$107,000.

24 And you will hear some interesting testimony

25 about that, I'm sure, but it was a \$100,000 payment. I

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1 think you saw the other agreement from the large utility for

2 \$200,000, and we think if you find infringement, that those

3 are what ME2C has valued its patents at -- these patents,

4 this party, ME2C.

5 And I'm going to just kind of breeze through

6 invalidity very quickly. As I touched on earlier, if we can

7 look at the kof family tree slide again. The patent

8 applications --

9 THE COURT: Mr. Sykes, I'm sorry to interrupt

10 you. I do want to make sure we take our afternoon break. I

11 wonder if you're moving to a different part of your closing.

12 Would this be a good time to do that?

13 MR. SYKES: This is fine. I've probably got

14 five mintues left.

15 THE COURT: I'm sorry. I thought you had more.

16 Let me let you continue. I wanted to ask.

17 MR. SYKES: Thank you all for sticking with me.

18 I know it's tedious and lots of data and dates and tons and

19 coal, and sometimes we feel like we wake up with coal dust

20 on us working on this case. So thank you for hearing us

21 because we don't get to tell our side for a few days.

22 The patent applications were filed in 2018, and

23 as I alluded to earlier, I didn't have all the details.

24 There's your original filing in 2004, and then that's called

25 a provisional ^ listen and non provisional in 2005 and filed

<p style="text-align: center;">217</p> <p>1 another one, and this one split which is a very regular 2 normal thing to happen in the Patent Office. 3 And so you get two chains, and you have a series 4 of applications filed up to 2018. This is the one that 5 issues in the '114 patent, and we have a longer chain here 6 up to the one that issues as the '517. 7 So they were filed in 2018. This one issued in 8 2020. This one issued in 2019, and very simply you -- you 9 heard some of this in the video. 10 For a patent to be valid, it has to be novel, 11 which means it's new or what others have done before, 12 shouldn't be in print publications like the prior art, 13 patents and research papers. 14 The patent claim must be nonobvious which means 15 it's not just an obvious combination of things that a person 16 of ordinary skill would find to be a technician in the 17 field, something versed in the technology would understand, 18 and it's just to put things together in an obvious way. 19 And so they claim priority from 2018 back to 20 2004, and for ME2C to receive the benefit of that 2004 21 provisional application, obviously there's a lot of work in 22 the space going on, lots of work going on these years. 23 There must be a legally sufficient written 24 description to support the claims filed in 2018 in each one 25 of these applications leading up to the 2018 filing, so each</p>	<p style="text-align: center;">219</p> <p>1 the different chemistries involved. 2 And Dr. Niksa will explain to you and provide 3 his opinions, and he will explain to why it's his view, his 4 opinion that in certain of the intervening applications, 5 there was not a description of adding bromine directly to 6 the coal before combustion. 7 And because of that -- and it breaks the 8 authority chain -- the 2018 applications would lose the 24 9 filing date. And then Dr. Niksa will explain why prior art 10 in that early 2000s time period renders these 2018 11 applications in years later invalid over the prior art. 12 So thank you for your time. Again, you will be 13 hearing "specially made and adapted" and "substantial 14 non-infringing uses." I think, as you've seen, our people 15 reasonably believed, having sold tens of millions of tons 16 of, refined coal, that was never combusted with activated 17 carbon while the suit was going on by the defendant 18 companies had reason to believe they did not infringe and no 19 reason to believe their product was specially made and 20 adapted, and it was never their intention to sell refined 21 coal to cause the power plant to infringe. The activated 22 carbon suppliers, that was their business. Our business was 23 selling fuel, refined coal, that met its targets under the 24 law without activated carbon, and we hope that you will 25 consider the evidence and render a verdict for the defense.</p>
<p style="text-align: center;">218</p> <p>1 one in the chain has to have a written description of the 2 invention claimed in the 2018 applications. 3 And it's CERT's burden, the defendants' burden 4 to prove this by clear and convincing evidence that at least 5 one of these applications in the chain lacks the written 6 description, and then if it does, and that breaks the 7 priority chain, then prior art would come in, and we will 8 show why that would invalidate the patents. 9 And so the issue is whether -- this may surprise 10 you. The issue is whether there's adequate written 11 description support in the intervening applications for 12 adding bromine directly to coal as opposed to just adding 13 bromine into the flue or into the furnace itself or 14 downstream. 15 And we have an expert slide 5, I believe, 16 Dr. Stephen Niksa. Dr. Niksa, he has a Ph.D. in chemical 17 engineering, went to Princeton. I believe he got his Ph.D. 18 in 1982, and he has literally spent his life studying coal 19 combustion, emissions regulation, including mercury control, 20 NOx. 21 He has modelled all the reactions, I believe, I 22 read in his papers, 5- or 600 different chemical reactions 23 that happen in a coal furnace, 260 published paper. He's 24 written books. He has lived this. It's been his life since 25 the '80s studying coal combustion, coal emissions and all</p>	<p style="text-align: center;">220</p> <p>1 Thank you. 2 THE COURT: Thank you, Mr. Sykes. 3 Everyone, we'll take our afternoon break at this 4 time. 5 (The jury exited the courtroom.) 6 THE COURT: We'll take a 15-minute break it's 7 about 3:42 right now. We'll come back and ask everyone to 8 be back by a few minutes before the time. 9 The Court will stand in recess. Thank you. 10 (A recess was taken, after which the following 11 proceedings were had:) 12 THE COURT: Is everyone set for us to bring the 13 jury in? Okay. 14 (The jury entered the courtroom.) 15 THE COURT: Let me turn to plaintiffs' counsel 16 to begin their case in chief. 17 Mr. Caldwell. 18 MR. CALDWELL: Thank you, Your Honor. 19 Your Honor, the plaintiffs would like to call 20 Mr. John Pavlish, the inventor. 21 While Mr. Pavlish is being sworn, can I pass out 22 the binders? 23 THE COURT: You may. We'll have our witness 24 sworn. 25 THE CLERK: Please state and spell your name for</p>

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1 the record.

2 THE WITNESS: John Pavlish, J-O-H-N,

3 P-A-V-L-I-S-H.

4 JOHN PAVLISH,

5 called as a witness on behalf of the

6 Plaintiff, was sworn, and testified

7 as follows:

8 MR. CALDWELL: Your Honor, I have one more

9 binder for the witness.

10 THE COURT: You may approach.

11 MR. CALDWELL: Thank you.

12 May I begin, Your Honor?

13 THE COURT: You may.

14 MR. CALDWELL: I have an unusual request.

15 There's one thing. I would like to seal the courtroom for

16 for one question. I think it would be less disruptive if I

17 do it real quick and then go off the sealed record.

18 THE COURT: Is there any way around doing this?

19 MR. CALDWELL: My client believes that we should

20 seal the courtroom for -- it's just a number. My client

21 believes that we should seal the courtroom. Obviously, I'm

22 going to do what the Court orders.

23 THE COURT: Let's have a brief sidebar so I can

24 understand.

25 (The following discussion was had at sidebar:)

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1 THE COURT: We're on the record. And let me --

2 like I mentioned at the pretrial conference, we won't be

3 sealing the courtroom really at almost any time. We'll be

4 looking for any alternative to having a sealed courtroom,

5 including making reference in some way so the jury can see

6 something.

7 With that as a backdrop, what is it that we're

8 talking about? Why do we have to do this?

9 MR. CALDWELL: I would like to talk about -- I'm

10 trying to make it as minimally disruptive as possible -- is

11 during the opening just basically saying, "Look at how they

12 settled the lawsuit. It's \$100,000 or thereabouts." I

13 think, necessarily, we need to respond to that and point out

14 similarly situated defendants paid \$267 million because that

15 was omitted.

16 So I guess my client's preference, being

17 publicly traded, is it's probably not the ideal way for it

18 to be released. If it's better, maybe what we could do is

19 pull up the document and zero in on that in the document and

20 not say it on the transcript.

21 THE COURT: I have to tell you, I think this

22 information about what was paid for the licenses, this is

23 information -- that's going -- I think going to be central

24 to the damages issues in the case. I can't see sealing the

25 courtroom with regard to the discussion. The best thing to

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1 do is if there's some way you think discussing or showing

2 will maybe minimize the need for broadcasting whatever,

3 you're welcome to do that, but I can't see sealing the

4 courtroom for that.

5 MR. CALDWELL: Well, to be honest, if that's

6 kind of the direction we're going to have going forward in

7 the case, that's helpful. This is just the first time

8 something came up, so it just might be that we bite the

9 bullet and do it.

10 THE COURT: Okay. All right. Good. Thank you.

11 (The discussion at sidebar ended.)

12 THE COURT: Plaintiffs counsel can begin their

13 questioning.

14 DIRECT EXAMINATION

15 BY MR. CALDWELL:

16 Q. Good afternoon.

17 A. **Good afternoon.**

18 Q. Please introduce yourself to the jury.

19 A. **Good afternoon. My name is John Pavlish.**

20 Q. Why are you here to testify, Mr. Pavlish?

21 A. **I'm here as the co-inventor on the patents-in-suit**

22 **and also the corporate representative for ME2C.**

23 Q. In terms of personality, are you more on the

24 technical side or business side of ME2C?

25 A. **I'd be more on the technical side.**

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1 Q. Are you aware of some of the big terms of license

2 agreements that ME2C has entered into in the past?

3 A. **I'm aware of it.**

4 Q. I'm going to go through the technical information,

5 but I want to have you respond to something that pertains to

6 something we heard in opening.

7 Do you recall the discussion in opening from

8 defense counsel about how to settle this lawsuit, some coal

9 plants paid a small amount or there was a reference that

10 Alistar paid a small amount?

11 A. **I remember that.**

12 Q. Were there any other defendants in this lawsuit that

13 are similarly situated to these CERT entities, what they

14 call refined coal defendants?

15 A. **Are there any other entities?**

16 Q. Were there other entities in this lawsuit?

17 A. **Yes.**

18 Q. Sir, how much did the Gallagher and DTE defendants

19 pay to settle and get out of the lawsuit and take a license?

20 A. **I believe it was around 28 million.**

21 Q. So you said you're on the technical side. Will there

22 be another witness who's more focused on the business side

23 of ME2C?

24 A. **Yes.**

25 Q. What is it you invented, Mr. Pavlish?

1 A. **I invented, along with my co-inventors and**
 2 **co-workers, invented a two-part process to reduce mercury**
 3 **emissions, in particular from flue gas, but more importantly**
 4 **from coal-fired power plants.**
 5 Q. Around what time did you and your co-inventors come
 6 up with this invention?
 7 A. **Around 2002, summer of 2002.**
 8 Q. How old a man are you?
 9 A. **Just turned 65.**
 10 Q. Do you have a family?
 11 A. **I do.**
 12 Q. Married?
 13 A. **I am.**
 14 Q. How big is your family?
 15 A. **I have 4 children and 11 grandchildren.**
 16 Q. Whereabouts do you live, Mr. Pavlish?
 17 A. **I lived most of my life in Minnesota. As I've gotten**
 18 **older, my wife and I don't particularly like the cold**
 19 **weather in Minnesota, 30 below, so we share a time now in**
 20 **Florida during the wintertime and the rest of our time we**
 21 **share up in Minnesota.**
 22 Q. Where did you grow up in Minnesota?
 23 A. **I grew up near a small town called Bejou Minnesota.**
 24 Q. How big is Bejou?
 25 A. **Bejou is a very small town. Less than a hundred**

1 **people.**
 2 Q. What did your folks do, mom and dad do, in Bejou?
 3 A. **I grew up on a farm. They farmed.**
 4 Q. Do you have siblings?
 5 A. **I do. Myself and six others, so total seven**
 6 **including me.**
 7 Q. Obviously, you're not a farmer. Did you end up going
 8 to college?
 9 A. **I did.**
 10 Q. What did you study?
 11 A. **I went to -- got a two-year degree in the applied**
 12 **science, Associate of Applied Science, from University of**
 13 **Minnesota Crookston, and I also have a four-year degree,**
 14 **Bachelor of Science in mechanical engineering from North**
 15 **Dakota State University, and I was pursuing a degree,**
 16 **masters degree, in mechanical engineering from Kansas**
 17 **University.**
 18 Q. What made you want to study mechanical engineering
 19 after college, Mr. Pavlish?
 20 A. **Made we want to study it? I guess I always had a**
 21 **mechanical inclination. Growing up on the farm, we were**
 22 **poor, didn't have a lot of money, so when things would break**
 23 **we couldn't afford to repair it. I would repair it and fix**
 24 **it. I looked, why did it break? Was it designed correctly?**
 25 **Why was it designed that way? I grew up through high school**

1 **doing that, so just seemed natural for me to pursue a**
 2 **mechanical engineering degree.**
 3 Q. In addition to the engineering degree, do you have
 4 any professional certifications?
 5 A. **I do.**
 6 Q. Like what?
 7 A. **I hold a Professional Engineering certificate.**
 8 Q. How do you get that?
 9 A. **To get that, you have to take a thumbnail engineering**
 10 **course. I took that and graduated with mechanical**
 11 **engineering. That's an eight-hour exam. I passed that and**
 12 **worked for about 4 or 5 years in the field of engineering**
 13 **and then I took an eight-hour exam called a Professional**
 14 **Engineering Exam and passed that as well.**
 15 Q. Now, did you go to work after you got out of school?
 16 A. **I did.**
 17 Q. Where did you go to work?
 18 A. **I worked for a company called Black & Veatch.**
 19 **They're a large engineering firm that is internationally**
 20 **known and specializes in the design and construction and**
 21 **building of power plants.**
 22 Q. And in terms of the power plants that you got to look
 23 at, did you look at coal-fired power plants?
 24 A. **That's pretty much all I worked on, is coal-fired**
 25 **plants.**

1 Q. Given your background, I'd like to start with a brief
 2 introduction of how coal-fired power plants work to make
 3 sure that's in the evidentiary record. Is that okay?
 4 A. **Sure.**
 5 Q. Just at a high level, what are the parts of what's
 6 going on?
 7 A. **Sure. I never went through it. I'll refresh it, go**
 8 **through it again.**
 9 **We see on the left-hand side of the slide,**
 10 **there's the huge coal pile we talked about at the beginning**
 11 **of the remarks. That sits close to the power plant and that**
 12 **coal is then fed by a series of conveyers to a pulverizer,**
 13 **and that pulverizer takes coal and grinds it up to a real**
 14 **fine material like powdered sugar, real fine material. That**
 15 **gets blown into a combustor, and it's where it's actually**
 16 **burnt.**
 17 **As it burns, it generates an enormous amount of**
 18 **heat. That heat is transferred to water and that water is**
 19 **converted to high pressure steam as well as high pressure**
 20 **steam. That steam flows into a turbine and the turbine**
 21 **turns a generator. The generator sends the electricity to**
 22 **the power grid and your home.**
 23 **The steam is condensed at the turbine and**
 24 **returned back to the combustion chamber/boiler and that**
 25 **cycle repeats over and over again.**

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1 Q. We went to the boiler point, and from the boiler we
 2 focused on where the steam goes, the water side of it. What
 3 are the key parts of what we need to know about the exhaust
 4 and combustion parts?

5 A. **As I mentioned, the coal comes from the coal pile,
 6 goes through the pulverizer, so it's very fine. That fine
 7 coal is combusted, burnt, and generates what we call flue
 8 gas, and that flue gas flows out of the boiler and through a
 9 series of clean-up devices. It cleans up the bad stuff out
 10 of the flue gas.**

11 **What we're showing here is one device. There
 12 are a number of devices, scrubbers, other devices that are
 13 also in the stream. The purpose of the devices is to clean
 14 out impurities. Once those impurities and you end up with a
 15 clean gas, that gas is sent out of the stack out to the
 16 atmosphere.**

17 Q. Where does the big stack of coal typically come from?

18 A. **The big stack of coal comes from the mine.**

19 Q. Are mines often adjacent to the plant or sometimes do
 20 they have to travel a long way with the coal?

21 A. **Sometimes it can be adjacent to the coal, but in many
 22 cases, the coal is mined some distance from the plant and
 23 transported by truck or by train.**

24 Q. How much of the U.S. power supply were coal-fired
 25 power plants providing around the time of the invention in

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1 the early 2000s?

2 A. **Around 50 to 55 percent.**

3 Q. How much of the United States power supply do
 4 coal-fired power plants provide today?

5 A. **Approximately 20 percent.**

6 Q. Do you have a sense why that percentage changed over
 7 time?

8 A. **Sure. A lot of the energy comparators changed, solar
 9 and wind. There's also the increase in the amount of
 10 natural gas used for power reduction.**

11 Q. Is coal obsolete or pretty close to becoming
 12 obsolete?

13 A. **I wouldn't say that.**

14 Q. Why?

15 A. **I think it serves a real critical purpose in
 16 maintaining the overall stability of the electrical grid.**

17 Q. What is it about coal that stands out in terms of
 18 stability of the electrical grid?

19 A. **Well, it's a large resource that can maintain,
 20 basically, the stability, meaning it's a very reliable
 21 source. It's got fuel stored on site, so it can generate
 22 electricity 24/7. From that viewpoint, it can provide a
 23 consistent, nonvarying so to speak, electrical current off
 24 of the grid, so it's kind of critical in that regard.**

25 Q. How is the process that you invented used in

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1 coal-fired power plants in your experience?

2 A. **What we do is we add a bromine compound to the coal
 3 and then we add additives to the coal and that goes upstream
 4 to the combustion zone and we add activated carbon
 5 downstream of the boiler combustion zone.**

6 **When we do that, kind of the -- I guess the
 7 carbon and the bromine kind of exchange some electrons and
 8 make that surface stickier toward mercury and catch that
 9 more effectively.**

10 Q. About how long have you been either researching or
 11 testing or working in the mercury capture-related field?

12 A. **It would be over 30 years now.**

13 Q. Have you ever published any articles or reports in
 14 this field?

15 A. **I've been fortunate throughout my career. I
 16 published over 200 different articles and papers and
 17 publications and so forth.**

18 Q. Do you serve on any professional or technical
 19 committees in the space of mercury capture?

20 A. **I do.**

21 Q. Like what?

22 A. **I serve on Mercury Emissions from Coal. It's an
 23 international mercury work group. And I also serve on the
 24 United Nations Environmental Program. It's a global mercury
 25 partnership program.**

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1 Q. Do you believe your invention is important?

2 A. **I believe it's extremely important.**

3 Q. Why?

4 A. **There really -- at the time of the invention, there
 5 really was no solution to reduce or improve mercury from
 6 coal-fired power plants and not to any significant degree,
 7 so it was critical.**

8 Q. Back to your time at the engineering company Black &
 9 Veatch. I think you said you worked on plant design. What
 10 did you work on at Black & Veatch after that?

11 A. **The last five years at Black & Veatch, I spent most
 12 of my time on software, a computer program that would
 13 simulate the performance and operation of a plant that could
 14 let us look at the economics should a design change be
 15 implemented or coal quality change.**

16 Q. What kind of changes would that mean, a design change
 17 that you might model or coal quality change that you might
 18 model?

19 A. **The design change includes many things. Typically,
 20 we look at type first and say what are the characteristics
 21 and what sort of equipment is needed, whether that be
 22 handling equipment or whether that be the type of emission
 23 control equipment.**

24 **And then you would look at the design of that
 25 and again, overall, evaluate performance and the economics**

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1 **of that coal type along with that particular design.**
 2 Q. Does it matter if a coal plant burns one type of coal
 3 versus another?
 4 A. **Yes, very much so.**
 5 Q. I'd like to direct you to the screen. Can you help
 6 us understand some of the different classifications of coal?
 7 A. **Sure. Generally there are four different types of**
 8 **classification of coal. Shown here, they are lignite,**
 9 **sub-bituminous, bituminous, and anthracite. Four different**
 10 **types.**
 11 Q. What types of characteristics tend to vary and make
 12 one type of coal different from another in a meaningful way?
 13 A. **The common difference would be the carbon content of**
 14 **the coal and to some degree also the moisture or call it the**
 15 **impurities, the amount of ash or dirt that might also be**
 16 **contained within that coal.**
 17 Q. What are the hallmarks of anthracite coal?
 18 A. **Anthracite is a very hard coal, primarily consists of**
 19 **carbon, has very small amounts of impurities, doesn't have a**
 20 **lot of moisture in it. It's very hard coal.**
 21 Q. Is there a consequence of it being a hard coal?
 22 A. **Since it's a hard coal, even though it's got a high**
 23 **carbon content, it's difficult to actually burn because it**
 24 **doesn't have a lot of volatile materials. It's difficult to**
 25 **sustain.**

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1 Q. What hallmarks the bituminous coal?
 2 A. **Bituminous coal has a high heat content, a little bit**
 3 **less carbon content than, say, anthracite. And it's got a**
 4 **little more impurities, but not as much as the other coal**
 5 **we'll talk about. And there's vast quantities of it, so**
 6 **it's used quite a bit in power production.**
 7 Q. Are there any particular impurities or issues that
 8 bituminous coal is known to have problems and issues with?
 9 A. **One of the bad characteristics of bituminous, even**
 10 **though it has high carbon content, one of the bad**
 11 **characteristics is high sulfur content.**
 12 Q. What is sub-bituminous coal?
 13 A. **Sub-bituminous is the middle road, a lower rank coal.**
 14 **It has less carbon, a lot of moisture, a fair bit of**
 15 **impurities. One of the attractive characteristics of**
 16 **sub-bituminous coal is that it has a very low sulfur**
 17 **content.**
 18 Q. Are there significant quantities of sub-bituminous
 19 coal in the United States?
 20 A. **Yeah, there are vast amounts of sub-bituminous.**
 21 Q. So wrap up. What is lignite?
 22 A. **Lignite is one of the worst coals, and I jokingly say**
 23 **it's kind of like burning dirt. There is some carbon there.**
 24 **It does have some, but it has a large amount of dirt and a**
 25 **high amount of moisture as well.**

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1 Q. Within a given type of coal like sub-bituminous, are
 2 there other subtypes within that?
 3 A. **Well, there's what's called a -- we call it the PRB**
 4 **coal. It's primarily mined in the Powder River Basin, which**
 5 **is in Wyoming and Montana. That's the primary coal that's**
 6 **used for power production.**
 7 Q. Do there tend to be differences where it's located
 8 both geographically and also geologically?
 9 A. **I would say yes, both. Geologically, they're located**
 10 **in different places across the U.S., and they're mined**
 11 **differently as well.**
 12 Q. Give me an example how one type of coal might be
 13 mined differently that matters.
 14 A. **Generally, the low coal, the lignites and**
 15 **sub-bituminous coals, they're near the surface and easy to**
 16 **mine. You remove topsoil and take out the coal. The higher**
 17 **ranked coal, such as bituminous and anthracite, they're**
 18 **deeper, underground, not on the outside, so they're in rocks**
 19 **so a little more difficult**
 20 Q. Do people who work in this field kind of have --
 21 (Multiple speakers.)
 22 Q. Let's just try to make sure that we don't talk over
 23 each other for the sake of our court reporter.
 24 As we move left, we kind of referred to
 25 something becoming more of a low-rank coal. Do you remember

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1 that?
 2 A. **I do.**
 3 Q. If there's certain things that are higher rank coals,
 4 why don't we just burn those?
 5 A. **Well, a lot of it comes down to the impurities, how**
 6 **they're mined, how well they are, where they're located.**
 7 **There's a lot of different factors why we burn one coal**
 8 **versus another coal for power production.**
 9 Q. I'd like to direct you to this geography slide we saw
 10 before on the -- what type of coal do we typically see on
 11 the eastern side of the United States?
 12 A. **On the eastern side of the United States, we see the**
 13 **anthracite we talked about, but it's there in very small**
 14 **amounts. We show it in the green.**
 15 **And then we have vast amounts of this bituminous**
 16 **coal, which I also discussed. We can see in the yellow**
 17 **there's a large supply of that.**
 18 Q. What types of coal were commonly mined and used as
 19 you get sort of west of the Mississippi?
 20 A. **West of the Mississippi, you see in the blue is the**
 21 **sub-bituminous coal, which I also talked about. It's there**
 22 **in vast amounts as well.**
 23 **Then you have the lignites, which up in North**
 24 **Dakota, there's a huge supply, a resource of lignite. And**
 25 **there's also some lignite down in, say, Texas, Arkansas.**

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1 It's kind of scattered around throughout the two states.

2 Q. The elephant in the room on this picture is this

3 gigantic blob in yellow up here in the middle of the

4 country. If I were to build a coal plant in Kansas, would I

5 use automatically use the bituminous coal in Kansas?

6 A. It's a complex question. Since the coal is there,

7 one would be led to believe that you put the plant there,

8 but as I mentioned, the bituminous coal has the high sulfur

9 content. In order to reduce the SOx emissions that result

10 from that high sulfur coal, you have to put in a scrubber

11 that's 3 or 4 million dollars whereas you might look at

12 bringing in a sub-bituminous from Wyoming. You have

13 transportation would be much higher, but it's easily mined,

14 so the cost of coal is quite a bit less and it has this

15 attractive feature, this low sulfur. So you wouldn't need

16 to put it there. You kind of have to weigh out what it

17 makes sense, to transport the coal or put in a scrubber and

18 economically what would make more sense.

19 Q. In your career history, have you modelled that type

20 of decision-making before?

21 A. Yeah, that's exactly what I did at Black & Veatch.

22 Q. Can you help us understand about how much coal a coal

23 plant might use from an average one to a large coal plant?

24 A. An average coal plant will burn on the order of, say,

25 half a million to a million pounds per hour. So we're

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1 talking a lot of coal, obviously. A large plant like the

2 one I believe you mentioned, the Parish plant for example,

3 that's a four-unit plant and fairly large. And that plant

4 is probably going to burn 2, 3 million pounds an hour, and

5 it's going to burn literally train loads. And the train

6 load, a unit train is about a hundred cars and each car

7 holds about a hundred tons. And that large plant, for

8 example, is going to burn 2 or 3 of these unit trains so

9 looking at 2, 400 cars a day. Burn a lot of coal.

10 Q. Kind of rough estimation, unless I totally mess this

11 up. The courtroom is on the order of magnitude of something

12 like 50,000 cubic feet, length, width, height. How long

13 would it take to burn coal filling this courtroom roughly?

14 A. An plant can burn the quantity in about 2 to 4 hours.

15 Q. At some point, did you leave Black & Veatch and go

16 elsewhere?

17 A. I did.

18 Q. Where did you go?

19 A. I went to the EERC.

20 Q. What is the EERC?

21 A. The EERC is the Energy and Environmental Research

22 Center. It's located in Grand Forks, North Dakota.

23 Q. Is the EERC is a for profit company?

24 A. No, it's not. It's a nonprofit.

25 Q. When did you start working at the EERC?

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1 A. I started working there in 1993.

2 Q. Why did you leave Black & Veatch and go to work at

3 the EERC?

4 A. The primary reason to get closer to family. I guess

5 closer to home is the primary reason.

6 Q. Why else would you want to go work at the EERC?

7 A. Why else?

8 Q. Why else would you like to work at the EERC?

9 A. Sure. Gave you an opportunity to do more work in the

10 R&D area and specialize on development of technologies in

11 the area of energy production as well as different

12 environmental controls.

13 Q. Did you work on a specific program within the EERC

14 when you started?

15 A. I did. I worked at the EERC, but I worked in a

16 program under the EERC called the Center for Toxic Metals.

17 Q. Is mercury an air toxic metal?

18 A. Yes, it is.

19 Q. What were your main responsibilities working at the

20 Center for Air Toxic Metals?

21 A. My main responsibility was to manage and oversee the

22 research and development work that was done over that

23 program.

24 Q. In that mid '90s time frame, was that an important

25 time to be studying mercury?

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1 A. In the mid '90s, it was very important. We had come

2 to realize under a few years of study that -- you saw the

3 particulates of some air toxins being controlled and mercury

4 was not. It was being released from these plants.

5 Q. If other air toxins were better being controlled in

6 coal emissions, why was mercury so problematic?

7 A. Well, mercury was in kind of the vapor phase. Like I

8 said, it wasn't being removed in the plant. It was actually

9 being discharged into the atmosphere. Once it travels to

10 the atmosphere, it can travel to water bodies, so bad for

11 the environment and certainly not good for health. It's

12 harmful to your health as well.

13 Q. Was there ever a time when mercury kind of started to

14 be the focus that the Center for Air Toxic Metals zeroed in

15 on?

16 A. In the mid '90s, we focused on mercury.

17 Q. What kind of things were you researching regarding

18 mercury in the mid '90s?

19 A. In the Center for Air Toxins, we looked at a number

20 of different things. We looked at how the mercury was bound

21 in the fuel. We looked at the cake formation of the mercury

22 as it was combusted or gasified. We looked at different

23 ways to measure mercury in the coal combustion systems. We

24 had the technicians to do that, good technicians. We looked

25 a lot at the control in mercury from these plants, and we

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1 also had a little bit of a people looking at the health
 2 effects of mercury.
 3 Q. Did you perform all of that research alone?
 4 A. **No, I didn't.**
 5 Q. How many people were working under you?
 6 A. **As director of that program, I had probably 30 to 50**
 7 **different people.**
 8 Q. How many total folks at the EERC were working on
 9 mercury?
 10 A. **It was several years where we had 150 different**
 11 **people working on mercury.**
 12 Q. Mr. Pavlish, was there anything particularly
 13 difficult or complicated with regard to studying mercury?
 14 A. **Well, yeah. It's a gaseous form. It's in elemental**
 15 **form. It's very difficult to, I guess, remove from a flue**
 16 **gas.**
 17 Q. Were there kinds of coals you were concerned with in
 18 particular?
 19 A. **By that point, we had -- from field data we had**
 20 **pretty well recognized that the low-rank coals, the lignites**
 21 **and sub-bituminous, were emitting more elemental mercury,**
 22 **for example, than, say, plants that were burning bituminous**
 23 **coal. The lower-ranked coals were the immediate concern.**
 24 Q. I guess that I asked you about if mercury is
 25 difficult. Now I'm going to focus on the power plant aspect

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1 of it. Is there anything uniquely challenging about trying
 2 to investigate mercury in the context of a gigantic furnace?
 3 A. **In a furnace, it's very difficult. When you burn**
 4 **this fuel or this coal, you're burning it under very high**
 5 **temperatures, in excess of 4,000 degrees F. It's a very hot**
 6 **zone, complex area where things are turbulent. Talking**
 7 **about thousands of different chemicals and reactions**
 8 **occurring at the same time. It's a very complex process.**
 9 Q. Is there a way for a person to physically see what it
 10 looks like inside a combustion chamber?
 11 A. **Yes. Most plants have a viewport that you can view**
 12 **into the combustion zone.**
 13 Q. First, I'm sure this is hard to judge. About how big
 14 is this viewport that we're going to look at?
 15 A. **This view port is a 4- to 6-inch opening that goes**
 16 **through the boiler to the combustion zone, and that's**
 17 **probably two feet thick just to get into the combustion**
 18 **zone. When you're looking into it, so to speak, it would be**
 19 **across this room, 20, 30, 40 feet deep. It's a big box, if**
 20 **you will, where that combustion occurs.**
 21 Q. What will we see when we play the video clip briefly?
 22 A. **What we're going to see here is the actual combustion**
 23 **of the fine coal particles that are flying around in this**
 24 **big box. You can see it's a turbulent zone. You can see**
 25 **the flame and particles all being combusted. You're looking**

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1 at that way across this room. It's a big box.
 2 Q. How much mercury is actually in the flue gas?
 3 A. **Well, the amount of mercury in the flue gas is very**
 4 **very small amounts. We're talking about, like, generally,**
 5 **in the order of 1 to 2 parts per billion.**
 6 Q. So if mercury is only present in such small,
 7 fractional amounts, is it even that big of a deal?
 8 A. **Even though it's there in very, very small amounts,**
 9 **one atom of mercury versus a billion atoms of flue gas, they**
 10 **burn a lot of coal and generate a lot of flue gas. The**
 11 **volumes of flue gas are huge. Even though the amount of**
 12 **mercury is in there is a small amount it generates a very**
 13 **measurable amount of mercury.**
 14 Q. How do you go about solving the problem of removing
 15 mercury from emissions?
 16 A. **Well, we've done a bunch of research, lab-type skill**
 17 **work, and we come to realize we needed to do testing, larger**
 18 **testing, so we wanted to test sorbents and additives.**
 19 Q. Are these tests you can run on the tabletop in a
 20 small lab?
 21 A. **We had done that already, so we were wanting to move**
 22 **at the next stage and we wanted to do it at a scale that we**
 23 **could produce a real flue gas that would be simulated by a**
 24 **power plant.**
 25 Q. Did EERC have a miniature power plant you could use

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1 for testing?
 2 A. **Yes, it did.**
 3 Q. What is it called?
 4 A. **It's call a particulate test combustor or PTC.**
 5 Q. Do you have a binder in front of you?
 6 A. **Yes, I do.**
 7 Q. If you're able, would you please flip to the document
 8 marked PTX 58.
 9 A. **Yes, I see that.**
 10 Q. What is Plaintiffs' Trial Exhibit 58?
 11 A. **The document is a description of the test facility,**
 12 **that PTC combustor.**
 13 Q. Are you familiar Plaintiffs' Trial Exhibit 58?
 14 A. **Yes, I am.**
 15 MR. CALDWELL: Your Honor, Plaintiffs move for
 16 the admission of Plaintiffs' Trial Exhibit 58.
 17 THE COURT: Any objection?
 18 MR. SYKES: No, Your Honor.
 19 THE COURT: It will be admitted.
 20 (Plaintiffs' Exhibit 58 was admitted.)
 21 BY MR. CALDWELL:
 22 Q. Sir, is this the document you were just looking at?
 23 A. **Yes, it is.**
 24 Q. What was the purpose of the document that says
 25 Description of Test Facilities?

1 A. **This document was really to describe that unit. In**
 2 **other words, what does it consist of, what is it capable of**
 3 **doing, what are the different test parameters it can test**
 4 **under. Thorough description of the particulate test**
 5 **combustor.**
 6 Q. What are we looking at here on the fourth page?
 7 A. **Yes, this is, I guess, a view of that PTC or that**
 8 **particulate test combustor. What you're seeing on the**
 9 **right-hand side is a pictorial view, if you will, of the**
 10 **equipment there. It's hard to see the different components.**
 11 **If you look on the left-hand side, that describes the**
 12 **different components there, the combustor, how the coal is**
 13 **fed, the different emissions controls, the clean-up devices**
 14 **I referred to earlier such as the scraper, scrubber**
 15 **device --**
 16 THE COURT: Could you speak a little slower. It
 17 will help our court reporter. Thank you.
 18 BY MR. CALDWELL:
 19 Q. So you were an employee of the EERC. Could you just
 20 run tests on this particulate test combustor whenever you
 21 wanted?
 22 A. **No, I couldn't.**
 23 Q. Why?
 24 A. **Well, there was really two reasons. The first was**
 25 **it's very expensive to operate and run this unit, and so we**

1 **needed a lot of funding, if you will, to run it. And**
 2 **second, other projects also relied on doing tests on others.**
 3 **There's also scheduling. You have to schedule it in.**
 4 Q. What did you do to try to obtain funding for your
 5 testing related to mercury emissions?
 6 A. **Well, we pursued trying to get funding so that we**
 7 **could do these tests, and so we had some meetings, internal**
 8 **meetings, whatever, to discuss how could we get that funding**
 9 **where should we pursue that funding.**
 10 Q. Thank you. In your binder, would you turn to the tab
 11 that is for Plaintiffs' Trial Exhibit 59?
 12 A. **Yes. I see that.**
 13 Q. Do you recognize Plaintiffs' Trial Exhibit 59?
 14 A. **Yes, I do.**
 15 Q. What is it?
 16 A. **This is a document that I had prepared to kind of**
 17 **describe a project to pursue that funding. In other words,**
 18 **initiate that project, but we needed to get the funding**
 19 **first.**
 20 Q. Do you recall when it was that you prepared this
 21 document?
 22 A. **I believe this document was prepared -- I was**
 23 **probably preparing it the latter part of 2021, so say**
 24 **December.**
 25 Q. You said 2021?

1 A. **2001. I apologize. 2001.**
 2 MR. CALDWELL: Your Honor, Plaintiff moves for
 3 the admission of Trial Exhibit 59.
 4 THE COURT: Any objection?
 5 MR. SYKES: No objection.
 6 THE COURT: It's admitted.
 7 (Plaintiffs' Exhibit 59 was admitted.)
 8 BY MR. CALDWELL:
 9 Q. I think you already previewed. You helped create
 10 this document?
 11 A. **I did.**
 12 Q. It says at the top "Mercury Control Technologies for
 13 Electrical Utilities Burning Lignite Coals."
 14 Do you see that?
 15 A. **I do.**
 16 Q. Why does it say you guys wanted to study lignite?
 17 A. **Well, at the time, we had the data -- we felt that**
 18 **the lignite coal was kind of the worst-case scenario, so we**
 19 **wanted to study it in the worst conditions. Could we**
 20 **develop something to remove mercury from a worst case?**
 21 Q. Did you have any expectation if you could fix the
 22 mercury issues with lignite whether that would be helpful on
 23 even better coals like sub-bituminous?
 24 A. **Yeah, we thought that we could come up with an**
 25 **approach for technology. It would work on plants burning**

1 **lignite, it would likely work for sub-bituminous as well**
 2 **because that's a low-ranked coal.**
 3 Q. Who was the audience for this presentation?
 4 A. **We sought funding of the audience and particularly**
 5 **industrial sponsors, coal partners, utility folks,**
 6 **governmental agencies, state agencies. So there's quite a**
 7 **large group.**
 8 Q. So when you got those groups of people together to
 9 look at your presentation, what were you trying to impress
 10 upon them?
 11 A. **We were trying to impress that we needed to do, like,**
 12 **research with that coal, like, immediately, now.**
 13 Q. Mr. Diaz, could I have you go to page four.
 14 I want to direct you to this slide that that
 15 says "background" and could you introduce to us in 2001,
 16 what problems were you specifically suggesting needed to be
 17 looked at right away?
 18 A. **Well, the problem was with lignite coal is it had a**
 19 **high fraction of the elemental mercury that was being**
 20 **released to the atmosphere. We turned our attention to**
 21 **developing -- attempting to do research and testing and**
 22 **developing a technology for that particular coal, and we**
 23 **felt that, again, that being the worst-case scenario, it's**
 24 **likely not going to be reactive or reactive for other coals,**
 25 **different flue gases. Again, a worst-case scenario we**

- 1 wanted to do research on.
- 2 Q. What is elemental mercury?
- 3 A. **Elemental mercury is what it says. It's the element**
- 4 **of mercury. It's in its basic state, neutral state.**
- 5 Q. Is it reactive in that state?
- 6 A. **No, elemental mercury is very nonreactive.**
- 7 Q. What is the significance of something like mercury
- 8 being nonreactive?
- 9 A. **Well, the significance is it doesn't really want to**
- 10 **react with anything, so it's very difficult to, say, capture**
- 11 **it. It doesn't want to react.**
- 12 Q. Is there a way to make something like mercury maybe
- 13 more reactive where it's willing to engage in a reaction?
- 14 A. **Yes. One way you can do it is to, I guess, kind of**
- 15 **steal some electrons from it, if you will, and that will**
- 16 **give it a positive charge. And once it has the positive**
- 17 **charge, it's in a state that's much more reactive.**
- 18 Q. What's that called?
- 19 A. **That's generally called oxidation.**
- 20 Q. Are there particular types of those four coals that
- 21 are known to have this problem with elemental mercury?
- 22 A. **The two really are the lignite that are the worst**
- 23 **case and sub-bituminous coal, and even within those, it's,**
- 24 **like I say, for example, the lignite. There's that Fort**
- 25 **Union or Texas lignite and the sub-bituminous is part of the**

- 1 **PRB the Powder River Basin.**
- 2 Q. The next bullet down says potentially less reactive
- 3 towards catalysts and sorbents.
- 4 What is a catalyst?
- 5 A. **A catalyst is basically a -- you can kind of think of**
- 6 **it as any surface that would promote a reaction or speed up**
- 7 **a reaction between two chemicals that normally wouldn't**
- 8 **occur unless that surface is there, that catalyst is there.**
- 9 Q. What is a sorbent?
- 10 A. **A sorbent is usually a material that can absorb or**
- 11 **adsorb probably a harmful substance from a solid or liquid.**
- 12 **You can think of it as small particles that are very sticky.**
- 13 **Things that will stick it to.**
- 14 Q. Were there any specific techniques you had in mind
- 15 you wanted to look into?
- 16 A. **Yes. At this point, we really had turned our focus**
- 17 **primarily to what we call the sorbent, looking at sorbents.**
- 18 Q. What kind of sorbents?
- 19 A. **We had done a lot of work. At this point, we were**
- 20 **really wanting to focus on activated carbon.**
- 21 Q. Thank you, Mr. Diaz.
- 22 So I think you said the context of documents
- 23 like that is you were making presentations trying to get
- 24 funding to do testing. Did you eventually get any funding
- 25 that you could use toward mercury research?

- 1 A. **Yes, we did.**
- 2 Q. How did that play out?
- 3 A. **Well, we kind of defined that project after we got**
- 4 **some sponsors on board. Final scope of the testing is to be**
- 5 **submitting a proposal, and that proposal was then accepted**
- 6 **and awarded.**
- 7 Q. By what entity?
- 8 A. **It was the United States Department of Energy.**
- 9 Q. In those early days of testing, what kind of chemical
- 10 were you looking at as this oxidizing agent?
- 11 A. **The earlier start of the tests were really focused on**
- 12 **chlorine.**
- 13 Q. When did you get going on working on carbon-based
- 14 sorbents but with a chlorine?
- 15 A. **We initiated that project in February of 2002 time**
- 16 **frame.**
- 17 Q. What did that 2002, early 2002 testing show about
- 18 using chlorine and then the carbon sorbent?
- 19 A. **Usually, when we combine those two, the chlorine and**
- 20 **activated carbon, we always see improved results, improved**
- 21 **capture.**
- 22 Q. Did you think you'd be able to get really substantial
- 23 capture, 90 percent capture, in a coal plant using chlorine
- 24 as a sorbent?
- 25 A. **I think going into the test, that's certainly what we**

- 1 **hoped for. Unfortunately, that's not quite what the test**
- 2 **results showed.**
- 3 Q. Tell me what you mean.
- 4 A. **Getting 90 percent or higher levels of mercury with**
- 5 **the chlorine additive, it's virtually impossible. You can**
- 6 **do it, but not really. It's a very corrosive agent, very**
- 7 **corrosive. So we found through some of the testing that you**
- 8 **would have to add huge quantities of this chlorine. If you**
- 9 **added that much chlorine, you'd probably destroy the plant.**
- 10 **You'd corrode it up. No operator would put that much. Yes,**
- 11 **in theory, maybe but probably in practice, no.**
- 12 Q. Why did you not just immediately jump to testing
- 13 other elements or compounds?
- 14 A. **As we went into the test, we said we're studying**
- 15 **chlorine, and chlorine was bought by many. It's the most**
- 16 **reactive form of halogen, so there was no reason. It's**
- 17 **thought to be the best oxidant, I guess.**
- 18 Q. Were there ever occasions where you were able to test
- 19 additives that were not chlorine based?
- 20 A. **We tested what we call speculative approaches. When**
- 21 **we finished the day meeting the obligations of DEO tests,**
- 22 **when we officially had time left over, we tested other**
- 23 **things.**
- 24 Q. Your after hours tests?
- 25 A. **Yeah, these after hours.**

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1 Q. So when did you first test what we're now kind of
2 describing in shorthand as this two parts of adding a
3 bromine-based additive before the combustor and then
4 injecting activated carbon downstream of the combustor?
5 A. **We did those tests in the summer of 2002.**
6 Q. What were the results of the after-hours tests where
7 you used a bromine-based additive with activated carbon?
8 A. **They were extremely encouraging. We tested a lot of
9 these other approaches, but quite surprising. It worked
10 very well in comparison to the chlorine additive.**
11 Q. Didn't you have the same concerns about corrosion
12 with bromine that you just described for chlorine?
13 A. **Not nearly the same level of concern, much lower
14 level. We were using less amounts as well, so the concern
15 with bromine was quite diminished.**
16 Q. Was that what you expected going in?
17 A. **No, we certainly did not. It was shocking to see
18 great results, so we did not expect it.**
19 Q. How does that moment -- what are your thoughts about
20 that moment in retrospect?
21 A. **It's one of the moments you have in life where you
22 say, you're working on it hard, we finally see something
23 that jumped out, like wow. We have something here. This
24 could really work.**
25 Q. Mr. Pavlish, I'm going to start constructing a

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1 timeline, and you just described in 2002 --
2 Mr. Diaz, can you get that for me. Thank you.
3 I want to ask, is this what you described in
4 summer 2002 as the first time you put together the concept
5 of the bromine with the sorbent?
6 A. **Yes, it is.**
7 Q. All right. Now, let's talk a little bit more about
8 your conception of the idea. Can you give us a sense of
9 orders of magnitude how much more effective you were finding
10 bromine to be versus the chlorine?
11 A. **Quite a bit. On the order of ten times better.**
12 Q. Why hadn't bromine been your initial go-to chemical?
13 A. **Like I said earlier, we thought chlorine would be for
14 more active than bromine. Going in, we thought chlorine
15 would be the best.**
16 Q. Did you come to have a belief in your mind as to why
17 the bromine sort of in practicality ended up working so much
18 better than chlorine?
19 A. **Yes. In part, the chlorine being so reactive, that
20 it would react earlier on in the process and become less
21 available to react than the sorbent and the mercury versus
22 bromine is a little less reactive. It would be less
23 available, if you will, to interact with the sorbent later
24 on in the process.**
25 **I think what we also came to understand is this**

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1 **catalytic effect I briefly mentioned. In other words, the
2 interaction of the bromine and carbon and mercury is much
3 faster with bromine than for chlorine. It was a much faster
4 reaction.**
5 Q. Why are you mentioning how fast the bromine, carbon,
6 and mercury can react? Why are you mentioning that as
7 significant?
8 A. **In most combustion systems where you inject the
9 activated carbon, you only have about three seconds for all
10 this stuff to happen so you can collect it.**
11 Q. What kind of reaction was going on that gave the
12 bromine and activated carbon the ability to react in the
13 flue gas with mercury?
14 A. **You have the bromine and the mercury and the sorbent
15 and they all come together. We call this -- we call it
16 in-flight reaction.**
17 Q. In-flight?
18 A. **In-flight.**
19 Q. Did you come up with multiple ways to add the
20 bromine?
21 A. **Yes, we did. We actually came up with three
22 different ways. You could add it directly to the coal or
23 you could add it directly into the combustion chamber, or
24 you could add it downstream of the combustion chamber.**
25 Q. There was some suggestion in the defendants' opening

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1 that in your invention, you have to add bromine into the
2 boiler.
3 Did you hear that?
4 A. **I did.**
5 Q. Do you agree with that?
6 A. **No, I don't. I just mentioned we have three
7 different ways. You could add it directly to the coal.**
8 Q. Is that disclosed in your provisional patent
9 application?
10 A. **Yes, it's disclosed. In fact, we put a figure in
11 there to show the three different options, three different
12 places you could add it.**
13 Q. What is the earliest -- for the sake of the timeline,
14 what is the earliest you found you could document this idea
15 of adding bromine to the coal, for example, and the sorbent
16 after the boiler?
17 A. **I went back to my documents to try to pinpoint
18 exactly when that was, and I was able to identify and find a
19 document where -- that I had prepared, actually, for an
20 upcoming Research Advisory Council meeting. That was an
21 annual meeting we always have, and I found that was
22 prepared, say, in the August 2002 time frame.**
23 Q. If you would look in your binder at the document
24 marked Plaintiffs' Trial Exhibit 57, let me know when you
25 have found it.

257

1 A. **Yes, I have it.**

2 Q. Do you recognize it?

3 A. **I do.**

4 Q. What is it?

5 A. **This is the document I mentioned in preparing this**

6 **for the meeting.**

7 Q. Does this document corroborate what you consider as

8 the conception of your idea?

9 A. **Yes, it does.**

10 MR. CALDWELL: Your Honor, Plaintiff moves for

11 the admission of Plaintiffs' Trial Exhibit 67.

12 THE COURT: Is there any objection?

13 MR. SYKES: No objection, Your Honor.

14 THE COURT: It will be admitted.

15 (Plaintiffs' Exhibit 67 was admitted.)

16 BY MR. CALDWELL:

17 Q. What's on the screen now is Plaintiffs' Trial

18 Exhibit 67. It indicates at the bottom -- it has several

19 pages.

20 To kind of cut to the chase, where in this

21 document does it corroborate your idea of using bromine as

22 an additive and activated carbon in a coal system?

23 A. **Well, several places, but in particular, say, page 2,**

24 **page 3.**

25 Q. Let's just go to page 2 then. Where is it on page 2

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1 that you're referencing?

2 A. **Page 2 is under Item 4 toward the top of the page.**

3 Q. How do we know you're looking at bromine to catalyze

4 the oxidation of elemental mercury?

5 A. **It's indicated in the top sentence. You have the Cl**

6 **which stands for chlorine and Br which stands for bromine,**

7 **and there was some evidence that says here it oxidizes the**

8 **elemental mercury.**

9 Q. What else do you say here, sir?

10 A. **Well, we also say that we want to look at the -- I**

11 **guess the mechanism or the reactions that might occur with**

12 **say bromine in a real flue gas.**

13 Q. And so that sentence that says an investigation of

14 fundamental mechanism, is that what you're referring to?

15 A. **Yes.**

16 Q. Thank you.

17 MR. CALDWELL: Can you get that sentence,

18 Mr. Diaz?

19 BY MR. CALDWELL:

20 Q. And I see reference to testing for the optimum level

21 of chlorine or bromine Californias.

22 I want to ask you about what comes after that --

23 after that part about expediting reaction.

24 It says: You also want to surmise whether SOx

25 or NOx may have any detrimental effects on the oxidation.

259

1 What did you mean there?

2 A. **Well, all flue gases have SOx and NOx. I mean, they**

3 **very much can interact and usually not in a favorable way.**

4 **We were certainly expecting I guess the potential for some**

5 **detrimental effects. Some other -- it's not going to work**

6 **in a real flue gas ^ listen .**

7 Q. So is there any doubt in your mind you were already

8 thinking about bromine for treatment?

9 A. **Not at this point. I mean, it's -- clearly we want**

10 **to look at this reaction, and so -- and they want to do it**

11 **in the real flue gas. We just got done testing in a real**

12 **flue gas, so...**

13 Q. I'd like to go to the next section of the document

14 you wanted to direct us to, and I think it's the bottom of

15 page 3.

16 MR. CALDWELL: Can you grab the -- about a half

17 inch above that? Thank you.

18 BY MR. CALDWELL:

19 Q. What is it that you were explaining here that you

20 wanted to research?

21 A. **Well, first of all, we wanted to test additives other**

22 **than chlorine. We really wanted to test bromine in terms of**

23 **how it might enhance the reactivity of a sorbent activated**

24 **carbon.**

25 Q. And then you referred to recent pilot and field

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1 tests. What -- what were you talking about?

2 A. **Well, we essentially just completed that after hour**

3 **test that show bromine worked really well, so that's the**

4 **recent data that I'm referring to there.**

5 Q. If counsel for the defendants has maybe left the

6 impression that it is only recently you have considered

7 adding the additives directly to the fuel, the coal, what

8 would you say in response to that?

9 A. **I guess I would say definitely not. I mean, our**

10 **first test was adding bromine on the coal, and the coal was**

11 **then fed into the combustor, and it's stated newly in the**

12 **last paragraph, we added additives to the fuel.**

13 ^ Listen we wanted to know and we had already

14 **done adding bromine to the fuel, coal.**

15 Q. Thank you. What was your level of optimism at this

16 point where you're seeking to continue researching the

17 issues?

18 A. **Well, the initial tests were astounding. So, I mean,**

19 **we were very, I guess, optimistic that this technology that**

20 **we'd invented would continue to prove out.**

21 MR. CALDWELL: Now, Mr. Diaz, can -- strike

22 that.

23 BY MR. CALDWELL:

24 Q. I don't think I've directed you to something or

25 you've directed us to something that talks about carbon or

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1 activated carbon yet, so is that covered in the document as
2 well?
3 **A. Yes, it is.**
4 MR. CALDWELL: Mr. Diaz, can you pull up pages 4
5 and 5 just to kind of short circuit this and put them side
6 by side?
7 So, Mr. Diaz, do you see where it says number 3
8 on the first page? Would you grab that one, and then pretty
9 the thing that's almost in the exact same location on the
10 next page, grab that one. Thank you.
11 BY MR. CALDWELL:
12 **Q. Now, Mr. Pavlish, what is it you're showing us here**
13 **in your documentation from 2002?**
14 **A. Well, under 3, it's showing that we're going to**
15 **continue to do tests with sorbents, but in particular**
16 **carbons, activated carbon.**
17 **And then under item 11 we were already**
18 **anticipating the -- I guess that this technique, technology**
19 **was going to be superior. We hadn't proved it all out, but**
20 **we were anticipating should it work, which we hoped it**
21 **would, that there might be some other, say, negative**
22 **effects, if you will, and we wanted to study those.**
23 **And one of those effects would be if you add the**
24 **bromine and carbon together and somebody had to inject it**
25 **and goes to the bag, what does that do to the bag? I mean,**

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1 **is it going to corrode potentially or say plug the bag.**
2 **So we were already thinking ahead of the actual**
3 **application of that -- of that process.**
4 **Q. So at this point, are you saying that you already had**
5 **the idea of using the activated carbon with the catalyzing**
6 **agent, and now you just want to make sure that that itself**
7 **doesn't cause additional problems?**
8 **A. Yeah, we were already taking a step ahead of that.**
9 **It was kind of in a -- we were assuming it was going to work**
10 **well. We just wanted to know what we -- I guess what we**
11 **generally called balance of plant effects, what -- what**
12 **other parts of plant it might affect.**
13 **Q. To be perfectly clear, at the time you wrote this**
14 **document in 2002, did you have in mind the two-part**
15 **invention of using bromine and activated carbon?**
16 **A. Absolutely.**
17 MR. CALDWELL: Now, will you flip to the tab for
18 Plaintiffs' Trial Exhibit 68. Thank you, Mr. Diaz.
19 BY MR. CALDWELL:
20 **Q. What is Plaintiffs' Trial Exhibit 68?**
21 **A. Yes.**
22 **Q. What is it?**
23 **A. This is the -- it looks like the metadata from**
24 **that -- that file we were just talking about.**
25 **Q. And what is -- what is the purpose of the metadata in**

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1 that context?
2 **A. Well, what this indicates is that -- I mentioned I**
3 **was working on this file for this meeting, and I had**
4 **probably been working on it for a couple of weeks.**
5 **What this shows is the last time I modified it**
6 **was on 8/30/2002.**
7 **Q. August 30, 2002?**
8 **A. Yes, I'm sorry -- yes, August 30, 2002.**
9 **Q. I think that's what you said. I just want to make**
10 **sure we're talking about August.**
11 MR. CALDWELL: Plaintiff moves for the admission
12 of Plaintiffs' Trial Exhibit 68, Your Honor.
13 THE COURT: All right. Is there any objection?
14 MR. SYKES: No, Your Honor.
15 THE COURT: The exhibit will be admitted.
16 (Exhibit 68 marked.)
17 THE COURT: It's now about five o'clock. ^ Do
18 you want this off the record? I don't know what judge says
19 MR. CALDWELL: If we could -- could we present
20 Trial Exhibit 68? Thank you.
21 Thank you, Mr. Diaz. I've heard. You already
22 did it.
23 BY MR. CALDWELL:
24 **Q. So is this what you were referring to, Mr. Pavlish,**
25 **that says last modified on 8/30/2002?**

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1 **A. Yes.**
2 **Q. All right. I'm going to pick on you a little bit.**
3 **It says this is 8 pages, 2,725 words, and it was edited in**
4 **four minutes.**
5 **Are you the world's fastest typist?**
6 **A. Oh, no, not the least -- no, I don't type that fast,**
7 **no.**
8 **Q. What's your understanding of what that's referring**
9 **to?**
10 **A. Well, I think what that's referring to is I modified**
11 **and modified it as the final version. Like I said, I was**
12 **working on it for the meeting, and this is just renamed as**
13 **the final version.**
14 **Q. I see. Is that why it was printed maybe earlier**
15 **before --**
16 **A. Yeah.**
17 MR. CALDWELL: I'll tell you what, Your Honor,
18 this is kind of what I was referring to. I think this is a
19 good time to stop.
20 THE COURT: Okay. We'll use that as a stopping
21 point.
22 All right. That will conclude our testimony for
23 today. For our jurors, I want to say we're grateful to have
24 you with us. We wish you all a good night and safe travels.
25 The courtroom deputy will show you out, and you're through

1 for the day. Thank you.
 2 (The jury exited the courtroom.)
 3 THE COURT: Mr. Pavlish, you may step down, and
 4 you all may be seated.
 5 Counsel, in terms of homework for me, I know I
 6 have to review -- it looks like there are remaining disputes
 7 about the Schaatt deposition, but the disputes about the
 8 other deposition have been resolved.
 9 We'll do that and try to get you answers quickly
 10 so that folks can work on those.
 11 And is there anything else we need to take up
 12 before we conclude for the day? Mr. Caldwell?
 13 MR. CALDWELL: Not from the plaintiff,
 14 Your Honor.
 15 THE COURT: Mr. Sykes?
 16 MR. SYKES: We'd raise that standing issue. I
 17 don't know if the Court wants to take that up or not.
 18 THE COURT: Okay. Yes. So this is my -- this
 19 is the way I -- this is what I understand is happening and
 20 what I think makes most sense, and I'll let you tell me if
 21 you have disagreement.
 22 I understand there to be a CERT defendant
 23 dispute about one of the two plaintiffs and whether it has
 24 constitutional standing. There are arguments about that.
 25 Plaintiffs believe or the defendants believe that it has the

1 MR. DORSNEY: One quick point on that procedure.
 2 Would you like us to file a motion and engage in a briefing
 3 process on that issue?
 4 THE COURT: I think, ultimately, if I'm going to
 5 be called on to make a determination as to whether the
 6 plaintiff has constitutional standing, I would like it to be
 7 briefed in some way. We can talk about how that briefing
 8 will look like and incorporated with post-trial briefing
 9 after the trial.
 10 With that said, I hope everybody gets sleep
 11 tonight, and we look forward to seeing everybody tomorrow
 12 morning. With that said, the Court stands in recess.
 13 **C E R T I F I C A T E**
 14 I, Deanna L. Warner, a Certified Shorthand Reporter,
 15 do hereby certify that as such Certified Shorthand Reporter,
 16 I was present at and reported in Stenotype shorthand the
 17 above and foregoing proceedings.
 18
 19 _____
 20 Deanna L. Warner, RPR, CSR
 Official Court Reporter
 U.S. District Court
 21
 22
 23
 24
 25

1 right to make that argument. Plaintiffs think maybe the way
 2 the argument is being framed is for a statutory standing
 3 argument. Defendants say no, it's constitutional standing.
 4 And seems to me that the decision about whether
 5 MES has constitutional standing or not is one that I would
 6 make. I would be making it based on documents, contracts,
 7 things like that. And I don't see any reason or need to
 8 make that decision, especially with an issue that was -- not
 9 faulting anybody -- discovered three days before trial by
 10 Defendants' side. Now, during, before trial, I would be
 11 expecting, if it's necessary to do so, make the decision
 12 after trial with the appropriate briefing.
 13 I didn't see any reason that the trial would be
 14 affected one way or the other if we have two plaintiffs or
 15 one, so my plan was simply to defer that decision until
 16 after trial is concluded.
 17 Any objection on Plaintiffs' side?
 18 MR. CALDWELL: Not from Plaintiff.
 19 THE COURT: From Defense.
 20 MR. SYKES: No, Your Honor. We thought it was
 21 our duty to bring it to the Court's attention, and we don't
 22 know the full ramifications of it.
 23 THE COURT: Okay. Understood, and I appreciate
 24 Defendants' side raising the issue in the first place.
 25 Mr. Dorsney, is there anything?

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1 IN THE UNITED STATES DISTRICT COURT
2 IN AND FOR THE DISTRICT OF DELAWARE

3 MIDWEST ENERGY EMISSIONS CORP., et)
4 al.,)
5 -----Plaintiffs,)
6 vs.) Case No.
7 ARTHUR J. GALLAGHER & CO., et al.,) 19-CV-1334-CJB
8 -----Defendants.) Volume II

9 TRANSCRIPT OF JURY TRIAL

10

11 JURY TRIAL had before the Honorable Christopher J.
12 Burke, U.S.M.J., and a jury of eight in Courtroom 2A on the
13 27th of February, 2024.

14

15 APPEARANCES

16 DEVLIN LAW FIRM
17 BY: JAMES LENNON, ESQ.
18 PETER MAZUR, ESQ.

19 -and-

20 CALDWELL CASSADY & CURRY
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22 JASON CASSADY, ESQ.
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24 JUSTIN NEMUNAITIS, ESQ.
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 RICHARD COCHRANE, ESQ.

Counsel for Plaintiff

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1 THE COURT: All right, everybody. Just a couple
2 of housekeeping things. One is -- and I appreciate I know
3 you guys were up late. I feel bad for Mr. Caldwell sending
4 the e-mails at 11:48. I know you're not getting a lot of
5 sleep.

6 I will tell you FYI because we try to get in as
7 early as we can to review what you send us so we see what's
8 coming up. The reason we're doing that is the better we
9 have a sense of what the issues really are, we can review in
10 advance the quicker we can deal with them so that your time
11 doesn't get charged. The fewer things I can cover here, the
12 less circumstance where you're not going to be charged time.

13 If you're talking about an exhibit or a
14 paragraph of a report and you're not including it, we've got
15 to figure out where is it, where is paragraph 101 of
16 O'Keefe's report, et cetera, and we just lose time. It uses
17 time to less we can resolve it. So the more you can include
18 stuff in the e-mail the better for us.

19 Lastly, this is a little strange but apparently
20 a man at the pretrial conference and yesterday who is not
21 affiliated with this case has come into the courtroom both
22 times and crossed the well of the courtroom. Mr. Dorsney
23 apparently, according to any courtroom deputy, he's dropped
24 papers off in the vicinity. Nothing to do with you or your
25 case apparently doesn't have anything to do with a case I

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1 (Appearances continued.)

2

3 MORRIS JAMES LLP
4 BY: CORTLAN HITCH, ESQ.
 KENNETH DORSNEY, ESQ.

5 -and-

6 BRADLEY ARANT BOULT CUMMINGS LLP
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Counsel for CERT Defendants

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1 have, this same person has twice apparently come into the
2 courtroom and passed the well of the courtroom. Again, it's
3 hard to distinguish for court security to understand if this
4 is a courier or whatever, but it's strange and unusual and
5 we alerted our marshal service to it. It's all to say -- I
6 didn't even notice him. If you see this person again or if
7 this happens again, alert us in some way and let us know and
8 we'll let court staff know as well.

9 Let's try to cover as much as we can. Let's go
10 to the first issue. Mr. Nemunaitis, do you want to start us
11 off?

12 MR. NEMUNAITIS: Thank you, Your Honor. Justin
13 Nemunaitis for the defendants.

14 Last night after we sent the e-mail to the Court
15 with the exhibits and slide objection issues, there are two
16 additional things that came up. One is we filed a motion
17 for corrective instruction. I spoke to the other side about
18 that. This deals with the contributory infringement issue
19 and things that were said during the opening.

20 I don't think they really had fairly much time
21 to digest the motion, but I did want to bring that to the
22 Court's attention and we would like a ruling on fairly soon
23 because we do think it's an important issue.

24 THE COURT: I guess is what you're saying that
25 we see that the Court has ruled that with regard to

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1 contributory infringement, the material issue that's going
2 to be material to each defendant is the refined coal which
3 the defendant sold to each power plant. We also see that
4 the defendants are going to use evidence and attempt to
5 demonstrate that they're not guilty of contributory
6 infringement. Evidence of the coal provided to other CERT
7 entities perhaps who are not defendants anymore or these
8 CERT defendants prior to the damages period in an attempt to
9 show that when it came to the question of did they know that
10 the coal was specially made or adapted for infringement,
11 they thought it wasn't because look at all this other coal
12 that's associated in some way with us, et cetera, et cetera,
13 and that's what this is about.

14 MR. NEMUNAITIS: That's the issue, Your Honor.
15 And if Your Honor wants to take up argument, my co-counsel
16 Mr. McCarty could handle that, but I do think there's a
17 different issue sort of is higher urgency. I did want to
18 bring it to the Court's attention, and the issue at our end
19 is about jury confusion. You know, we can all understand
20 that, but we think it's more difficult for the jury, and
21 that's what we're concerned about.

22 THE COURT: You said you filed a motion on the
23 docket?

24 MR. NEMUNAITIS: Yes.

25 THE COURT: Oh, I didn't see that. Okay. But

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1 the gist is a motion saying, look, when you get to final
2 jury instructions we're going to want an instruction that
3 makes it clear to the jury that when it comes to analyzing
4 the elements of the claim, this is the coal that matters.
5 You know, and presumably like there will be some request or
6 to the extent other coal is mentioned, it can only be
7 relevant to the defense at stake, et cetera. That's the
8 gist -- you want to know what the instruction is going to
9 be?

10 MR. NEMUNAITIS: I think we might want the
11 instruction before the final jury instructions, so that's
12 part of the issue.

13 THE COURT: That's what my question is. You
14 know, we're kind of in triage mode so it's like why do I
15 need to decide what the exact wording of that instruction is
16 going to be prior to Thursday night is the question. Why do
17 we use our time whenever we get it right now to decide that
18 question right now as opposed to these other issues coming
19 up that will relate to the testimony today.

20 MR. NEMUNAITIS: I think we should focus on the
21 other issues right now.

22 THE COURT: Okay. To put it differently, I
23 think Thursday night the parties will make argument about
24 this instruction and I'll decide and then going into, you
25 know, closings, everyone will know what that instruction is.

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1 Is that okay with you?

2 MR. NEMUNAITIS: I expect that this issue is
3 going to come up before. What we're asking for is an
4 instruction before the final jury instructions. I expect
5 this is going to come to a head in front of a witness or
6 sometime earlier than that. I think we need to get their
7 response to the motion and I believe Your Honor needs time
8 to take a look at that.

9 THE COURT: I don't know how I would be prepared
10 to decide that at this very moment. So if you want to try
11 to work out some process, you know, with the other side, we
12 file a motion, they should have a chance to provide their
13 response, Judge, we'd like you to decide it by X and I'll
14 try to do so. I don't know what else we can do.

15 MR. NEMUNAITIS: We talked about it this
16 morning, we'll continue talking and go back to it at the
17 next opportunity.

18 THE COURT: Okay. If you can get me your
19 positions and we can figure out the time period in which
20 overnight or whatever that I can decide, you know, I'm happy
21 to do it.

22 MR. NEMUNAITIS: The other issue, Your Honor,
23 was in an e-mail to the Court after the evidentiary e-mail,
24 and this deals with something that we think is very
25 important to get resolved before the cross-examination of

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1 Mr. Pavlish who will be the first witness up this morning.
2 The issue here is on the priority date issue.
3 This was one of the two issues that was left to resolve in
4 Your Honor's preliminary instructions.

5 We spoke to the other side this morning. They
6 said they intend to cross Pavlish on that priority chain
7 issue that was raised in opening. That could be a problem
8 because we think ultimately their arguments are going to be
9 legally improper under the final jury instruction. And the
10 real issue here is on the '517 patent.

11 If Your Honor rules as a matter of law that the
12 provisional application was incorporated into the '517
13 patent, then them going through all these intervening
14 applications talking about changes and disclosure and all of
15 that would be very confusing to the jury because as a matter
16 of law that provisional is considered a part of the '517
17 patent.

18 THE COURT: I have a memory that I dealt with
19 this issue. I know parties have cited it. I just got this
20 e-mail at 6:34 a.m. I don't understand why, but I dealt
21 with an issue about, I guess, the '114 during summary
22 judgment. But other than that, you're coming to me cold
23 with it. So there's a provisional application; is that the
24 one that's filed in like '04.

25 MR. NEMUNAITIS: August 2004.

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1 THE COURT: Okay. And then we got to the '517
2 patent and that's issued in -- is that 2019?
3 MR. NEMUNAITIS: It would have been filed around
4 2019.
5 THE COURT: Okay. And the sole question is
6 going to be whether the '517 patent sufficiently
7 incorporates by reference the content of the provision?
8 MR. NEMUNAITIS: Correct.
9 THE COURT: Okay. And you're telling me that if
10 that's a legal decision I need to make and if I make the
11 decision that it does, that it sufficiently incorporates the
12 provision, then this line of argument the defendant is
13 making about breaking the priority chain is a nonstarter,
14 it's a nonentity; is that the idea?
15 MR. NEMUNAITIS: Correct. And they could
16 potentially still have that argument on the '114 side of the
17 chain, but for the bulk of the chain and the thing that we
18 think they're going to cross Mr. Pavlish on, it should be a
19 nonissue.
20 THE COURT: And the issue is whether -- you said
21 in your e-mail that previously I determined that phraseology
22 like incorporated by reference to the extent appropriate
23 under the law isn't the sufficient matter of incorporation
24 to appropriately incorporate a prior provisional
25 application. But you're saying that the '517 patent doesn't

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1 have that language, it just flatly says something like
2 incorporates by reference.
3 MR. NEMUNAITIS: Correct, Your Honor, and I can
4 walk through each of the statements there, but I don't
5 dispute that every single application of the '517 chain says
6 hereby incorporate by reference or hereby incorporate by
7 reference in its entirety. And that language has been
8 blessed by the Federal Circuit in the case we cited as
9 exactly what you're supposed to do to maintain priority.
10 THE COURT: Okay. All right. So I guess let me
11 hear from the other side. And, Mr. Nemunaitis, you're
12 saying this is an issue that needs to be decided in your
13 mind before cross-examination of Mr. Pavlish.
14 MR. NEMUNAITIS: Absolutely, Your Honor. We
15 think that this is going to be a significant part of the
16 cross-examination and deciding it now could avoid a whole
17 range of disputes that occur or objections coming up in his
18 testimony.
19 THE COURT: Let's hear from the other side.
20 MR. WILSON: Good morning, Your Honor. Benn
21 Wilson.
22 THE COURT: Mr. Wilson, good morning.
23 MR. WILSON: So there's a couple of steps going
24 on in this. The first step is back to your summary judgment
25 order. I think we have a different reading of the summary

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1 judgment order in which we laid out the argument that we
2 think the language to incorporate was improper as to any of
3 the patents, and the Court from our reading dealt with that
4 collectively and said I agree with defendants on this.
5 So I think our view is exactly flipped that this
6 has already been decided that it's not incorporated into the
7 intervening application.
8 Moving on from that step if we are --
9 THE COURT: Just so I understand at step one,
10 you say you read my prior summary judgment order to say that
11 I have already determined that as to the '517 patent and its
12 language, that it was not sufficient to incorporate by
13 reference the 2004 provisional?
14 MR. WILSON: Yes, sir, that was our reading of
15 it is that everything was dealt with collectively in the
16 discussion of that.
17 THE COURT: But Mr. Nemunaitis says that the
18 basis of that ruling was this language like incorporated by
19 reference "to the extent appropriate," and he says that the
20 '517 patent and I guess all of the other applications in the
21 relevant chain vis-a-vis it, don't use that language, they
22 use language like incorporated by reference or something
23 without that "to the extent of the appropriate" language.
24 Is that wrong?
25 MR. WILSON: I don't think that's wrong, Your

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1 Honor. No, those have -- I don't have the language of
2 incorporation all of those memorized, but they do not use
3 "to the extent appropriate" in connection with that. They
4 do use "to the extent appropriate" in connection with some
5 priority statements right next to that which is what we were
6 discussing and previewing.
7 THE COURT: I guess my question is on your first
8 argument if the very language that I said was problematic
9 and it was the basis of my decision at summary judgment
10 stages as to other applications, there's other patents at
11 least is not present in the relevant chain, how would my
12 prior decision have decided this issue? I don't understand.
13 MR. WILSON: From our reading, Your Honor, the
14 order basically outlined defendants have argued that this
15 isn't incorporated by reference to either chain because of
16 this language and the paragraph kind of outlined the
17 arguments and the following paragraph just started with, you
18 know, "I agree with defendants on this point." So we read
19 it as being treated collectively, but certainly understand
20 Your Honor's point that --
21 THE COURT: I'm just not understanding what
22 you're saying.
23 MR. WILSON: Okay.
24 THE COURT: So I'm asking what I think is a
25 pretty clear question, but I'm not getting what I understand

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1 to be a clear answer from you.

2 Let me ask it again. My understanding is at

3 least the way plaintiffs have said it is the case, that when

4 I look back at that prior order, that the sole basis, the

5 key basis in my decision about the lack of sufficient

6 incorporation will be the presence to these words "to the

7 extent appropriate." Do you disagree that was the key basis

8 for the decision?

9 MR. WILSON: No. Absolutely that's the basis.

10 THE COURT: And so they have said with regard to

11 this issue now, the one that's coming up right now about the

12 '517, that in it and I guess maybe other applications that

13 are relevant to go back to the '204, that language, the key

14 language that was the basis of my prior decision is not

15 found. Is that wrong?

16 MR. WILSON: That language is not found in the

17 sentence about incorporation. It's found in the prior

18 sentence about priority.

19 THE COURT: Okay. But so I guess I'm not

20 understanding. So if the key language is not found in the

21 sentence about incorporation, how would my prior decision

22 have resolved this issue? Seems like you think it did, but

23 I'm not understanding how.

24 MR. WILSON: Well, again, because from our

25 understanding we argued them together and they were dealt

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1 with collectively. We may be misunderstanding, Your Honor.

2 That's entirely possible, but that was our reading of it is

3 that the inclusion of the "to the extent appropriate"

4 language in the discussion of priority and incorporation was

5 dealing with all application chains.

6 THE COURT: Okay. All right. So what's the

7 next step?

8 MR. WILSON: So even if defendants misunderstood

9 that part before the '517 chain, they're still as I think

10 counsel has pointed out the open issue of even if the

11 language of incorporation is correct, there is still an

12 issue that is open as to whether it can be incorporated by

13 reference because it is essential material into that chain.

14 That's an issue that the Court touched on in

15 summary judgment and decided there was a dispute of fact as

16 to whether it would be essential material and left that for

17 the jury. Now, what we do have that is that I think the one

18 big open issue on jury instructions as to what will be the

19 appropriate instruction on that point.

20 THE COURT: Just let me make sure I understand

21 what the issue is. Let's say the plaintiff is correct and

22 there has not been a decision made already at summary

23 judgment as to the '517, that it can't incorporate by

24 reference this provisional. Then you're saying there's that

25 separate question about whether the material and what

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1 material is essential material?

2 MR. WILSON: Correct.

3 THE COURT: What material?

4 MR. WILSON: So in our view it's a figure, it's

5 Figure No. 2 and it's a textual description of Figure No. 2

6 in the provisional application.

7 THE COURT: So it's whether Figure No. 2 in the

8 provisional application is essential to you?

9 MR. WILSON: Correct.

10 THE COURT: Okay. And you're saying there are

11 going to be factual disputes about that?

12 MR. WILSON: Yes, and Your Honor stated that in

13 the summary judgment order. They identified other materials

14 that they think disclose that as well which would impact

15 whether it is or is not essential material.

16 THE COURT: And are those facts and disputes

17 that relate to a decision that ultimately though is a legal

18 decision I make?

19 MR. WILSON: So those factual disputes, the way

20 I read Your Honor's previous order, those are factual

21 disputes for the jury to decide whether there is other

22 written description of the point of adding bromine to coal

23 prior to combustion in the chain. If there is, then it is

24 not essential material. If there is not, then it is

25 essential material and then I think the legal point that

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1 Your Honor would be deciding that' still kind of embedded in

2 the jury instructions fight is what is the rule on

3 incorporating essential material.

4 THE COURT: Okay. I guess here's the question:

5 The parties raised this at 6:30 in the morning. The answer

6 to some of these questions is going to depend on review, I

7 think, of the prior summary judgment decision. It's going

8 to depend on review of the provisional and patents that I

9 don't have before me, no one presented me with. It may well

10 involve additional arguments. I just want to make sure I'm

11 understanding what the arguments are that you all want me to

12 decide before Mr. Pavlish gets crossed and we're going to

13 start at 9:00.

14 So is what you want me to do we bring him up, we

15 do his direct, and then I take a break and we take whatever

16 time you need for you to make arguments for me to decide

17 this issue about the provisional, charging the time to

18 whatever sides loses and then we bring Mr. Pavlish out to

19 cross, is that what you want to do?

20 MR. WILSON: I think from our side I don't think

21 that's necessary. I do think we intend to question

22 Mr. Pavlish on that to some degree. I don't think there's

23 the high degree of confusion that counsel is worried about.

24 I mean, ultimately if Your Honor decides a rule on

25 incorporation which makes that testimony irrelevant, that

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1 can be very clearly instructed later on if the provisional
2 application is or is not incorporated. It is probably a
3 good issue to decide before the expert testimony on this but
4 that's going to be tomorrow at the earliest. I think that
5 would be our sense on that.

6 THE COURT: I think we're talking about
7 logistics here. Because ultimately the only thing I can
8 tell you for certain is that at 9:00 the clock will start
9 ticking, either testimony will be taken or time will be
10 taken up to decide legal issues. Either way, all that time
11 will be charged to the parties. It's a question about how
12 you want to deal with these issues, how we can possibly deal
13 with them. Sounds like you're saying that whatever these
14 issues are, you don't think I need to decide what Mr.
15 Pavlish.

16 MR. WILSON: I think the best use of time would
17 be to move forward and to the extent something becomes
18 irrelevant because of a later decision, I think that can be
19 dealt with later. Yes, Your Honor.

20 THE COURT: Mr. Nemunaitis, I'll let you add
21 anything else you want to add, particularly about logistics.

22 MR. NEMUNAITIS: I would propose this as an
23 option, Your Honor, it should save everyone time. And once
24 we see what they say, maybe we object and try to raise the
25 issue again. But it looks like there's no dispute that if

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1 the application has the language, "I hereby incorporate by
2 reference," that as a matter of law that incorporates the
3 application by reference. If we had that instruction from
4 the Court before Mr. Pavlish's cross-examination or at the
5 appropriate time that may be a way to mitigate some of this
6 and then resolve the final issue about what goes into the
7 final jury instructions.

8 THE COURT: If I'm going to satisfy myself that
9 what you're saying is correct that, A, the relevant language
10 in the relevant patents is X or that the law is Y or that in
11 my prior summary judgment I said -- what are the things I'd
12 have to look at to be able to do that?

13 MR. NEMUNAITIS: I don't think there's anything
14 more that Your Honor needs to look at. Looks like we agree
15 that all the applications in the chain of the '517 has the
16 correct language.

17 THE COURT: Mr. Wilson said something like as it
18 relates to incorporation of reference but not priority, I
19 don't know what he's talking about there, but it sounds like
20 at least with regard to the language about incorporation of
21 reference he's correct?

22 MR. NEMUNAITIS: And that's the only sentence
23 that matters.

24 THE COURT: The legal decision I have to make is
25 whether a document was properly incorporated by reference

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1 into a patent at issue.

2 MR. NEMUNAITIS: So if there's a different
3 statement about what other applications are in the chain I
4 don't see how that could possibly matter to the
5 incorporation by reference statement. And that is addressed
6 on, I believe it's page 8 of the summary judgment order from
7 Your Honor.

8 THE COURT: Do you have a DI number on the
9 summary judgment order?

10 MR. NEMUNAITIS: I'm sorry, Your Honor. This
11 was sealed. I don't have it handy.

12 THE COURT: 614 apparently. Okay. So what
13 you're saying is, Mr. Nemunaitis, if I can't satisfy myself,
14 that -- under the law, that -- well, if it's not disputed
15 that the phraseology, "to the extent appropriate" is not
16 found in these documents and instead these documents simply
17 say, "incorporated by reference," if I could satisfy myself
18 that that kind of statement is sufficient to incorporate the
19 prior patent or patent application, that will provide the
20 clarity you need at least to know what the legal landscape
21 will be?

22 MR. NEMUNAITIS: Correct.

23 THE COURT: Mr. Wilson, is that disagreed with
24 on this issue by the defendant?

25 MR. WILSON: Thank you. If I'm understanding

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1 correct it seems like there would still be the dispute about
2 what the ultimate rule is going to be on incorporating
3 essential material by reference. So I think that would
4 still be an open issue. I mean, if it answers their
5 question enough for them to move forward this morning I
6 certainly won't disagree with their position on that. But
7 ultimately there is going to be an open question of what is
8 the rule on incorporating essential material by reference.
9 I think their position is ultimately going to be there is no
10 bar on that. So their position is going to be if you rule
11 that that language is correct it is incorporated by
12 reference for all purposes and we don't need to worry about
13 anything else. Our stance is the bar on incorporation by
14 reference of essential material will apply and it would
15 still be appropriate for us to ask questions about what is
16 disclosed in that intervening chain as it relates to the
17 provisional because it will affect whether it's essential
18 material or not.

19 THE COURT: Okay. All right. Well, I think --
20 we're about 8:55 right now. And so I'm not certain how it
21 is that in the time between now and when Mr. Pavlish is
22 cross-examined I'll be able to make a final decision with
23 regard to what I think are multiple issues that the parties
24 are raising about this issue. So I think ultimately what's
25 going to need to happen is either after his direct the

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1 parties will somehow need to let me know if they want to
 2 stop and have the jury go out and then to have whatever
 3 argument I need and whatever documents, as long as we need
 4 to take to make a decision now.
 5 If one or both sides ask for that I'll consider
 6 it and may allow it, but the side that does not prevail will
 7 lose the time. Or if there's some alternative, proceed with
 8 testimony and somehow the parties can put before me in a
 9 clear way what are the decisions I need to make, what are
 10 the documents I need to refer to, and I can do so at some
 11 point during the trial, like in the evenings or in the
 12 morning. I'll try to do it. That's the call you guys have
 13 to make, ideally jointly, and let me know. Does that make
 14 sense?
 15 MR. WILSON: Yes, thank you, Your Honor.
 16 THE COURT: We're basically at our time here. I
 17 saw there were other issues that the parties had. If it
 18 helps briefly I can say it seemed like the parties were
 19 having some issue about discussion of information about
 20 other coal other than the refined coal that would be related
 21 to the elements of contributory infringement, like the stuff
 22 that defendants talked about in their opening. I think what
 23 I ruled is that defendants can make an argument about
 24 mistake of law. They cited the common case in the
 25 Connecticut case and I agreed they can make that argument

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1 based on the evidence that their client maybe misunderstood
 2 the law about what coal counted for -- whether the coal was
 3 especially made or adapted. My sense was those docs should
 4 be usable for that purpose.
 5 And then there were disputes about Mr. O'Keefe's
 6 report. I did see a couple of disputes about can we talk
 7 about the org chart about the CERT defendants. My thought
 8 was sure you can, both sides talked about that in opening.
 9 The structure of these entities can be relevant in the case.
 10 What are these entities? Are they related to each other?
 11 So I give you that feedback. We're not going to have time
 12 to discuss it. Since there are objections we'll have to
 13 discuss them during trial at sidebar and hopefully there
 14 won't be too many. But I give you that feedback to a couple
 15 things I saw the best I can divine.
 16 We have to get the jury in. So we'll conclude
 17 unless we need to take something else up. Seeing nothing
 18 the Court will stand in recess. Thank you.
 19 (A recess was taken, after which the following
 20 proceedings were had:)
 21 THE COURT: We'll bring the jury in.
 22 (The jury entered the courtroom.)
 23 THE COURT: All right. Let's continue with
 24 direct examination of Mr. Pavlish. We'll have Mr. Pavlish
 25 come forward.

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1 You remain sworn.
 2 EXAMINATION
 3 BY MR. CALDWELL:
 4 Q. Good morning, Mr. Pavlish?
 5 A. **Good morning.**
 6 Q. Do you have your binder still just in case we need
 7 it? Perfect, thank you. Now I don't want to replot old
 8 ground but to remind everybody where we were, you had just
 9 shown us documentation in 2002 of having conceived your
 10 invention. Do you recall that discussion?
 11 A. **I do.**
 12 Q. If I could, I'd like to go back to adding that flag,
 13 and what we've done is on August 30, 2002, we've cited
 14 documentation of your conception citing plaintiff trial
 15 Exhibit 67 and 68; is that fair?
 16 A. **Yes.**
 17 Q. So those were those after hours tests you had talked
 18 about. Do you remember?
 19 A. **Yes.**
 20 Q. After these after hours tests how frequently did you
 21 work on developing the invention?
 22 A. **As much as I could.**
 23 Q. Why couldn't you work on it every day?
 24 A. **We were limited in funding and those tests were very**
 25 **expensive.**

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1 MR. CALDWELL: Can the Court and everybody hear
 2 him through the microphone?
 3 THE COURT: Can everybody hear him?
 4 BY MR. CALDWELL:
 5 Q. What happened to that original Department of Energy
 6 funding he talked about?
 7 A. **By that point it had been exhausted. There were no**
 8 **funds left.**
 9 Q. Were you diligent in trying to obtain funding for
 10 additional testing?
 11 A. **Yes.**
 12 Q. Over about what time frame would you say you had to
 13 continue diligently trying to obtain funding.
 14 A. **We pursued funding immediately. The document we**
 15 **discussed yesterday was actually part of pursuing funding,**
 16 **so we pursued funding from 2002 through 2003 to acquire**
 17 **funding.**
 18 Q. Were you able to secure some funding that would let
 19 you do further actual tests in the boiler test environment?
 20 A. **Yes, we were.**
 21 Q. When did that additional testing take place?
 22 A. **That testing took place in early September of 2003.**
 23 Q. Can we add that testing to the timeline?
 24 A. **Sure.**
 25 Q. Were those September 2003 tests just sort of after

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1 hours tests like the original ones you described?

2 **A. We had adequate funding at this point, so they were**

3 **much more thorough, much more at length, we could study a**

4 **lot more.**

5 **Q.** What I'd like to find out is do you have any

6 documentation that you did the test in case there's any

7 dispute that you were actually implementing this thing in

8 2003?

9 **A. Yes, we had -- it was documented in the PTC logbook.**

10 **Q.** What is a PTC logbook?

11 **A. The PTC logbook is a particulate test combustor that**

12 **we use. So it's a logbook and it basically has records or**

13 **entries if you want to call them, as to actually how the**

14 **tests were done, the time, what conditions, what rates we**

15 **are adding. Pretty much all the details of how the test was**

16 **actually performed.**

17 **Q.** Would the logbook track the particular chemicals that

18 you were adding?

19 **A. Oh, absolutely, yeah.**

20 **Q.** What was the purpose of somebody keeping these types

21 of records in the PTC logbook?

22 **A. Well, the primary purpose was to really document the**

23 **actual conditions so that when you looked at the data you**

24 **can kind of understand how did this perform under these**

25 **conditions and how much material we would be adding in order**

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1 **to achieve these reductions.**

2 **Q.** Was the PTC logbook something that your employer, the

3 EERC, kept in the ordinary course of business?

4 **A. It was done for every project so yeah, in the normal**

5 **course of business.**

6 **Q.** Could anybody just walk in and modify that logbook

7 willy-nilly if they wanted to?

8 **A. No.**

9 **Q.** Is it something that you personally filled out?

10 **A. No.**

11 **Q.** So who is it that fills out the particulate test

12 combustor logbook?

13 **A. The entries in the logbook would be strictly done by**

14 **the people who were running the tests, so the operators, the**

15 **technicians, people who were actually making observations,**

16 **turning the knob so to speak in terms of different rates, et**

17 **cetera. So it was the actual operations and technicians.**

18 **Q.** So if I understand this correctly, you would have

19 something that you wanted to test, you would set up the test

20 conditions and then you would give it to the technicians who

21 actually run the test combustor?

22 **A. That's correct.**

23 **Q.** And those are the ones who wrote down, here's what I

24 put in, according to your instructions?

25 **A. Right.**

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1 **Q.** Now, if you would in your binder, would you flip to

2 the tab that says PTX 69?

3 **A. Yes, I see that.**

4 **Q.** What is the document that is at PTX 69?

5 **A. That's a declaration from Tom Erickson providing a**

6 **certified copy of these PTC logbooks.**

7 **Q.** First of all, who is Tom Erickson?

8 **A. Tom Erickson is the director of Energy and**

9 **Environmental Research Center.**

10 **Q.** And you said attached to his declaration he declares

11 to facts was also some copies of the logbook?

12 **A. Yes, and he basically reviewed them, stated that**

13 **these were accurate and true and correct copies of those**

14 **logbooks.**

15 **Q.** And are those logbooks that reflect tests that were

16 run for you?

17 **A. Yes.**

18 **MR. CALDWELL:** Your Honor, plaintiff moves for

19 the admission of Plaintiffs' Trial Exhibit 69.

20 **THE COURT:** Is there any objection?

21 **MR. SYKES:** No objection, Your Honor.

22 **THE COURT:** It's admitted.

23 (Thereupon, Plaintiffs' Exhibit 69 was

24 admitted.)

25 **MR. CALDWELL:** If you would, Mr. Diaz, would you

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1 pull up Plaintiffs' Exhibit 69. Can we split screen the

2 first two pages of that? Thank you.

3 **BY MR. CALDWELL:**

4 **Q.** Mr. Pavlish, what is it that we're seeing here sort

5 of as the first two pages?

6 **A. Well, it's basically the declaration stating that he**

7 **is the director of the Energy and Environmental Research**

8 **Center and he did review all those pages, and based on that**

9 **they are true and accurate copies of the logbooks. And he**

10 **also states that this is done in regular practice, normal**

11 **course of business and they're kept over time at the -- as**

12 **part of the business.**

13 **Q.** Do you have any question whatsoever about the

14 authenticity of these logbooks we're about to show?

15 **A. No, I did not.**

16 **MR. CALDWELL:** Mr. Diaz, would you flip to

17 page -- it's Plaintiffs' Trial Exhibit 69.0315.

18 **BY MR. CALDWELL:**

19 **Q.** At this point we're kind of into -- well, I guess it

20 looks like they're handwritten, so give us the context as to

21 what we're -- what a document or page like this is

22 reflecting.

23 **A. A typical logbook is it's kind of listed on the**

24 **left-hand column the actual time when these tests were done.**

25 **On the bottom of that page kind of states the date at which**

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1 **it was done, and then they're handwritten I guess you'd call**
2 **them notes, it's describing exactly what was done. Was some**
3 **material turned off, a piece of equipment turned on or**
4 **turned off, was the rate adjusted.**
5 **And then on the far right column it's the**
6 **technicians, if you will, that actually documented that**
7 **entry.**
8 Q. So for context, this is September 18, 2003; is that
9 right?
10 A. **Correct.**
11 Q. And if we see a time like 1904, is that 7:04 p.m.?
12 A. **Yes, we do use military time.**
13 MR. CALDWELL: Mr. Diaz, could you grab the top
14 third of this document.
15 BY MR. CALDWELL:
16 Q. And what is it that this document reflects, sir, in
17 terms of tests that were being done in September 2003?
18 A. **At that particular date it states the time at which a**
19 **sodium bromide feeder was turned on. And sodium bromide is**
20 **a bromine-containing compound, and it was turned on and it**
21 **was turned on at 40 grams per hour.**
22 Q. Now, when I ask you -- I think there was a suggestion
23 yesterday that it was maybe recent that you had this idea to
24 say your invention relates to putting bromine on the coal.
25 So in this experiment in September of 2003,

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1 where did you put the bromine solution?
2 A. **It's stated right there: Sodium bromide coal to**
3 **feeders. Put right on the coal.**
4 Q. Thank you.
5 MR. CALDWELL: Mr. Diaz, if we flip to page 317,
6 please. Would you mind? Thank you.
7 BY MR. CALDWELL:
8 Q. On this one, let's kind of grab -- well, first of
9 all, this looks like the next day September 19th?
10 A. **Yes.**
11 MR. CALDWELL: Can we kind of grab that middle
12 section there, Mr. Diaz, right above where it says 217?
13 Thank you.
14 BY MR. CALDWELL:
15 Q. So what's going on kind of the next morning now in
16 the test combustor?
17 A. **Here, we're starting that sodium bromide feeder**
18 **again. And it's being set at 10 grams per hour, and shortly**
19 **thereafter, a half an hour later, we start up our activated**
20 **carbon injection system. And that's noted as NOR FDG**
21 **carbon. NOR FDG is kind of a trade name for a carbon in the**
22 **industry. It is a large company called North American**
23 **Zicon, Inc.**
24 Q. And this looks like it's in the morning, like 9:50 in
25 the morning the next day?

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1 A. **Yes.**
2 Q. So did they just turn the machine off and go home
3 that night?
4 A. **The machine has to run 24/7 to keep combustion and**
5 **everything warm. The generator feeders are turned off so**
6 **the machine can minimize operator time.**
7 Q. Just turning to chemicals, like, I realize this says
8 literally sodium bromide, but what is represented by Na and
9 then Br?
10 A. **Na is the chemical symbol for sodium, and Br is the**
11 **chemical symbol for bromine so put the two together and you**
12 **get sodium bromide.**
13 Q. Separate and apart from putting bromine directly on
14 the coal, did you also test putting bromine elsewhere in the
15 process?
16 A. **Yes, we did.**
17 MR. CALDWELL: Let's flip to the next page,
18 Mr. Diaz. Can you grab the bottom 40 percent or so of that
19 page.
20 BY MR. CALDWELL:
21 Q. What are we seeing here reflected on September 19th,
22 sir?
23 A. **Here we've kind of reversed order, but we started the**
24 **carbon feed system, in this case it's a brominated treated**
25 **type carbon, so the carbon has bromine. And then later on,**

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1 **a few hours later we then started the sodium bromide feeder**
2 **and feeding it 10 grams an hour.**
3 Q. Where?
4 A. **That's again on the coal.**
5 Q. You even tested mixing the bromine with the carbon?
6 A. **Yes. The sodium bromide is set on the coal, and**
7 **again this activated carbon was injected into that flue gas**
8 **downstream of the combustion.**
9 Q. Why were you testing so many different kind of places
10 and combinations of where you could insert the bromine?
11 A. **For a lot of reasons I guess, but the primary was to**
12 **see does the position of where you place the bromine affect**
13 **the efficacy or the efficiency, you know, of removing**
14 **mercury, so we wanted to look at those different**
15 **combinations.**
16 **And so that's why. At this point we didn't know**
17 **where the best location per se was so we were exploring.**
18 Q. Kind of stepping away from the book for one second, I
19 want to ask you something about coal plants. I would assume
20 there are differences from one plant to another; is that
21 fair? Just a coal plant in general.
22 A. **Yeah.**
23 Q. Might it be the case that depending on coal or the
24 way a facility is structured what makes sense for one
25 environment?

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1 **A. There's a lot of factors to consider. That certainly**
2 **would be one of them.**
3 MR. CALDWELL: Could we go to the next page,
4 Mr. Diaz.
5 BY MR. CALDWELL:
6 Q. And then what are we looking at the stop half of this
7 page?
8 **A. Here it's just demonstrating or showing that both the**
9 **treated carbon and the sodium bromide systems were on and at**
10 **10:22 when it says stop they essentially shut off.**
11 Q. Thank you.
12 Is there any doubt in your mind that you not
13 only conceived your idea but now you practiced your
14 invention?
15 **A. These tests most definitely did that.**
16 Q. And are they documented, sir?
17 **A. They're very well documented.**
18 Q. What were the results of the September 2003 testing?
19 **A. Well, the 2003 testing further confirmed what we had**
20 **seen, I guess, during it was after-hour testing to confirm**
21 **that adding a bromine additive again whether it's on the**
22 **coal or downstream of the flue gas and then adding an**
23 **activated carbon.**
24 Q. Thank you.
25 So, Mr. Pavlish, what I've got here, this PTX 69

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1 you'll recognize that reference is the logbook you just
2 looked at?
3 **A. Yes.**
4 Q. I've added the date September 2003 testing, and I
5 want to look after that. After September 2003 did you
6 conduct even more tests to continue to test and confirm your
7 findings?
8 **A. Yes, we did.**
9 Q. Roughly when?
10 **A. I believe we did tests in December '03 and some**
11 **additional testing in the spring, early spring, later spring**
12 **of '04.**
13 MR. CALDWELL: Mr. Diaz, back in the logbook
14 let's jump to sort of a different time. Let's jump to the
15 page 334. Can we have about the bottom 40 percent or so?
16 Perfect.
17 BY MR. CALDWELL:
18 Q. Okay. Now, for December 11th, 2003, what is
19 reflected in the logbook?
20 **A. Those tests were done on that date.**
21 Q. And what were these tests?
22 **A. These tests were done, again we started this sodium**
23 **bromide feeder 20 grams an hour. Shortly later we started**
24 **the FGD carbon again, that's an activated carbon provided by**
25 **North Americas at 10 grams an hour.**

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1 **A little bit later we actually lowered the**
2 **sodium bromide feeder, the feed rate to 10 grams per hour.**
3 **So we were kind of starting to look at is there an optimum**
4 **if you will.**
5 Q. So in this test you started out with 20 grams an hour
6 roughly, if I understand correctly, and cut it in half
7 partway through the test?
8 **A. Correct.**
9 Q. And what did though results teach you?
10 **A. They demonstrated that you could actually get by when**
11 **I say "by," use less bromine and still get very, very good**
12 **removal.**
13 MR. CALDWELL: Mr. Diaz, would you flip to the
14 page that is 363.
15 BY MR. CALDWELL:
16 Q. Moving along now to February, a couple months later,
17 February 20, 2004. Now I'd like to get sort of maybe the
18 bottom half of this page.
19 All right, Mr. Pavlish, what is it that's
20 reflected in the logbook from February 20, 2004?
21 **A. Here again on that date we started the sorbent**
22 **feeder -- not the sorbent feeder -- the sodium bromide**
23 **feeder adding in I think it says 1 gram per hour there, and**
24 **we actually increased the sorbent feed and the sorbent here**
25 **is referring to activated carbon to that rate.**

303

1 Q. Were you continuing to test ratios of bromine to
2 activated carbon?
3 **A. Yeah that was one of certainly one of our goals was**
4 **to kind of determine an optimum, so to speak, amount of this**
5 **bromine versus the activated carbon to see if there's an**
6 **optimum ratio if you will.**
7 Q. And then what did you find with respect to the amount
8 of bromine needed to get really good mercury removal?
9 **A. I think all of these tests kind of continue to show**
10 **that you can use very small amounts of bromine and get a**
11 **significant improvement in mercury capture.**
12 Q. Separate and apart from the scientific data, what was
13 your emotional reaction to these results?
14 **A. Well, I found them quite fascinating if you consider**
15 **we're talking about a coal that's got impurities in it and**
16 **combustion is coal and we're generating flue gas that has**
17 **thousands and thousands of reactions. I mean, these**
18 **impurities in the coal there's probably every element known**
19 **to man in coal so when you burn it you end up with an awful**
20 **lot of different reactions and it also has ash in it, small**
21 **ash particles that are kind of flowing along with the gas.**
22 **So we're not really talking about gas-phase-type reactions,**
23 **we're taking about complex surface-tension-type reactions**
24 **like we talked about yesterday.**
25 **If you recall we're also talking about one part**

304

1 per billion. So I think what these tests demonstrated is

2 you can remove very small amounts of mercury, you can remove

3 them in a very short period of time, in a very complex flue

4 gas, and we can use the in-flight reactions of the bromine,

5 mercury, and carbon to remove significant amounts of

6 mercury. So I think the results are really amazing.

7 MR CALDWELL: Mr. Diaz, could you flip back to

8 the other graphic.

9 BY MR. CALDWELL:

10 Q. So can we now add the continued testing in December

11 of 2003 and February of 2004 to our timeline?

12 A. Yes.

13 Q. And each of those are again pointing to the logbook

14 that has been authenticated by the EERC?

15 A. That's correct.

16 Q. So you mentioned something about, I think, the

17 Department of Energy was funding this testing for you to

18 continue working?

19 A. Yes, the United States Department of Energy funded

20 this work.

21 Q. If they're paying for it did you have to give them

22 some reports on what was happening?

23 A. We generated a number of reports for them.

24 Q. Did those documents confirm that you had actually

25 really run tests?

305

1 A. Yeah, the documents contain essentially what we did,

2 the tests, and the results of the tests.

3 Q. Let's try to move through these quickly so we can add

4 them to the timeline. Would you look at your binder at

5 Plaintiffs' Trial Exhibit 64?

6 A. Yes, I see that.

7 Q. What is Plaintiffs' Exhibit 64?

8 A. This is a report that we prepared that documented

9 those September tests that we just talked about and

10 submitted on February of 2004 to the Department of Energy.

11 Q. Did you help prepare it?

12 A. I did.

13 Q. Does it confirm in the documents that you tested your

14 invention?

15 A. Yes, it does.

16 MR. CALDWELL: Your Honor, we'll move for the

17 admission of Plaintiffs' Trial Exhibit 64. It's a report to

18 the Department of Energy.

19 THE COURT: Is there any objection?

20 MR. SYKES: No objection, Your Honor.

21 THE COURT: It's admitted.

22 (Thereupon, Plaintiffs' Exhibit 64 was

23 admitted.)

24 MR. CALDWELL: Mr. Diaz, if you pull it up we'll

25 get into what's at issue here.

306

1 BY MR. CALDWELL:

2 Q. Are you one of the authors of this document, sir?

3 A. Yes, I am.

4 Q. At a high level, what did the February 2004 report

5 generally explain to the Department of Energy?

6 A. At a very high level it would explain what tests were

7 done, what conditions they were done under, and then what

8 test configurations those tests were performed under and

9 also what coal type.

10 Q. Cutting to the chase, will you jump to page 17. What

11 are we seeing on page 17 of this report to the DOE?

12 A. This is a report that on the top half shows the test

13 configuration where we added the bromine additive that was

14 fed into this PTC combustor and then downstream of that we

15 measured the mercury and downstream we also added a sorbent,

16 in this case activated carbon, as shown in the table below.

17 And we were testing with this ESP, and ESP is an

18 electrostatic precipitator and that essentially removes

19 particulates. And so it would remove the sorbent and

20 mercury would be attached to the sorbent, and so then we

21 would measure the mercury downstream of that and determine

22 essentially what we captured.

23 Q. Does it tell the DOE what kind of combinations of

24 substances you tested?

25 A. Yes, that's shown in table 1.

307

1 MR. CALDWELL: Let's blow up the table. Thank

2 you.

3 BY MR. CALDWELL:

4 Q. So you've told us before about this brand name Darco

5 FG is your activated carbon; right?

6 A. Yes.

7 Q. What is the sort of trade name or brand name being

8 used for the bromine solution?

9 A. The bromine solution was referred to as SEA2.

10 Q. What does SEA stand for?

11 A. It's a trade name we came up with that refers to

12 sorbent enhancement additive.

13 Q. This says it's sorbent enhancement additive 2. So if

14 that's bromine, what was sorbent enhancement additive 1?

15 A. Sorbent enhancement additive 1 was a chlorine base

16 instead of a bromine base.

17 Q. So which tests are there that indicate you were

18 testing bromine additives and then activated carbon?

19 A. Yes. We did tests with SEA2, that would be T 15, T

20 16, and T 19.

21 Q. How do we know you tested it with activated carbon?

22 A. Where it's indicated by Darco FGD, again that's an

23 activated carbon, and then T 19 it's the ERC treated carbon.

24 Q. Did the EERC provide further reports to the

25 Department of Energy continuing to report on tests from

308

1 December '03 and February '04?
2 **A. Yes, we did.**
3 **Q.** Now would you flip to the page or the tab for
4 Plaintiffs' Trial Exhibit 65.
5 **A. I see that.**
6 **Q.** What is Plaintiffs' Trial Exhibit 65?
7 **A. This is another report that was prepared and sent in**
8 **to the Department of Energy in 2005 further describing and**
9 **providing tests results on the time we did testing in**
10 **September that we talked about.**
11 MR. CALDWELL: Your Honor, plaintiff moves for
12 the admission of Plaintiffs' Trial Exhibit 65, which is
13 another Department of Energy report.
14 THE COURT: Any objection?
15 MR. SYKES: No objection, Your Honor.
16 THE COURT: It's admitted.
17 (Thereupon, Plaintiffs' Exhibit 65 was
18 admitted.)
19 BY MR. CALDWELL:
20 **Q.** Sir, what is this report that's Plaintiffs' Trial
21 Exhibit 65?
22 **A. This is the report we prepared for DOE in**
23 **February 2005 and showing that I was a coauthor on that.**
24 MR. CALDWELL: Mr. Diaz, let's jump to page 37.
25 BY MR. CALDWELL:

309

1 **Q.** I particularly want to focus on what is demonstrated
2 here on page 37. Can you tell us what it is that we see in
3 terms of this graph?
4 **A. Sure. What we're showing you on this graph is on the**
5 **Y axis is mercury removal in terms of percent of how much**
6 **mercury was being removed from the gas, and on the X axis is**
7 **the rate at which we were applying these three different**
8 **options: The sodium chloride, the SEA2, and the SEA2 with**
9 **activated carbon.**
10 **Q.** I want to break down the legend here. The little
11 black triangle says NaCl or a chloride-type product and
12 there appears to be a trend line that relates to that. So
13 can you describe for us essentially what the impact is of
14 the line related to your chlorine additive?
15 **A. Well, when we tested the chlorine additive by itself**
16 **we had to add a lot, as you can see relative to the others,**
17 **I mean, 14, 16. The units may not make sense to you but**
18 **just kind of look at the magnitude of those numbers and you**
19 **can see we were adding a lot.**
20 **Q.** Were you getting a great effect from adding a lot?
21 **A. Rather disappointing. We were only getting about 40**
22 **to 45 percent. So nothing too impressive.**
23 **Q.** Does it seem to be peaking around 45 percent or so?
24 **A. I think we could have probably added a million pounds**
25 **but I think you wouldn't have gotten more than 50 percent no**

310

1 **matter what you did.**
2 **Q.** Now the middle trend line, it looks like it may be
3 the square, it just says SEA2. First of all, what is it
4 that this middle trend line is reflecting by only saying
5 SEA2?
6 **A. SEA2, that's where we tested with a bromine only, we**
7 **didn't use an activated carbon, so bromine only. And you**
8 **can see that it actually had a much better level of mercury**
9 **removal, mercury capture, than say chlorine alone. And it**
10 **looks like we were getting somewhere in the neighborhood of**
11 **60 to 65 percent and it was starting to plateau or level off**
12 **as well.**
13 **Q.** Now, what is the final trend line by the purple
14 square?
15 **A. The final trend line is showing there is, again,**
16 **where we had this bromine, but in this case we have it with**
17 **activated carbon and here we're achieving nearly 85 percent,**
18 **very very low amounts of bromine.**
19 **Q.** And based on the trend line you see did you have a
20 sense as to whether you could accomplish extraordinarily
21 high removal, like in the 90s?
22 **A. I think the trend line would say you'll get 90 plus.**
23 **Q.** Do you understand these documents have been admitted
24 and if the jury wants to look at them later in their
25 deliberations these are fair game for the jury to consider?

311

1 **A. They're all publicly available.**
2 **Q.** So not only that but these, because you sent them to
3 the Department of Energy, they're publicly available?
4 **A. They've been all submitted to the Department of**
5 **Energy back in the time frame so they're all publicly**
6 **available reports.**
7 **Q.** Is there a doubt in your mind that not only did you
8 conceive of the patented invention, but you had documented
9 the conception and implementation of your invention in 2002,
10 '03, '04?
11 **A. No doubt in my mind.**
12 **Q.** Were there still other reports submitted to the
13 Department of Energy?
14 **A. Yes, there were still other reports.**
15 **Q.** What's number 66, if you'll just tell us and hit it
16 really quickly?
17 **A. 66 was another report that was submitted on**
18 **October 2005. And this report, focused on testing with the**
19 **sub-bituminous coal the other reports were more focused on**
20 **lignite coal.**
21 **Q.** Are you familiar with the document that's number 66?
22 **A. Yes, I am.**
23 MR. CALDWELL: Your Honor, plaintiff moves for
24 admission of Plaintiffs' Trial Exhibit 66.
25 THE COURT: Any objection?

312

1 MR. SYKES: No objection.
2 THE COURT: It's admitted.
3 (Thereupon, Plaintiffs' Exhibit 66 was
4 admitted.)
5 BY MR. CALDWELL:
6 Q. Just quickly, what is now this report that's
7 Exhibit 66?
8 A. **It's a similar report. Again, we tested
9 sub-bituminous coal, we tested it with a bromine additive in
10 conjunction with activated carbon and demonstrated those
11 results.**
12 Q. Does this sequence kind of correlate to what you said
13 yesterday that early on you wanted to start with the worst
14 coals and see if we could solve the problem in the worst
15 coals it will be in good shape for the better coals?
16 A. **That was our general strategy to tackle the worst
17 case and as we found out, the technology worked very good
18 with lignite and also worked very good with sub-bituminous.**
19 Q. Can we see the page marked 58. And what were you
20 reporting in the tables on page 58 of Plaintiffs' Trial
21 Exhibit 66?
22 A. **We were reporting specific tests again with
23 sub-bituminous coal, but we were testing it with the SEA2
24 sodium as well as with activated carbon, the Darco --
25 provided by Darco.**

313

1 Q. Just quickly, so does this reflect that you guys did
2 tests with your chlorine additive and you also did tests
3 with your bromine additive?
4 A. **Correct.**
5 Q. And then you did some where you actually said, oh,
6 let's test it together?
7 A. **That's an exploratory test to see if there's synergy
8 with adding the two.**
9 Q. Thank you.
10 MR. CALDWELL: Can we go back to the PowerPoint.
11 Perfect.
12 BY MR. CALDWELL:
13 Q. Mr. Pavlish, can we continue to build our timeline
14 this time by just sort of adding additional documents that
15 we've seen that corroborated dates?
16 A. **Yes.**
17 Q. Thank you.
18 So in addition to submitting all of this to the
19 Department of Energy, did you and your coinventors decide to
20 file a patent application for your invention?
21 A. **Yes, we did.**
22 Q. When was it that you guys filed your patent
23 application?
24 A. **Well, that application was actually filed in August
25 of 2004.**

314

1 Q. Did you have to just sort of go out and hire your own
2 lawyers or was there a process in place for this?
3 A. **The EERC had their own IP department, to they really
4 had patent attorneys that they would work with.**
5 Q. At this point in 2004 did you have any experience in
6 writing patents?
7 A. **Zero. None.**
8 Q. What kind of papers are you used to writing?
9 A. **Generally the reports that we went through and more
10 technical in nature.**
11 Q. What did you think of the patent process?
12 A. **My first impression was they write them in different
13 language.**
14 Q. So at some point after you filed your provisional
15 application, were you awarded a patent for your work?
16 A. **Yes, we were.**
17 Q. How did that feel?
18 A. **It felt really great. I mean, that was my first
19 patent. I didn't have a patent up to that point.**
20 Q. Around when did your first patent issue?
21 A. **I believe the first patent was, like, 2008.**
22 Q. When it issued, who was the owner of that patent?
23 A. **Well, as part of employment at the EERC, all IP was
24 automatically owned by EERC.**
25 Q. Was there only one inventive concept in your patent

315

1 application or were there several different ways of using
2 your invention?
3 A. **Yeah, there was a number of different ways.**
4 Q. Who got to sort of decide in the early patent
5 prosecution which ideas to focus on for patent claims?
6 A. **Since the EERC owned the IP, it was kind of more, I
7 guess, a business decision on their part to decide
8 essentially what particular aspects of the invention they
9 would pursue.**
10 Q. And by the way, you said something. I think you said
11 that the first one issued you think in 2008 --
12 A. **Yes.**
13 Q. -- do you remember that?
14 But you told me you filed your application in
15 2004. Does it, like, take years for the examination process
16 to go through on each patent?
17 A. **Unfortunately, yeah. Many of these earlier patents I
18 think we had one that took almost seven, eight years. It's
19 a long process.**
20 Q. So approximately how many patents has the
21 United States Patent and Trademark Office awarded you and
22 your coinventors Dr. Olson and Mr. Holmes?
23 A. **I think at this point it's slightly over a dozen.**
24 Q. Do you have a sense as to why so many have issued out
25 of that original provisional application?

316

1 A. **We had a lot of different features or if you want to**
2 **call them inventions within, adding the bromine to the coal,**
3 **adding the bromine in the boiler, adding the bromine**
4 **downstream of the boiler, using activated carbon. So**
5 **there's different ways, I guess, that you can apply that**
6 **invention, and so we wanted to make sure we had, I guess,**
7 **coverage or patent claims on them.**
8 Q. And was there a stake in the ground at the Patent
9 Office for every one of those in your original application
10 in 2004?
11 A. **Yes, all of them are tied back to that provisional.**
12 Q. Is that sort of legal process something that you're
13 going to testify about like the legal patent prosecution
14 work?
15 A. **No, I don't know a lot about that. I provide**
16 **information to review, but I'm not a patent attorney.**
17 Q. Okay. So what method of providing bromine into the
18 system do the patents in this case relate to?
19 A. **The patents in this case relate to adding bromine to**
20 **the coal and then adding -- again, prior to the combustion**
21 **chamber, and then adding an aggravated sorbent downstream of**
22 **the combustion chamber.**
23 Q. Now, I'm going to ask you to look at the jury and
24 tell them when was it you conceived of your idea of putting
25 bromine on the coal before it goes into the boiler.

317

1 A. **That was in the summer of 2002.**
2 Q. If you could take a look at the binder in front of
3 you and look at Plaintiffs' Trial Exhibits 1 and 3.
4 A. **Yes, I see.**
5 Q. What are those?
6 A. **Those are the two patents that are part of the suit.**
7 MR. CALDWELL: Your Honor, plaintiff moves for
8 the admission of Plaintiffs' Trial Exhibits 1 and 3, the
9 '114 patent and the '517 patent.
10 THE COURT: Is there any objection?
11 MR. SYKES: No objection.
12 THE COURT: They're admitted.
13 (Thereupon, Plaintiffs' Exhibit 1 and 3 were
14 admitted.)
15 BY MR. CALDWELL:
16 Q. So there's another exhibit I'd like to direct you to
17 while you've got the binder. Will you flip to the one that
18 says Plaintiffs' Trial Exhibit 17?
19 A. **Yes, I see that.**
20 Q. What is Plaintiffs' Trial Exhibit 17?
21 A. **That's the provisional application that we filed for**
22 **this invention back in August of 2004.**
23 Q. Did you personally write the claims, like I showed on
24 that foam board in opening the sort of legal description?
25 A. **Like I said earlier, they write in a different**

318

1 **language. That's up to the patent attorneys to do.**
2 MR. CALDWELL: Can I get Slide 10, Mr. Diaz?
3 Thank you.
4 BY MR. CALDWELL:
5 Q. What is the figure that is on the screen now, sir?
6 It's from the '114 patent.
7 A. **This is a figure that shows where you can add the**
8 **additive bromine and where you would add the activated**
9 **carbon.**
10 Q. So the additive, is that what you're referring to as
11 bromine?
12 A. **Yes.**
13 Q. And what is the sorbent in this context?
14 A. **In this context it's activated carbon.**
15 Q. And is this figure in the other patent, the '517 as
16 well?
17 A. **Correct.**
18 Q. When did the '114 patent get issued?
19 A. **I want to say July of 2019.**
20 Q. Later in time did yourself and your current employer,
21 ME2C, kind of get to control the direction of the patent
22 prosecution and which inventions to focus on?
23 A. **Yeah, they were purchased by ME2C in 2017.**
24 Q. We'll get to that in just a minute.
25 In case there's a suggestion you sort of

319

1 recently came up with this, are you aware of any documents
2 that aren't from 2017, '18, '19 or '20 that have this figure
3 in them?
4 A. **Certainly the patents have them in them.**
5 Q. And when was it first in a patent application, sir?
6 A. **I put that diagram together before we filed the**
7 **provisional back in '04.**
8 Q. And is the invention also described in words in terms
9 of where you can put the additive?
10 A. **Yes, it's described in the figure and it's also**
11 **described in words that the additive can be put essentially**
12 **on the coal before, within the boiler or it can be put after**
13 **the boiler.**
14 Q. So if the lawyer for the defendants has suggested in
15 opening yesterday that your invention is just about putting
16 bromine straight in the furnace and not on the coal before,
17 what do you have to say to that?
18 A. **I think that would be a false statement. I mean, we**
19 **did all our early work putting bromine on the coal, so...**
20 Q. I want to go back to this kind of artistic graphic
21 that we looked at. So based on kind of the figure drawn
22 from your patents kind of in the graphic of a coal plant,
23 where would these places be that you disclosed adding
24 bromine?
25 A. **Yes, this is a figure we reviewed yesterday. And so**

320

1 where you'd add -- one place you'd add the bromine we'd say
 2 right downstream of the combustion chamber. Another place
 3 would be directly into the combustion chamber, and the most
 4 common place is to add it on the coal before it goes into
 5 the combustion chamber.
 6 Q. And then where is it that the sorbent like the
 7 activated carbon would be injected?
 8 A. **The sorbent would be downstream of the combustor.**
 9 Q. Is there further disclosure of this two-part process
 10 in your '114 patent?
 11 A. **Yes.**
 12 Q. And describe what you mean.
 13 A. **There's some additional figures that show again where
 14 these -- this bromine can be added, and you can see as noted
 15 by 401 that, again, you can add the bromine with the coal
 16 into the furnace area there or directly into the furnace,
 17 and then the sorbent, again as shown in green 402, would be
 18 added downstream of the combustor/boiler.**
 19 Q. Would you give us yet another example of disclosure
 20 where you add the promoter?
 21 A. **Yeah, there's actually verbiage or words that state
 22 it can be introduced upstream of the boiler of the
 23 combustion chamber as that diagram shows.**
 24 Q. This may be obvious, but for each of the patents
 25 we're talking about, from the provisional application and

321

1 all the ones that EERC pursued and the ones that ME2C
 2 pursued and the ones that are in this case, all of these sat
 3 in the hands of the Patent Office for investigation to
 4 determine if they allow your patent?
 5 A. **Yes.**
 6 Q. Thank you.
 7 So at some point while you were working for the
 8 EERC did you become familiar with a company that we now know
 9 as Midwest Energy Emissions Corporation or ME2C?
 10 A. **Yes, I did.**
 11 Q. How did you become aware of the entity that's ME2C
 12 now?
 13 A. **That company was actually doing work at the EERC
 14 doing different types of testing.**
 15 Q. Was there a time when you went to work for Mr. Rick
 16 MacPherson at ME2C?
 17 A. **Yes, I did. I started kind of in a consulting role,
 18 and then in 2014 I actually took full-time employment with
 19 ME2C.**
 20 Q. What sort of work did you do for them in a consulting
 21 role?
 22 A. **In a consulting role it was quite minimal. It was
 23 really just answering questions about the invention, maybe
 24 how to apply it in the best mode, maybe some type of
 25 measurements, sometimes there were measurement issues.**

322

1 **Just, I guess, technical questions as needed.**
 2 Q. Did you ever move over to full-time at ME2C?
 3 A. **I did. I took full-time employment in 2014.**
 4 Q. Why?
 5 A. **Well, I had been doing mercury research for, I guess,
 6 going on 20 years. We came up with this really cool
 7 invention and I really wanted to actually see it applied,
 8 see if it could make a difference, so to speak, in the real
 9 world in terms of reducing mercury.**
 10 Q. What really motivated you about getting your
 11 technology out into the world?
 12 A. **Well, my main motivation was we had this great
 13 invention, probably the best technology out there to reduce
 14 mercury from low rank coal, and I wanted to see it actually
 15 make it out of the lab and make a difference and actually be
 16 put into practice where you could actually reduce
 17 significantly mercury from those sources.**
 18 Q. So what is your position at ME2C?
 19 A. **I'm chief technology officer CTO and senior VP.**
 20 Q. What do you do as senior vice president and chief
 21 technology officer or CTO of ME2C?
 22 A. **I focus primarily on technical issues that arise, and
 23 I also work in business development.**
 24 Q. We previewed this, but the EERC used to own the
 25 patents, correct?

323

1 A. **Yes.**
 2 Q. Who owns them now?
 3 A. **ME2C.**
 4 Q. And when was it that ME2C acquired ownership of the
 5 patents?
 6 A. **It was around -- it was in 2017.**
 7 Q. Do you have an understanding of why that was a
 8 possible transaction, that the EERC was comfortable selling
 9 the patents to ME2C?
 10 A. **Yeah. I mean, part of their business model is they
 11 really only do research and development, they don't
 12 commercialize technology. They're looking at an entity like
 13 ME2C to actually take the technology, move it into the
 14 marketplace, and make it commercial.**
 15 Q. Did you receive any compensation -- let me ask a
 16 question before that, when the patents were filed and
 17 started issuing did the EERC give you any honorary interest
 18 in the patents or anything like that?
 19 A. **Yeah, they had a policy where the inventors would get
 20 a small interest in them.**
 21 Q. So then when the patents went to ME2C, did you
 22 receive any kind of compensation?
 23 A. **Yeah, as part of that policy I received a small
 24 payment as well as a small amount of shares.**
 25 Q. Do you have a financial stake in the outcome of this

324

1 stake?

2 **A. Well, as an ME2C employee, yes. I have shares in the**

3 **company, so yes. But on a personal level no.**

4 **Q.** Mr. Pavlish, has your financial state as an employee

5 at ME2C impacted the truth of anything you said in your

6 testimony?

7 **A. Absolutely not.**

8 **Q.** Have there been any times in the last several years

9 when you're trying to commercialize the product as you

10 described but you've run into commercial headaches that

11 relate to this case?

12 **A. Yes. The major headache is when you run into some**

13 **other business entity that's essentially using your**

14 **technology and so we have to compete with that business so**

15 **we can sell our technology which is the same technology. So**

16 **yeah, it's -- I guess that's one of the major challenges.**

17 **Q.** How does that make you feel?

18 **A. Makes me frustrated. It's sometimes maddening. You**

19 **have other entities out there that are taking advantage of**

20 **all of the development work and effort you put into**

21 **developing the technology and proving it out and essentially**

22 **they're just using it without permission, and beyond that it**

23 **makes it much more difficult for us, obviously, ME2C, to**

24 **take on more business.**

25 **Q.** When you go to a plant or you read kind of like

325

1 environmental reports about plants have you gotten a sense

2 as to where other companies are treating coal with bromine?

3 **A. Yeah, it's quite obvious they're adding it to the**

4 **coal.**

5 **Q.** Are there any reports or anything public from which

6 you can get a sense as to whether activated carbon is used

7 at coal plants that burn that Wyoming Powder River Basin

8 coal?

9 **A. There are some public reports out there that do**

10 **indicate. I know there's an EPA page that's out there that**

11 **shares some of that information. So yeah, there's some**

12 **publicly available information.**

13 **Q.** In your experience why is activated carbon being used

14 an at those PRB coal plants?

15 **A. It's based on our technology. I mean we have the**

16 **best technology so. If they're going to use activated**

17 **carbon, they're going to need bromine on the coal as well in**

18 **order to meet the mercury and air toxic standard that was**

19 **mentioned yesterday.**

20 **Q.** I'm glad you mentioned that. Mercury and air toxic

21 standard, is that sometimes called MATS, all capital

22 letters, M-A-T-S?

23 **A. Yes, that's what it's referred to as.**

24 **Q.** I tend to talk with my hands a lot. In the opening I

25 was talking about the EPA side of things, right, and MATS.

326

1 Do you remember that?

2 **A. Yes.**

3 **Q.** And then sort of the Congress and tax credit side?

4 **A. Yes.**

5 **Q.** What kind of mercury emissions were initially

6 sufficient for getting tax credits sort of on the Congress

7 and IRS side?

8 **A. My understanding is to get those credits you had to**

9 **remove mercury NOx and/or SOx.**

10 **Q.** What sort of percentage of mercury reduction?

11 **A. To meet the qualifications or certifications, again**

12 **this is my understanding, but you have to get 40 percent or**

13 **greater.**

14 **Q.** That stuff came into effect in around 2010; correct?

15 **A. I think 2012 is when they actually started. It**

16 **probably was announced sooner than that.**

17 **Q.** Even if that struck an alarm with the 40 percent

18 requirement, when did that MATS EPA requirement come into

19 place?

20 **A. That was promulgated from the effective 2013 time**

21 **frame where it would actually be implemented where the plant**

22 **would actually have to meet regulations. In 2015 they had**

23 **this one year exception that you could request, so a lot of**

24 **plants did request that. So really a lot of them started**

25 **testing these things out in '14, started putting in systems**

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1 **in '15, but by '16 they all had to meet the regulations.**

2 **Q.** If you wanted to keep selling your tax credit coal

3 once the EPA said 40 percent is not good enough, it's got to

4 be 90 percent, did you have a sense of what needed to be

5 done from then on with the PRB coal we talked about?

6 **A. Yeah. It's the same thing we demonstrated in your**

7 **test. You need that 90 percent reduction.**

8 **Q.** Thank you. Now Mr. Pavlish, given your experience in

9 mercury control and capture in coal fired power plants are

10 you going to use your background and qualifications to go

11 sort of go through the defendants' documents and offer

12 opinions on the issue of infringement?

13 **A. That's not my role.**

14 **Q.** If you have a coal background -- if you have a coal

15 background why is it that you're not going to take us

16 through their documents?

17 **A. Because I haven't had access to any of their**

18 **information, any confidential information, I haven't seen**

19 **it, haven't touched it, haven't accessed it. I'm not privy,**

20 **I guess, to that information.**

21 **Q.** And that's because you're part of the party, the

22 plaintiff, ME2C?

23 **A. Yes.**

24 **Q.** So is there somebody who has had access to that

25 document, those sorts of confidential documents from the

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1 defendants that can present them to the jury?

2 **A. Yes. That would be Mr. O'Keefe.**

3 **Q.** And then Mr. Philip Green on the damages side?

4 **A. Yes.**

5 MR. CALDWELL: The folks that do a better job of

6 tracking this than I do say that, Your Honor, I did not move

7 to admit Plaintiffs' Trial Exhibit 17, the provisional.

8 THE COURT: It's on my list.

9 MR. CALDWELL: Plaintiff moves to admit

10 Plaintiffs' Trial Exhibit 17.

11 THE COURT: Any objection?

12 MR. SYKES: No objection.

13 THE COURT: It's admitted.

14 (Thereupon, Plaintiffs' Exhibit 17 was

15 admitted.)

16 BY MR. CALDWELL:

17 **Q.** Do you normally wear a coat and tie to work?

18 **A. No. I prefer never. Can you tell it's a new suit**

19 **for just this occasion.**

20 **Q.** What about the experience, not just is suit, is this

21 a new experience?

22 **A. This is my first time. So never before.**

23 **Q.** Butterflies a little bit?

24 **A. A little nervous.**

25 **Q.** Mr. Pavlish, how do you feel sitting here today with

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1 the jury in the box, the courtroom full of lawyers or

2 interested parties, the judge sitting on the bench,

3 everybody gathered together to hear about your invention

4 from over 20 years ago and your patents?

5 **A. Well, it's a rather humbling experience to kind of**

6 **look around the courtroom and see everybody that's gathered**

7 **here today to kind of learn and listen about an invention, a**

8 **technology, that I developed and tested over 20 years ago.**

9 **I'm very thankful for the opportunity to share the story of**

10 **this invention.**

11 **Q.** Thank you, Mr. Pavlish.

12 MR. CALDWELL: We'll pass the witness, Your

13 Honor.

14 THE COURT: Okay. Before we do let me see

15 counsel at sidebar.

16 (Thereupon, a discussion was held at sidebar.)

17 THE COURT: Okay, counsel, so we're at a point

18 now where our discussion this morning becomes relevant

19 because we're about to do cross-examination of Mr. Pavlish.

20 What I'm proposing is if either sides asks me to do so what

21 I'd be prepared to do is take an early morning break, the

22 jury go out, and then to hear argument and to look at

23 whatever documents I might need to with regard to this

24 incorporation by reference/essential material issue which I

25 understand the legal decisions I'm being asked to make are,

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1 and probably likely taking a short break, going back and

2 talking about it and trying to make a decision on those as

3 best I can and ultimately if I could ultimately either

4 decide the time it took for that would be charged to the

5 losing side or maybe it should be split between both sides.

6 I'm prepared to do that if either side asks me to do it. If

7 neither side asks me to do this maybe we can resolve it.

8 Maybe we can do that too. Let me ask what is plaintiffs'

9 perspective?

10 MR. NEMUNAITIS: Counsel proposed a compromise

11 to narrow this down. We had narrowed this down to one

12 single legal issue that we proposed to the other side and

13 only fight about that, whoever wins that wins the issue. I

14 don't know if you guys.

15 MR. DORSNEY: What was your one legal issue?

16 MR. NEMUNAITIS: The essential matter argument,

17 I think that's what essentially this issue is conceded down

18 to is whether the essential matter causes a problem with the

19 incorporation.

20 MR. DORSNEY: And Your Honor, you're treating

21 this as a motion that they're making or as an evidentiary

22 issue that they're making procedurally?

23 THE COURT: Well I'm trying to -- what I

24 understood the distinction that you're making, Mr. Dorsney,

25 it seems like they are seeking a ruling on a legal issue

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1 which they say is going to be relevant and necessary to know

2 because it will feed the type of evidence that is or isn't

3 presented or types of questions asked I think.

4 MR. DORSNEY: I think our position would be that

5 a dispute that needs to go to the jury that cannot be

6 decided by a motion which amounts to basically a motion for

7 summary judgment, that there are disputed facts regarding

8 whether or not there is a priority issue there and that the

9 Court should allow those facts to go to the jury and make a

10 determination even after trial, after the evidence goes to

11 the jury, and we find out what the jury has to say about

12 that issue.

13 THE COURT: What is the issue that you're saying

14 is a jury issue?

15 MR. SYKES: Let me address that, Your Honor.

16 Mr. Caldwell's direct just opened it wide up. Do you

17 remember in PTX 17 they had that chart with the arrows?

18 THE COURT: With the picture.

19 MR. SYKES: With the picture.

20 THE COURT: The same picture that's in figure

21 six of the patent issued in 2019.

22 MR. SYKES: Yes, Your Honor. And the patent

23 issued in 2020, and he made a statement to the extent that

24 this was disclosed all the way through, that was the gist of

25 the examination. There is a patent in the middle the '147

<p style="text-align: center;">332</p> <p>1 patent that issued in 2012 in which that figure is omitted. 2 And the plaintiffs have been pointing from the get go of 3 this lawsuit to that figure as the figure that clearly shows 4 adding bromine to coal. And it's essential. Where there is 5 a factual dispute over whether that figure is essential 6 material to show adding bromine to coal. It's the thing I 7 always point to and it disappears in the 2012 patent which 8 is part of the priority chain and then later several years 9 later they add it back in and there's some text around that 10 too. So that whether it's essential material was an issue 11 that the Court did not resolve in summary judgment we 12 disputed issues of facts over that and I just have a few 13 questions for Mr. Pavlish to clarify what now they've 14 basically said this is here all the way through and I need 15 to show that.</p> <p>16 THE COURT: To make sure I understand what 17 you're saying -- Mr. Dorsney, I'm speaking right now. To 18 make sure I understand what you're saying is that there's 19 going to be a dispute -- there's going to be no dispute that 20 this picture does not appear in certain intervening 21 applications that could be part of the chain at issue. 22 There's going to be a dispute, a factual dispute, you're 23 saying about whether their disclosure in the picture is 24 essential material with regard to the invention. Am I 25 understanding that correctly? What a that means is let's</p>	<p style="text-align: center;">334</p> <p>1 THE COURT: And on the plaintiffs' side, what's 2 wrong with that understanding? 3 MR. CALDWELL: If you'll indulge us, I want to 4 respond to what he said I just did. 5 What I did was very deliberate I think to avoid 6 this problem. First, it's stated at the beginning, and 7 second of all, he created this issue in opening Mr. Sykes 8 did fair -- Mr. Sykes did because he's the one who put up 9 this long chain and said, We're going to show the 10 intervening apps have something. 11 And he also suggested it was a recent concept to 12 have treated the coal before. What I did is I didn't 13 actually talk about what's in the intervening ones. I 14 didn't talk about text. I did none of that. 15 What I said is if he's suggesting it's a recent 16 concept that you put in the coal earlier, when was this 17 first offered to the Patent Office in 2004. 18 I didn't do anything with the legal references 19 or anything like that. I responded to purely what he did in 20 the opening, and I tried to stay away from this issue that I 21 don't think is appropriate. 22 What I'm afraid of, there's a trial. I lost a 23 trial that went like this. What happened is the lawyers on 24 the other side were essentially instructing the jury on 25 improper law through the the entire trial.</p>
<p style="text-align: center;">333</p> <p>1 say it was essential material and I gather my essential 2 material there's another disclosure in the relevant 3 application? 4 MR. SYKES: It's just that figure and the 5 description of that figure, and they want to point to some 6 other stuff, and our expert says that's not good enough. 7 That's a factual dispute, and this goes to the heart of it. 8 And the rule is you can't incorporate essential 9 material by reference in the provisional. 10 THE COURT: Okay. So maybe a factual dispute 11 about whether, in fact, this has essential material or 12 whether alternatively there is some other disclosure of the 13 same concept that's in dispute, and are you saying that the 14 dispute about whether the figure is essential material is 15 one for the jury? 16 MR. SYKES: Yes. It's a factual dispute about 17 which there's competing expert -- 18 THE COURT: Which written description with 19 regard to the ultimate issue of written description. 20 MR. SYKES: Breaking the priority chain based on 21 written description. 22 THE COURT: So you want to ask questions of the 23 witness about what you say relates to a factual dispute 24 about essential material? 25 MR. SYKES: Yes, Your Honor.</p>	<p style="text-align: center;">335</p> <p>1 We got a corrective instruction. It was right 2 before closing. There was no one else we could fix it with, 3 and all the evidentiary record came in with a false standard 4 under the law and the inability to meet this false standard. 5 That's the path we're heading down because we 6 wanted resolution of the law on this. 7 I didn't mean to jump ahead of Mr. Nemunaitis. 8 I wanted to respond to the suggestion that I've now been the 9 one that created the problem. 10 THE COURT: Regardless, what's the relevance of 11 whether you created a problem? Is that an issue about 12 whether these questions are on the scope of direct? 13 What I'm trying to understand is: What do I 14 need to decide now, if anything, and what are the issues? 15 MR. CALDWELL: Fair enough. To answer your 16 question what's the relevance, Mr. Sykes started by saying, 17 It's all good now, Mr. Caldwell just opened the door. I get 18 to do this. 19 That's what I'm responding to, your question 20 about what's the relevant. I was responding to him saying 21 it's now me creating this problem, and it existed before 22 now. I didn't mean to interrupt Mr. Nemunaitis. 23 THE COURT: Let me stop you for a second. 24 Whatever is going on, it's clear that at a minimum, we need 25 to understand and resolve this before we can decide what</p>

<p style="text-align: right;">336</p> <p>1 we're going to do in the courtroom.</p> <p>2 I don't want to keep the jury sitting here for</p> <p>3 half an hour while we're talking. What I will plan to do is</p> <p>4 tell them we're taking an early break, and I have to discuss</p> <p>5 issues with the lawyers, and I'll determine what it is I</p> <p>6 need to do and decide, if anything.</p> <p>7 And then hopefully we can resolve that and</p> <p>8 figure out how to bring the jury back in and keep moving</p> <p>9 today.</p> <p>10 MR. SYKES: One super quick comment, Your Honor,</p> <p>11 responding to Mr. Caldwell comments about my opening. I</p> <p>12 referred not to the concept. I said what they claimed.</p> <p>13 What was claimed in the 2018 applications, that's the issue.</p> <p>14 So whether those claims have written</p> <p>15 description, we weren't -- I didn't suggest in opening that</p> <p>16 there was an absence of a concept. It was the priority</p> <p>17 argument in the claims.</p> <p>18 THE COURT: Okay. This time will be charged</p> <p>19 equally to both sides. Let's go back to counsel table, and</p> <p>20 I'll tell the jury what's going on.</p> <p>21 (The discussion at sidebar ended.)</p> <p>22 THE COURT: Ladies and gentlemen of the jury,</p> <p>23 there's a legal issue I need to discuss with the parties, so</p> <p>24 what we'll do is we'll take an early morning break so you</p> <p>25 don't have to sit here while I discuss what could be 30</p>	<p style="text-align: right;">338</p> <p>1 requesting a legal determination from me on right now? Are</p> <p>2 they factual disputes that the parties will ultimately be</p> <p>3 arguing about to the jury in their closing arguments?</p> <p>4 And I'm also trying to understand, Do I need to</p> <p>5 make decisions on them right now because if I don't,</p> <p>6 something bad may happen with regard to cross-examination or</p> <p>7 things may get upset or with regard to the efficient course</p> <p>8 of the trial.</p> <p>9 So I want to try to understand what's -- being</p> <p>10 asked of me what the issues are and what I need to do, if</p> <p>11 anything. We started that.</p> <p>12 So let me call plaintiffs' counsel up to try to</p> <p>13 synthesize.</p> <p>14 MR. NEMUNAITIS: Thank you, Your Honor.</p> <p>15 Justin Nemunaitis.</p> <p>16 I believe there's one legal issue, one legal</p> <p>17 decision that can solve all of this, and that is a</p> <p>18 determination as to whether there's a restriction on whether</p> <p>19 or not a provisional application can be incorporated into a</p> <p>20 nonprovisional application for priority date.</p> <p>21 A lot of confusing words but this is the issue.</p> <p>22 For written description where the claims of the patent --</p> <p>23 THE COURT: If you could speak up a little bit.</p> <p>24 MR. NEMUNAITIS: Sure. For written description,</p> <p>25 we're comparing the claims of the patent to the</p>
<p style="text-align: right;">337</p> <p>1 minutes.</p> <p>2 All right. So we're going to go ahead and do</p> <p>3 that. And it may be a longer break than normal, depending</p> <p>4 on how long I need to talk to them about this issue and</p> <p>5 figure out and decide.</p> <p>6 So with that said, we'll take our morning break,</p> <p>7 and the jury can go out.</p> <p>8 (The jury exited the courtroom.)</p> <p>9 THE COURT: Mr. Pavlish, you don't have to stay</p> <p>10 there for this. I'll let you head down from the witness</p> <p>11 stand and take a seat, and everyone can be seated.</p> <p>12 All right. So what I was discussing with</p> <p>13 counsel at sidebar is I'm trying to understand a few things,</p> <p>14 and frankly it's -- I don't know -- I don't know that I'm</p> <p>15 being aided in doing so or maybe I am, and it's just me.</p> <p>16 But I'm trying to understand: A, the parties</p> <p>17 are discussing certain maybe legal issues that I need to</p> <p>18 decide or maybe factual issues that the jury needs to</p> <p>19 resolve that have come up and that may relate to questions.</p> <p>20 The reason why this is being brought up right</p> <p>21 this moment is because it's asserted it may relate to</p> <p>22 cross-examination of Mr. Pavlish.</p> <p>23 And so we're trying to understand, What are the</p> <p>24 issues that are at play? I'm trying to understand, Are</p> <p>25 these issues that are legal issues that the parties are</p>	<p style="text-align: right;">339</p> <p>1 specification of the same patent. There is a rule that says</p> <p>2 essential material from a provisional cannot save you on a</p> <p>3 written description claim. It's got to be in the spec -- in</p> <p>4 the spec itself because you want to have one document that,</p> <p>5 you know, gives notice to the public.</p> <p>6 There is another rule in the MBEB, which has</p> <p>7 been endorsed by the courts and decided and briefed awhile</p> <p>8 ago that says that that rule about essential material for</p> <p>9 written description does not apply in priority date context.</p> <p>10 And so if Your Honor agrees with that and rules</p> <p>11 as a matter of law that this essential material written</p> <p>12 description rule does not apply to the priority date</p> <p>13 dispute, then that will resolve all of this because this</p> <p>14 morning they conceded that -- the magic language for</p> <p>15 incorporating through the final and second change is there,</p> <p>16 and that should do it to incorporate the provisional.</p> <p>17 THE COURT: So, I mean, I have a sense of what's</p> <p>18 going on, but you used a lot of words and but you haven't</p> <p>19 provided a lot of no context.</p> <p>20 So we've got a provisional. We're talking about</p> <p>21 the 2004 provisional.</p> <p>22 MR. NEMUNAITIS: Right.</p> <p>23 THE WITNESS: And we're talking about the</p> <p>24 patents-in-suit here, the '114 and the '517.</p> <p>25 MR. NEMUNAITIS: Correct.</p>

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1 THE COURT: So we're also talking about a
2 disclosure in the provisional, if I understand it correctly,
3 what I think is figure 2 in the provisional; is that right?
4 MR. NEMUNAITIS: Correct.
5 THE COURT: It's a disclosure. It's a picture.
6 MR. NEMUNAITIS: Yes.
7 THE COURT: And it's a picture I think plaintiff
8 asserts, and Mr. Pavlish testified about this, discloses
9 adding bromine to the refined coal prior to combustion.
10 MR. NEMUNAITIS: Right.
11 THE COURT: Is that right? Is that the key?
12 MR. NEMUNAITIS: Yes.
13 THE COURT: So we've got that picture in the
14 provisional. We know we've got -- we've got the same
15 picture in our patents-in-suit.
16 MR. NEMUNAITIS: Right.
17 THE COURT: Okay. So I'm with you now. I'm
18 with you so far. And we've got -- there's some kind of
19 dispute about essential material, whether -- is it -- it is
20 disputable whether this picture is essential material?
21 MR. NEMUNAITIS: They -- they would say that
22 that picture is essential to ensuring that there's written
23 descriptions in the claims.
24 THE COURT: Hold on. Let me just stop you
25 there.

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1 So you understand the defendants' arguments that
2 this picture and its inclusion not only in the provisional
3 application but the defendants are arguing that it needs to
4 be included and displayed in all of the other relevant
5 patent applications, if I understand correctly, between that
6 provisional and the '517 patent that's at issue here, or in
7 both patents?
8 MR. NEMUNAITIS: Both patents.
9 THE COURT: Both patents. Is it your
10 understanding that picture needs to show up in all the
11 intervening patent applications?
12 MR. NEMUNAITIS: I think their position is that
13 it does need to be in there. Our position is that there is
14 no rule that says essential material can be incorporated by
15 reference. As a matter of law, if it's in the provisional
16 and the provisional is incorporated in each of the
17 applications, then it is, as a matter of law, as if it is
18 literally copied into the document.
19 THE COURT: So now you're introducing a
20 different concept, which is, there's no rule about essential
21 material being incorporated by reference.
22 What are we talking about there?
23 MR. NEMUNAITIS: For written description, the
24 Patent Office is very clear. They want to have one document
25 that has all the information you need to settle that issue.

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1 For priority date, they just want to make sure
2 that you actually invented the thing you claimed on the
3 dates that you claimed.
4 So if you incorporate material from a
5 provisional application, that's fine for priority date
6 purposes.
7 THE COURT: Let me stop you.
8 So part of the reason we're having this dispute,
9 you mentioned priority. I just want to make sure, it's
10 explained in a way that's very clear for the record. What
11 are we talking about here? What's the issue? What are we
12 arguing about today?
13 So that's why I'm stopping you I want to break
14 it down.
15 So the reason -- and I gather a reason or maybe
16 the reason we're having this dispute is that the plaintiff
17 wants to use the provisional application and its date as a
18 relevant priority date; is that right?
19 MR. NEMUNAITIS: Yes.
20 THE COURT: Okay. And so -- and the defendant
21 is combatting it?
22 MR. NEMUNAITIS: Right.
23 THE COURT: And so there's an issue then. This
24 issue about essential material is related to this priority
25 date issue; is that right?

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1 MR. NEMUNAITIS: Right.
2 THE COURT: And there's an incorporation by
3 reference element of this dispute.
4 MR. NEMUNAITIS: Right.
5 THE COURT: What is that?
6 MR. NEMUNAITIS: If that material from the
7 provisional is incorporated by reference into all the
8 patents leading to the '517, then we win the priority date
9 issue.
10 THE COURT: And your view is that if in all of
11 the patents leading to the '517 the material in the
12 provisional, including this picture is incorporated by
13 reference, then you get to use the provisional date as your
14 priority date?
15 MR. NEMUNAITIS: Right.
16 THE COURT: And that's a legal decision you're
17 saying the Court has to make; is that right?
18 MR. NEMUNAITIS: Yes.
19 THE COURT: And that just relates to the '517
20 patent?
21 MR. NEMUNAITIS: For our purposes today, yes.
22 THE COURT: All right. So what you're saying
23 you want me to decide is you want me to decide, as a matter
24 of law, that the language in the relevant applications
25 including in the '517 patent but also the other applications

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1 in the chain was sufficient to incorporate by reference the
2 provisional application and this figure?
3 MR. NEMUNAITIS: Correct.
4 THE COURT: Do I have that language before me?
5 I don't, do I? Or do I?
6 MR. NEMUNAITIS: We have that all here, Your
7 Honor.
8 THE COURT: Okay. But if I understand it
9 correctly, so that's an issue that's coming up between the
10 parties. Did -- the plaintiff thinks so long as it
11 sufficiently incorporates by reference in all the
12 intervening applications, the provisional application in
13 this figure, that it gets to use the provisional date as a
14 priority date, you want me to make a legal ruling that
15 you're correct?
16 MR. NEMUNAITIS: Yes, Your Honor.
17 THE COURT: And you think they may not disagree
18 with you on that issue?
19 MR. NEMUNAITIS: On that particular issue, is
20 the magic language on the application, correct, I think
21 there's agreement.
22 THE COURT: But there's another issue and this
23 relates I think to this essential material list.
24 MR. NEMUNAITIS: Their position is that if the
25 material you need to rely on to prove the priority date, so

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1 figure 2 in the provisional, if you have to rely on that to
2 prove the priority date, that is considered essential.
3 THE COURT: And when you say if you have to rely
4 on it to prove the priority date, I think what you mean is,
5 and tell me if I'm wrong, the argument on their side is, A,
6 this disclosure in the figure, what disclosure, the
7 disclosure of putting the bromine onto the coal before it
8 gets combusted, if that's related to the invention, what's
9 claimed in the dispute, that it is, but it's part of the
10 claims so we'll talk about that. Then go ahead from there.
11 MR. NEMUNAITIS: Right. So if that's the
12 material that's related to the claim language then we
13 consider that essential.
14 THE COURT: And essential meaning -- am I right
15 that, and I have my prior ruling, the regulation, which is I
16 guess section 1.57, defines essential material as, quote,
17 material that's necessary to provide a written description
18 of the claimed invention as required by section 112.
19 MR. NEMUNAITIS: Right.
20 THE COURT: Required meaning I guess that what's
21 depicted in this thing, this picture, it's not described
22 anywhere else in these applications. The provisional and
23 the other applications leading up to the '517, that's their
24 argument.
25 MR. NEMUNAITIS: Right.

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1 THE COURT: And that's why they think it's
2 essential.
3 MR. NEMUNAITIS: Right.
4 THE COURT: And they say this picture did not
5 find its way into one of the intervening applications.
6 MR. NEMUNAITIS: Right.
7 THE COURT: And you don't dispute that.
8 MR. NEMUNAITIS: I don't dispute that it's not
9 explicitly in there, but if it's incorporated by reverence
10 it is in there.
11 THE COURT: So again you say that it's a legal
12 issue about whether it's sufficient to incorporate by
13 reference the content of the visual for purposes of the
14 prior art.
15 MR. NEMUNAITIS: Right.
16 THE COURT: Regardless of whether this thing is
17 essential material or not.
18 MR. NEMUNAITIS: Right. Let me try one more
19 sentence to make sure we're on the same page here. Which
20 is: If we were fighting over -- let's suppose we're looking
21 at the '147 patent where that figure 2 is not in the figures
22 of the patent. Make sense?
23 THE COURT: Okay.
24 MR. NEMUNAITIS: If we were fighting over
25 whether or not that figure was incorporated into the '147

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1 and the written description to support the '147 claims,
2 there would be no dispute that we're not allowed to do that.
3 You cannot incorporate essential material to rebut a written
4 description. But we're not arguing that point, we're
5 arguing about the priority date. So for priority date that
6 rule that says you cannot incorporate essential material by
7 reference does not apply to priority date and it makes sense
8 because the PTO doesn't really care if you copy and paste
9 every preceding application into the next one, they just
10 want to make sure you actually invented it when you said you
11 did.
12 THE COURT: So what you just said is when it
13 comes to a determination of the appropriate priority date
14 whether or not this picture is essential material is
15 irrelevant if it was otherwise incorporated by reference
16 into all of the preceding applications; is that right?
17 MR. NEMUNAITIS: Yes. And essentially there's
18 an MPEP rule that says that and if Your Honor agrees that
19 that rule is the rule of law that that resolves this issue.
20 THE COURT: Okay. But is the question of
21 whether this figure -- you say the question about whether
22 this figure is essential material is irrelevant to the
23 priority question?
24 MR. NEMUNAITIS: Yes.
25 THE COURT: But the other side disagrees.

<p style="text-align: center;">348</p> <p>1 MR. NEMUNAITIS: I believe they might. I'm not 2 sure about that.</p> <p>3 THE COURT: If they did is the question of 4 whether a figure is essential material, is that a question 5 for the judge or the jury?</p> <p>6 MR. NEMUNAITIS: It's something that would need 7 to be decided to prepare the jury instruction as to what has 8 been incorporated by reference into the final application. 9 I believe the judge would have to make that determination.</p> <p>10 THE COURT: Something that would have to be 11 decided for the jury instructions for the jury? Is it a 12 judge question or jury question?</p> <p>13 MR. NEMUNAITIS: Judge question.</p> <p>14 THE COURT: Whether it's essential material is a 15 judge question?</p> <p>16 MR. NEMUNAITIS: Correct.</p> <p>17 THE COURT: Okay. And so to summarize, you 18 think the only thing I need to do is make a legal 19 determination about whether the phraseology used in these 20 various applications including the '517 that incorporated by 21 reference the provisional is sufficient to incorporate by 22 reference the provisional in its content. And you think if 23 I make that decision in your favor there is no issue because 24 it resolves that you're entitled to use the priority date 25 from the provisional for the '517 patent?</p>	<p style="text-align: center;">350</p> <p>1 this now? Why do I have to use this time right now, using 2 the time that would otherwise be used for the witnesses, 3 including Mr. Pavlish's cross, as opposed to making it at a 4 meet-and-confer of the parties, some letters, at some later 5 point in the trial. Why do I need to make it now?</p> <p>6 MR. NEMUNAITIS: They're about to accuse 7 Mr. Pavlish of doing something nefarious by not including 8 the figure in intervening applications. But if the law is 9 that everything he did and the prosecution he did is normal 10 and consistent with the law, he did nothing wrong and that 11 sort of attack on him as a lay witness by a lawyer would be 12 completely inappropriate to do in front of a jury.</p> <p>13 THE COURT: Because it would be relevant?</p> <p>14 MR. NEMUNAITIS: Because we exactly followed the 15 law by relying on his incorporation by reference.</p> <p>16 THE COURT: What I'm trying to understand is 17 what's the objection to the question? Is it the question 18 would be irrelevant? What's the objection to it? You say 19 it would be bad to have, but I'm trying to understand the 20 legal basis.</p> <p>21 MR. NEMUNAITIS: It would be irrelevant and 22 unduly prejudicial.</p> <p>23 THE COURT: Let me hear from the other side 24 about what they think the issues are, if you want to hand up 25 what you have.</p>
<p style="text-align: center;">349</p> <p>1 MR. NEMUNAITIS: Yes. I have the rule here, 2 Your Honor, if I may.</p> <p>3 THE COURT: Hold on. I'm trying to understand 4 what the issues are. So the other side thinks that's not 5 right. And the other side thinks it's important that this 6 figure is essential material. And they think it's important 7 it's essential material because they think if it is 8 essential material then it wouldn't be sufficient to just 9 incorporate it by reference in all these intervening 10 applications, instead it would actually have to be in all 11 the intervening applications. And it's not -- so if it's 12 not, then I guess their position is you wouldn't be able to 13 use the 2004 provisional for priority date, is that their 14 position?</p> <p>15 MR. NEMUNAITIS: Yes. I believe that's correct, 16 Your Honor.</p> <p>17 THE COURT: You say I don't have to decide that, 18 whether it's essential material or not. I think they'd say 19 I do. If I do need to decide it you say that's a judge 20 question?</p> <p>21 MR. NEMUNAITIS: Right.</p> <p>22 THE COURT: Are those all the issues that are 23 percolating here?</p> <p>24 MR. NEMUNAITIS: I believe that's correct.</p> <p>25 THE COURT: The last question: Why are we doing</p>	<p style="text-align: center;">351</p> <p>1 MR. NEMUNAITIS: I have one copy. It's the MPEP 2 rule at the top there.</p> <p>3 THE COURT: And I guess, Mr. Nemunaitis, before 4 you sit down, what would happen if I said no, I don't think 5 I need to make these calls. It's difficult, needs research, 6 and the parties need to make this legal decision, maybe a 7 legal decision, maybe not a legal decision, in five minutes 8 or 10 minutes. I don't want to do that. They just 9 presented this issue to me as one I need to resolve at 6:30 10 in the morning without any documents or briefing, that seems 11 like a bad idea. Let's say I said no, I'm not going to do 12 it. Now you can lay your arguments out and I'll make them 13 when I've had a chance to reflect on it. And then we go 14 ahead and we have questioning about this issue. What's the 15 harm, what would happen later?</p> <p>16 MR. NEMUNAITIS: Well, I believe we have very 17 inappropriate questioning of a lay witness that would be 18 completely irrelevant based on an erroneous instruction on 19 the law and we would need to deal with how to correct the 20 legally erroneous arguments made in front of the jury.</p> <p>21 THE COURT: And the erroneous instruction of law 22 would be?</p> <p>23 MR. NEMUNAITIS: Accusing Mr. Pavlish of doing 24 something wrong by not explicitly putting that provisional 25 figure in the provisional.</p>

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1 THE COURT: If it turns out that doing that
2 doesn't have any meaningful effect because of a legal
3 decision, you can just point that out.
4 MR. NEMUNAITIS: If we have the correct
5 instruction at that appropriate time but if they're accusing
6 him of doing something wrong, of something nefarious, I
7 believe that could be very misleading to the jury.
8 THE COURT: You keep saying something nefarious,
9 that there's not a picture in this disclosure. This is
10 about a disclosure that may lead to a legal or factual
11 issue. I don't understand what's so nefarious about it.
12 What is so prejudicial that if this questioning happens,
13 it's only going to be a couple of questions, that it's so
14 damaging? I don't understand.
15 MR. NEMUNAITIS: It would seem to me a theme
16 from their opening is that the plaintiffs in this case
17 didn't properly disclose everything they did with the
18 invention. I'm afraid it would be consistent with that
19 theme and would be misleading, and ultimately perhaps can
20 ask for a corrective legal instruction to address the issue.
21 THE COURT: Let me hear from the other side.
22 Thank you, Mr. Nemunaitis.
23 Okay. Mr. Wilson, and I do want to focus.
24 Again, I'm trying to figure out what are the issues that you
25 think are at play here? Explain them, and then what do you

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1 think I need to decide or not, et cetera, in a way that we
2 went through it with Mr. Nemunaitis? Can you help me with
3 that?
4 MR. WILSON: Absolutely. I think Your Honor has
5 accurately hit on the issues but I'll step through them as
6 we see them to make sure we're on the same page.
7 THE COURT: Step one.
8 MR. WILSON: Step one is the issue that's
9 addressed in the summary judgment order about the language
10 of incorporation, that's addressed there and briefed there.
11 THE COURT: That's whether or not the language
12 that's used in the '517 patent and any relevant application
13 in the priority chain leading to the provision was
14 sufficient under the law to incorporate by reference the
15 content of the 2004 provisional?
16 MR. WILSON: Correct.
17 THE COURT: You have made an argument, at least
18 with regard to other patents and the relevant disclosures,
19 that the nature of the disclosure as a legal matter wasn't
20 sufficient to incorporate by reference certain content.
21 MR. WILSON: Correct.
22 THE COURT: And I -- and I agreed with you, and
23 I think the other side says, and I'm -- and I have my order.
24 So, you know, look at it with this. Look at it. But I
25 think they say the reason why I agreed with you is because

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1 there was particular phraseology in those intervening
2 applications, including in the '114, which was something
3 like, "Hereby incorporated herein by reference to the extent
4 appropriate." And I focused on that phraseology, "to the
5 extent appropriate," because it was a confusing thing. What
6 extent was being appropriate? That was the basis of the
7 rulings of that.
8 MR. WILSON: That was the language you quoted in
9 your order. Right.
10 THE COURT: And I think the -- Mr. Nemunaitis
11 says it is undisputed. It is undisputed that with regard
12 with what we're arguing about advantage, the disclosure in
13 the '517 and all the applications in between going back to
14 the 2004 provisional is that "to the extent appropriate"
15 language is not included and instead language that's
16 included, which I'll see if I ever need to look at the
17 relevant documents, is something like "incorporated by
18 reference," is that incorrect?
19 MR. WILSON: With respect to the particular
20 phrase "incorporated by reference," it is correct that, in
21 the chain leading to the '517, "to the extent appropriate"
22 is not in the same sentence as the "incorporated by
23 reference" language.
24 The "to the extent appropriate" language does
25 appear in the multiple applications in that chain in the

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1 preceding sentence talking about claiming priority to the
2 provisional, and our argument at the time was that was
3 equally confusing as to what was to be incorporated.
4 THE COURT: Okay. So are you arguing that the
5 legal decision I would have to make as to whether or not the
6 content of the 2004 provisional was incorporated by
7 reference to the chain -- are you arguing that it is not
8 decided one way or the other with regard to this
9 "incorporation by reference" issue as to the provisional?
10 Are you arguing that whatever you're saying is an additional
11 sentence about priority and the language about "extent
12 appropriate" has some relevance to this "incorporation by
13 reference" issue I have to decide?
14 MR. WILSON: So that was our argument on step
15 one in summary judgment.
16 THE COURT: Okay. I want to know what your
17 argument is right now.
18 MR. WILSON: Sure. And, yes, that is our
19 argument, that that language makes it confusing as to what
20 is incorporated by reference in that chain as well for this
21 step one issue.
22 THE COURT: But if it wasn't there, like just
23 if -- just, like, look, incorporated by reference, this
24 provisional --
25 MR. WILSON: Yes.

<p style="text-align: center;">356</p> <p>1 THE COURT: -- would you agree that that is 2 sufficient to incorporate by reference certain material? 3 MR. WILSON: Taking that sentence in isolation, 4 if the preceding sentence was not there, yes, we agree that 5 was sufficient. 6 THE COURT: How many different -- this is maybe 7 for you or the other side. How many different applications 8 do I have to look at to see what the language is used at 9 issue? 10 MR. WILSON: I would say it's three to four. 11 THE COURT: And the plaintiffs say they have it, 12 but I don't. So let's say I look at it, and I decide, 13 look -- looking back at my summary judgment order, parties 14 say I've got to make this call now. I see the language that 15 the plaintiff is pointing to, "the extent appropriate," 16 which doesn't say "extent appropriate." It says 17 "incorporated by reference." Yeah, I think that's 18 sufficient to incorporate by reference the provisional, its 19 contents and all the intervening applications. I think 20 you're saying I'm not done. 21 MR. WILSON: Correct, we're saying you're not 22 done. We're saying there is a step two which is where the 23 legal propriety of "incorporating by reference essential 24 material" comes into effect. 25 THE COURT: Okay. And let me make sure I</p>	<p style="text-align: center;">358</p> <p>1 And you cannot incorporate essential material by reference 2 into one of those intervening applications in order to make 3 that a proper application for priority. 4 THE COURT: So if this figure, figure 2, is 5 essential material, if it is, then it wouldn't be proper to 6 incorporate it by reference in the way the plaintiffs say 7 that they have by use of this magic language in all these 8 applications, including the '517. 9 MR. WILSON: That is -- that is what we are 10 saying. The language may be correct, but they are still not 11 legally permitted to do that. 12 THE COURT: So the call that has to be made 13 there in review is if you're correct under the law that 14 Mr. Nemunaitis says, no, it -- whether it's essential 15 material or not, it doesn't matter. You can incorporate by 16 reference essential material or nonessential material in a 17 provisional and get the benefit of a priority. I think 18 that's what he's arguing. 19 MR. WILSON: I take that to be his argument. 20 THE COURT: But you disagree with that? 21 MR. WILSON: I disagree. 22 THE COURT: If I was going to find, like, legal 23 argument about whether that's true or not, where would I 24 look? 25 MR. WILSON: So we argued that point on summary</p>
<p style="text-align: center;">357</p> <p>1 understand your point there. Okay. So I've decided that -- 2 in this hypothetical world, that, yes, what the plaintiff 3 was trying to do -- it was trying to incorporate by 4 reference into the '517 via statements in that patent and 5 all the chain applications before the content of the 6 provisional. 7 And that's relevant or right, you agree, that -- 8 because what we're fighting about is its importance, 9 potentially, that this provisional has this picture of 10 the -- what the plaintiffs say is the disclosure of the 11 activated carbon being added to the coal before the boiler; 12 is that right? 13 MR. WILSON: Right. 14 THE COURT: So saying I make that call, yeah, 15 they incorporated by reference that provision. You say I'm 16 not done because...? 17 MR. WILSON: You are not done because through 18 the combination of 35 U.S.C. 120, which discusses how you 19 can claim priority back through a chain of applications 20 which is that each preceding application has to have 112 21 support for the claim, coupled with the 37 CFR 1.57 D which 22 prohibits incorporating by reference essential material -- 23 when those are considered together, our position is when 24 you're stepping back through the chain to see if there's 25 proper claim of priority, you have to apply that 1.57 D bar.</p>	<p style="text-align: center;">359</p> <p>1 judgment, so there is briefing on that issue there. That's 2 where we cited section 120.57(d). In our reply brief on 3 summary judgment, this is -- it's an odd and confusing 4 issue, and there's very limited case law. In our reply 5 brief on summary judgment, we cited what it was at the time 6 and what I believe is still the only case sort of addressing 7 this issue as well. 8 THE COURT: What's that case? 9 MR. WILSON: I believe it's called Maquet. 10 M-A-Q-U-E-T, I think. 11 THE COURT: I will remember that later. So your 12 view is the first issue is step one. Then step two is you 13 think I need to decide whether or not this disclosure is 14 essential material. And that's a dispute in and of itself 15 because the plaintiff says I don't need to decide, but you 16 say I do because you can't incorporate by reference 17 essential material in the provisional, and you say this 18 Maquet case is relevant. 19 Let's say I find that you're wrong and that 20 you -- or maybe I -- let's say I find you're correct, and 21 you can't -- you can't incorporate essential material by 22 reference in this way to get the benefit of a priority date, 23 because that's what we're fighting about. 24 MR. WILSON: Yes. 25 THE COURT: Is there going to be a dispute,</p>

<p style="text-align: center;">360</p> <p>1 then, about whether this is actually essential material?</p> <p>2 MR. WILSON: So our position is that it is</p> <p>3 essential material. Upon summary judgment, Your Honor</p> <p>4 addressed that in a paragraph or two finding that there was</p> <p>5 a dispute of fact about whether it would, in fact, be</p> <p>6 essential material.</p> <p>7 THE COURT: And all these issues we've talked</p> <p>8 about so far, including this one -- is there a dispute of</p> <p>9 fact about whether it's essential material? -- are those all</p> <p>10 questions that I have to resolve as a judge?</p> <p>11 MR. WILSON: I think the way it's been presented</p> <p>12 at this point following summary judgment and the way expert</p> <p>13 reports are and the way I expect them to testify, there is a</p> <p>14 dispute of fact about whether it is essential material. And</p> <p>15 I'll try to very briefly outline what it would be. There --</p> <p>16 THE COURT: I don't think that's the question I</p> <p>17 asked you.</p> <p>18 MR. WILSON: Sure.</p> <p>19 THE COURT: The question I asked you is who</p> <p>20 decides it? Do I, the judge, decide this dispute or is the</p> <p>21 jury going to decide is this -- was this essential material?</p> <p>22 MR. WILSON: I mean, I think the import of Your</p> <p>23 Honor's previous order is that the jury would decide it</p> <p>24 because it ultimately boils down to a question of written</p> <p>25 description on which there is a dispute of fact.</p>	<p style="text-align: center;">362</p> <p>1 wrong on step two, right -- so you say -- or to get to step</p> <p>2 two, it has to be essential material, and there's a dispute</p> <p>3 about that.</p> <p>4 So you're saying that the essential material</p> <p>5 dispute, which is a jury question, relates to a dispute</p> <p>6 about -- well, if it's essential material, you can't -- you</p> <p>7 can't incorporate it by reference, and that's a judge</p> <p>8 decision?</p> <p>9 MR. WILSON: So Your Honor's decision would</p> <p>10 basically be which of our competing interpretations of</p> <p>11 whether you're allowed to incorporate essential material.</p> <p>12 That is a decision for you. That is a legal question.</p> <p>13 If there is no prohibition of incorporating</p> <p>14 essential material, then at that point, the jury wouldn't</p> <p>15 need to decide whether it's essential material.</p> <p>16 THE COURT: Okay. So if, at step two, there's</p> <p>17 no provision on incorporating essential material in order to</p> <p>18 get the priority date, then not an issue the jury needs to</p> <p>19 decide. But if there is one, then the jury would be</p> <p>20 deciding it.</p> <p>21 MR. WILSON: Correct. And I should preface this</p> <p>22 by saying that our expert has never conceded that figure 2</p> <p>23 in itself does provide a proper written description. For</p> <p>24 the purposes of summary judgment, we assumed that it did.</p> <p>25 So I just want to make sure I'm not conceding that we would</p>
<p style="text-align: center;">361</p> <p>1 THE COURT: Okay. All right. Is there anything</p> <p>2 you want to say about what is the dispute about whether this</p> <p>3 figure is essential material?</p> <p>4 MR. WILSON: Certainly. I can give you a</p> <p>5 sentence or two. So the experts at this point basically</p> <p>6 have competing opinions on whether other materials that are</p> <p>7 indisputably explicitly in these intervening applications</p> <p>8 also disclose adding bromine to coal before combustion.</p> <p>9 THE COURT: And you say those are just fact</p> <p>10 disputes between experts about written description that a</p> <p>11 jury would use?</p> <p>12 MR. WILSON: Correct.</p> <p>13 THE COURT: All right. So I think you're saying</p> <p>14 there's at least three issues here. There's the threshold</p> <p>15 step-one issue: Is it appropriate in the way that they did</p> <p>16 incorporate by reference certain material?</p> <p>17 Second, even if it is, you'd say it doesn't</p> <p>18 matter because the material at issue is essential material.</p> <p>19 Again, essential material you can't incorporate it by</p> <p>20 reference in that way, via provisional, to get a priority</p> <p>21 date. They disagree. I have to decide that. Both judge</p> <p>22 decisions so far.</p> <p>23 MR. WILSON: Correct.</p> <p>24 THE COURT: But then, thirdly, if it becomes</p> <p>25 relevant -- so if you're -- if you're -- I guess if you're</p>	<p style="text-align: center;">363</p> <p>1 be admitting that it is entitled to the provisional in</p> <p>2 that -- in that realm, but we would no longer be fighting</p> <p>3 over whether it could be incorporated.</p> <p>4 THE COURT: Okay. And, lastly, do I need to</p> <p>5 make this decision now, all these various decisions about</p> <p>6 legal decisions, looking at documents? Do I have to make</p> <p>7 this right now before you cross Mr. Pavlish?</p> <p>8 MR. WILSON: I mean, our take is roughly what</p> <p>9 Your Honor proposed to Mr. Nemunaitis, that if the questions</p> <p>10 about figure 2 and the provisional with respect to '147</p> <p>11 become irrelevant because of something Your Honor decides,</p> <p>12 then that will basically fall out in jury instructions and</p> <p>13 can be cured and instructed if necessary.</p> <p>14 THE COURT: You said with respect to the '147.</p> <p>15 Are you talking about the '147 or the -- is that the --</p> <p>16 MR. WILSON: No, I'm just saying that I think</p> <p>17 what we're talking about is asking him questions about the</p> <p>18 provisional and whether that figure appears in an</p> <p>19 intervening patent.</p> <p>20 THE COURT: And it turns out it doesn't matter</p> <p>21 whether it does or not. You're saying, "So what? Assume</p> <p>22 some questions were asked about something that the jury</p> <p>23 will, you know, eventually be, if they had to be, told, it</p> <p>24 doesn't make any difference."</p> <p>25 MR. WILSON: Correct.</p>

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1 THE COURT: Anything further to explain the
2 issues?
3 MR. WILSON: No, sir.
4 THE COURT: All right. Thank you, Mr. Wilson.
5 Anything further, Mr. Nemunaitis?
6 MR. NEMUNAITIS: I have copies of the language
7 from the application if Your Honor would like to see that.
8 THE COURT: Okay. Yeah. How many applications
9 are there that have this "incorporated by reference"
10 language?
11 MR. NEMUNAITIS: This just has the relevant
12 portions copied and pasted in from Mr. O'Keefe's report.
13 It's one document. Oh, I'm sorry. It's the -- yes, it's
14 one document, and it has all 12 of the applications. But I
15 think the '147 patent is the one they're really focused on.
16 THE COURT: It has all the relevant ones but the
17 '147 -- I'm sorry. I don't understand what you're saying.
18 MR. NEMUNAITIS: I'm sorry. It has the
19 incorporation language from every application in the chain.
20 My understanding is that they are claiming that the '147
21 patent is the one in the chain that failed to properly
22 incorporate by reference, at least as one example of that.
23 THE COURT: I don't know that they are, though.
24 Seems like they're saying lots of them have the language
25 that this prior sentence, et cetera. But you're saying, in

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1 any event, all the ones that matter are in this document?
2 MR. NEMUNAITIS: Correct.
3 THE COURT: And how many are there?
4 MR. NEMUNAITIS: I believe there's 12.
5 THE COURT: 12 different applications. So is
6 the language the same, or is it different?
7 MR. NEMUNAITIS: Varies. Like, differences.
8 I --
9 THE COURT: I mean, I'm just trying to picture
10 what you want me to do. I think you want me to take a break
11 and decide all these issues with the documents with just
12 what I heard from the lawyers, which could take I don't know
13 how long. So we just let the jury sit and wait until we get
14 that decision, that's what your proposal is? Is that what
15 you're asking for? I just want to know.
16 MR. NEMUNAITIS: No, Your Honor. I think we
17 should proceed with the trial but I can provide this as a
18 resource if that would be helpful.
19 THE COURT: I'll have you hand it up and give a
20 copy to the other side. We'll take a short break so the
21 lawyers can get their things together and so I can chat
22 briefly about what's been said here. We'll come back out
23 and almost certainly in light of what plaintiffs' counsel
24 just said we will proceed, but presumably we'll need to
25 decide how we will resolve these issues and when. Why don't

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1 we take a short break. We'll plan to come back -- I'd ask
2 the lawyers to be back here by 11:00. Thank you.
3 (A recess was taken, after which the following
4 proceedings were had:)
5 THE COURT: Let me say for the record what's the
6 outcome of what we just discussed and I'll try to articulate
7 it as clearly as I can. Firstly and most importantly, we
8 are not going to take a further break for me to resolve any
9 of the disputed issues the parties just discussed. I don't
10 think based on what's been said, and I think it's now
11 agreed, there's a need to do so or that any questions that
12 might be asked of Mr. Pavlish on cross-examination are so
13 unduly prejudicial that if they end up being irrelevant to
14 some issues in the case or not depending on what the Court
15 decides on this issue they can't be asked now, and later if
16 needed the Court and the parties can explain whether they
17 were or weren't relevant. With regard to the disputed
18 issues, I understand there to be three.
19 I understand the first disputed issue to be
20 whether, based on the language that was utilized in certain
21 patents and patent applications, the plaintiffs utilized
22 sufficient language to incorporate by reference certain
23 material in a prior submission. I understand there's a
24 dispute about that and I understand the parties think that's
25 a legal dispute the court needs to resolve.

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1 Secondly, I understand there to be, even if the
2 plaintiffs did so, that the defendants assert that to the
3 extent that this material is essential material, then simply
4 incorporating it by reference isn't enough under the law to
5 get the priority date of 2004. The plaintiffs dispute that.
6 I understand that issue to be a legal dispute as well that
7 the parties believe the Court needs to resolve.
8 But if the defendants are correct that would
9 then relate to a third disputed issue which is whether the
10 material is essential material. The parties have different
11 views on that, apparently the experts do. The defendant at
12 least believes that question is one that should be put to
13 the jury, I don't know what the plaintiff thinks about that.
14 Anyway, I think there's those three issues.
15 What I'm going to ask the parties to do is come to an
16 agreement on when a joint letter brief submission that
17 further articulates the positions of the parties laid out
18 today and it cites any accompanying case law or attaches any
19 relevant documents should be submitted. I'm going to assume
20 based on right now that I won't need to decide that finally
21 until the prayer conference on Thursday evening. If the
22 parties believe that's wrong and they want that decided
23 earlier they can decide on what the right schedule is and
24 when they're going to submit a joint letter to me and let me
25 know when the letter is going to be submitted.

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1 If everyone is ready to proceed we'll bring the
 2 jury in right now.
 3 MR. DORSNEY: Your Honor, we have to hand up
 4 material for the witness.
 5 (The jury entered the courtroom.)
 6 THE COURT: We'll have the witness retake the
 7 stand. And I'm sorry, Mr. Dorsney, did you say you handed
 8 up materials for me?
 9 MR. DORSNEY: That would be cross materials.
 10 THE COURT: I want to make sure I know what
 11 we're talking about. Thank you.
 12 MR. DORSNEY: Thank you, Your Honor.
 13 THE COURT: All right. We'll proceed with
 14 cross-examination.
 15 CROSS EXAMINATION
 16 BY MR. SYKES:
 17 Q. Good morning, Mr. Pavlish. Paul Sykes here for the
 18 defendant. You touched on this with Mr. Caldwell in your
 19 direct examination. You are the CTO of ME2C now?
 20 A. **That's correct.**
 21 Q. And as the CTO you also hold a number of shares of
 22 the company; fair?
 23 A. **I do.**
 24 Q. And the 2022 annual report said that you own about
 25 6.1 million shares of the company; is that fair?

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1 A. **I wouldn't quite characterize it that way. I own**
 2 **shares and stock options.**
 3 Q. Do you know how many shares and stock options you own
 4 altogether?
 5 A. **I own approximately a million shares and maybe it's**
 6 **probably 3 to 4 million options.**
 7 Q. And so you would benefit financially from the share
 8 ownership in the outcome of this case potentially?
 9 A. **Potentially.**
 10 Q. I'm going to just ask you a few quick questions about
 11 the continuity of the patent applications from your
 12 conception and reduction to practice that you discussed in
 13 your direct exam up to the '517 and '114 patents that we're
 14 here about this week.
 15 MR. SYKES: Mr. Brown, if we could just to get
 16 everyone oriented, put the family tree chart on the screen.
 17 BY MR. SYKES:
 18 Q. So this is one of your patent applications for the
 19 '114; correct?
 20 A. **Correct.**
 21 Q. We see pointing also to the application 091 for the
 22 '517 patent and then the provisional which we looked at as
 23 PTX 17 is back here in 2004; right?
 24 A. **Correct.**
 25 Q. Okay.

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1 MR. SYKES: And so, Mr. Brown, if we could put
 2 up PTX 17, the provisional application and let's page down
 3 to page 13. Maybe another couple of pages. There we go.
 4 BY MR. SYKES:
 5 Q. This is the figure 2 of the provisional that
 6 Mr. Caldwell directed you to and you pointed to this
 7 additive injection as pointing to adding bromine to the coal
 8 before combustion; right?
 9 A. **Right.**
 10 **MR. SYKES: And Mr. Brown, if we could now pull**
 11 **up the '517 patent, PTX 3.**
 12 BY MR. SYKES:
 13 Q. Okay. Here we see this is the '517 patent issued in
 14 2020 and here's our figure, the same figure we looked at in
 15 the provisional; correct?
 16 A. **It's the same figure, yes.**
 17 Q. And then I think it shows up, that's the front page I
 18 believe it shows up as figure 11 further down. We'll skip
 19 that.
 20 And step back and have another look at the
 21 family tree. So right here in the family tree, we see the
 22 application filed in 2009 that issued in the 8164 or 168147
 23 patent; correct?
 24 A. **Correct.**
 25 Q. And so the '147 is in this line that leads up to the

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1 '517; fair?
 2 A. **Fair.**
 3 MR. SYKES: And Mr. Brown, if you could pull up
 4 PTX 5.
 5 BY MR. SYKES:
 6 Q. So here is PTX 5. If we could just page through each
 7 page. That's the second page, third page, figure 2, figure
 8 three, these are being played on the screen, figure four,
 9 figure five, figure six, figure seven, figure eight, figure
 10 nine, figure ten, and then we get to the text. So it's fair
 11 to say that the chart we looked at in the provisional, PTX
 12 17, and then it showed up in the '517, PTX three, it was not
 13 displayed there in PTX five, the '147 patent; fair?
 14 A. **Fair.**
 15 Q. And if we jump down to column 14 of the '147 patent,
 16 beginning on column 14 and then continuing through column
 17 21, you're familiar with this patent, this is one of your --
 18 you've been examined on this before; right?
 19 A. **Yes.**
 20 Q. And so there are 12 examples that this goes to patent
 21 application or this patent goes through in columns 14 to 21
 22 and just to save us the time, and you testified about this
 23 before, can you confirm that none of the examples from 1 to
 24 12 disclose adding bromine directly to the coal before
 25 combustion; fair?

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1 **A. I think I responded that it wasn't disclosed but that**
2 **I was aware of some of the examples where bromine was added**
3 **to the coal.**
4 **Q.** That's right. You agree that the written document
5 examples 1 to 12 it wasn't there, and then you further
6 clarified that your memory was, as you testified today, that
7 you had added it?
8 **A. Correct.**
9 **Q.** Let's -- yesterday at the beginning of your
10 testimony, very beginning of your direct, you remember you
11 gave testimony about the ME2C license, I believe it's PTX
12 766 if memory serves correctly, the DTE AJG Chem-Mod
13 license. Do you remember that?
14 **A. I guess I don't recall that.**
15 **Q.** If you could, you've got a binder with your exhibits.
16 Let's look at the very -- look in the middle you'll see a
17 PTX 766 tab.
18 **A. You said 766?**
19 **Q.** Yes, sir. About halfway through the notebook.
20 **A. Yes, I see that.**
21 **Q.** You remember testifying about that yesterday; right?
22 **A. I remember testifying to the amount we settled for.**
23 **Q.** Thank you. And you were also involved in licenses
24 ME2C granted to several power plant operators in this case;
25 weren't you?

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1 **A. You would have to define when you say "involved."**
2 **Q.** You were part of the team that negotiated each of the
3 licenses with, you remember, Talen, Vistra Energy, and AEP?
4 **A. I was part of the team that provided information and**
5 **data that went into that negotiation.**
6 **Q.** And you provided data that was part of developing the
7 cost structure of the negotiation; right?
8 **A. I provided data that eventually formed that**
9 **structure.**
10 **Q.** So as -- so let's take a look since you were part of
11 the team that negotiated them, they're identified as
12 exhibits DTX 19, 20, and 23 in your binder. DTX 19 is
13 entitled fleet wide license and supply, an agreement between
14 ME2C and Vistra. Do you see that?
15 **A. Yes. On 19, yes, I see that.**
16 **Q.** And as we just confirmed you were part of the
17 negotiating team that provided data to support this
18 agreement; correct?
19 **A. Again, I wouldn't characterize it as negotiations. I**
20 **didn't do the final negotiations. I provided information.**
21 **Q.** And but you're familiar with this agreement; aren't
22 you?
23 **A. Some parts of it. Again, I didn't finalize the**
24 **agreement. I had input on another level, providing data**
25 **information. Final agreement was not by me.**

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1 **Q.** I recognize that. You didn't finalize the agreement
2 you talked about yesterday, PTX 766 either; did you?
3 **A. Yes, I think.**
4 **Q.** And the next agreement, DTX 20, between ME2C and AEP,
5 you agree you were part of the negotiating team and you're
6 familiar with that agreement as well?
7 **A. Yes.**
8 **Q.** And then DTX 21, the agreement between ME2C and NRG
9 Energy, you were part of the negotiating team and you're
10 familiar with that agreement as well; correct?
11 **A. Again, I provided information and data.**
12 **Q.** And I believe you actually -- you were actually
13 involved in the negotiation on that one; right?
14 **A. That would have been our attorney that represented us**
15 **that negotiated and defined the terms of that.**
16 **Q.** And you remember giving a deposition in this case;
17 don't you?
18 **A. Yes.**
19 **Q.** And do you remember being asked about all these
20 agreements?
21 **A. Yes.**
22 **Q.** And do you remember that you were asked: Next is an
23 NRG license agreement dated January 5, 2021. Were you
24 involved in the negotiation of that license?
25 And do you remember your answer?

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1 **A. I don't remember the exact wording for that, no.**
2 **Q.** You answered yes. You wouldn't have any reason to
3 dispute that?
4 **A. I guess maybe I misunderstood the term in the context**
5 **of what you were meaning by negotiation there.**
6 **Q.** Let's just take a look at your deposition. I think
7 you've got your binders?
8 **A. I do.**
9 **Q.** That's on page 269, line 18. And could you --
10 THE COURT: Excuse me, Mr. Sykes. I think the
11 defendant is going to take down -- I think I instructed the
12 parties about this. Take down a picture while you're asking
13 that. It hasn't been entered.
14 MR. SYKES: Yes, Your Honor. I know we're --
15 it's our first time to do this. I want to make sure we're
16 following your instructions.
17 THE COURT: Absolutely.
18 BY MR. SYKES:
19 **Q.** Mr. Pavlish, if you could read beginning on page 269,
20 line 18 through line 25, please. And you were asked --
21 **A. I'm sorry, could you repeat, 269 through?**
22 **Q.** Line 18 to 25.
23 **A. Okay. Next is the NRG license. Were you involved in**
24 **the negotiations of that? And I said yes. And then it**
25 **says: Did you have the same role you had at AEP and Vistra.**

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1 Q. Your answer was yes?
2 A. **Again it goes back to what you mean by negotiation.**
3 **I did provide data that went into that negotiation.**
4 Q. You were asked if you were involved in the
5 negotiation, and you said yes?
6 A. **I said yes.**
7 Q. And the last one is the agreement between ME2C and
8 Brandon Shores, LLC, Talen Generation and several other
9 entities we refer to as the Talen agreement.
10 Your role is the same in that agreement; fair?
11 A. **Yes.**
12 MR. SYKES: I move to admit DTX 19, DTX 20,
13 DTX 21 and DTX 23.
14 THE COURT: Any objection?
15 MR. CALDWELL: No, sir.
16 THE COURT: They are admitted.
17 (Thereupon, Plaintiffs' Exhibit Numbers 19, 20,
18 21 and 23 were admitted.)
19 BY MR. SYKES:
20 Q. And I think as you touched on a moment ago, your role
21 was providing data as part of developing a cost structure?
22 A. **Yes.**
23 Q. And let's take a look just at one of these
24 agreements.
25 MR. SYKES: Mr. Brown if you could put up say

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1 DTX 19.
2 BY MR. SYKES:
3 Q. DTX 19 is a -- it's a fleet wide license. That's
4 what it's described as; fair?
5 A. **Yes.**
6 Q. And let's look at the first page of DTX 20. And it's
7 also a fleet wide license and supply agreement; correct?
8 A. **Correct.**
9 Q. And you have the binders in front of you, but DTX 21
10 and 23 likewise are fleet wide license agreements?
11 A. **Correct.**
12 Q. And "fleet wide" means all the power plants in that
13 utility's fleet; correct?
14 A. **Yes. I mean, there are probably specific terms in**
15 **there that may limit it but in general, yes.**
16 Q. Some of these utilities like Vistra and NRG, they may
17 span multiple states, don't they?
18 A. **They could potentially.**
19 Q. How many plants does Vistra have in its fleet, do you
20 know?
21 A. **As of today today, plants or units?**
22 Q. Just power plants.
23 A. **I'd say -- you're talking about Vistra? They have a**
24 **number in the Midwest, and they have a number in Texas, so**
25 **8, 10.**

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1 Q. How many plants does AEP have, do you know?
2 A. **Not right off.**
3 Q. What about NRG, about 20? Does that sound right?
4 A. **That sounds too many for coal plants.**
5 Q. How many coal plants do you think it has?
6 A. **Plants, maybe 8 or 10.**
7 Q. And what about Talen, do you have a sense of how many
8 coal plants?
9 A. **I don't recall.**
10 Q. Six or eight sound about right?
11 A. **I don't recall.**
12 Q. Let's just jump back to DTX 19. And let's look at
13 section 2.
14 And you understand, Mr. Pavlish, as chief
15 technical officer of ME2C, you deal with IP issues that --
16 this is ME2C granting to Vistra in this case a -- it says a
17 nonexclusive, nontransferable, nonsublicensable section 3.5
18 worldwide, fully paid up, royalty free, irrevocable and
19 perpetual license under all the licensed patents.
20 Did I read that correctly?
21 A. **You read it correctly.**
22 Q. And the licensed patents are referring to ME2C's
23 mercury control patents; is that fair?
24 A. **I guess I'm looking to where it actually says that.**
25 Q. That would be -- let's look up at section 1.5.

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1 A. **Do I turn to that?**
2 Q. And you see that says licensed patents include legal
3 language. The asserted patents, the ones asserted in the
4 lawsuit against Vistra, which was this lawsuit, and then all
5 patents and patent applications listed on Exhibit A; right?
6 A. **Again, I didn't write this term, but that appears**
7 **what it says.**
8 Q. That's what it says?
9 A. **Yeah.**
10 Q. And let's jump down to Exhibit A, which is on page 16
11 of the document, and then Exhibit A is a listing of various
12 ME2C patents and patent applications. Fair enough?
13 A. **Yeah, fair enough.**
14 Q. And you're familiar with these. This is what you --
15 A. **Yeah, fair enough.**
16 Q. Got you. And among these, you wouldn't dispute that
17 we have the '114 and the '517 patents that are at issue in
18 this case?
19 A. **Right.**
20 Q. And those are the asserted patents in this agreement?
21 A. **Correct.**
22 Q. I know this is a little tedious, but try to walk
23 through and cover these things.
24 Jumping back to section 2 of DTX 19, and then we
25 see in section 2.1, the license is to: A, to make, dispose

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1 of licensed products or combination products; and then B, to
2 have licensed products made or otherwise provided by one or
3 more third parties or use, sell, et cetera, by Vistra and
4 its affiliates.
5 Do you see that?
6 **A. Yes, sir.**
7 **Q.** And licensed products, that would be what's described
8 up in paragraph 1.6, and reading that it says: Shall mean
9 any and all products and services of or provided by or to,
10 directly or indirectly -- so products provided by or to
11 Vistra or its affiliates -- including any portions of those
12 alone or in combination with other products and services
13 such that such licensed products constitute in respect of a
14 patent claim direct infringement of a claim, contributory
15 infringement of such claim, and part 3, induced infringement
16 of a claim.
17 Did I read that correctly?
18 **A. Yes. You read it correctly.**
19 **Q.** Okay. So just to clarify, I touched on this, but
20 each of these utilities, Vistra, AEP, NRG, and Talen
21 represented by the Exhibits DTX 19, 20, 21, 22, and 23.
22 Now, they were the defendants in this very
23 lawsuit; right?
24 **A. Yes.**
25 **Q.** And ME2C sued them for violating the same patents

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1 that we're talking about this week?
2 **A. Yes.**
3 **Q.** Right?
4 **A. Yes.**
5 **Q.** And then also included the -- infringing the '147
6 patent that we looked at a minute ago, PTX 5 that issued in
7 2012; is that right?
8 **A. Are you saying it was included?**
9 **Q.** Yeah. It was included in the case.
10 **A. Yes.**
11 **Q.** And so ME2C it was your understanding was seeking
12 damages back six years in July 2019 the -- let me start
13 over. That was not very well said.
14 In the lawsuit against these four utilities,
15 ME2C was seeking past damages going back six years from the
16 filing of the complaint in July 2019 based on their past
17 usage or alleged usage of your two-part process; is that
18 fair?
19 **A. I think we were seeking past damages. I'm not**
20 **specific on the years or dates.**
21 **Q.** And let's just take a look at section 3.1 of
22 Exhibit 19, DTX 19.
23 So ME2C not only granted the license we just
24 looked at but also granted these -- Vistra and its
25 affiliates and a long list of synonyms and others that some

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1 fine lawyers drafted, a release from these past damages and
2 claims as well; fair?
3 **A. Again I didn't write these terms. If that's what it**
4 **says, I guess that's what it says.**
5 **Q.** Well, who else was involved in negotiating these
6 licenses?
7 **A. Primarily that would have been our representative,**
8 **our representing attorney.**
9 **Q.** And who was that for these?
10 **A. That was Caldwell.**
11 **Q.** Counsel here?
12 **A. Yes, counsel here.**
13 **Q.** Mr. MacPherson, he's CEO. I'm sure he had some role?
14 **A. I'm sure he had some input, yes.**
15 **Q.** Well, you were involved. I mean, you and Rick --
16 **A. Yeah, he was involved.**
17 **Q.** I should say Mr. MacPherson. Okay. And we touched
18 on a few moments ago, you said you provided data to support
19 the cost structure.
20 Do you recall that?
21 **A. Yeah, provided data and information.**
22 **Q.** What data? Where did you get it?
23 **A. We were looking at like generation from a plant**
24 **trying to anticipate rejection, coal data, coal consumption**
25 **data.**

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1 **Q.** Where do you get coal consumption data?
2 **A. That's publicly available.**
3 **Q.** Is there something called -- I've seen in this case
4 the EIA database?
5 **A. Yes.**
6 **Q.** And what is the EIA database?
7 **A. Energy information agency database. It's part of the**
8 **Department of Energy.**
9 **Q.** And I don't pretend to know much about it, but is it
10 fair to say that power plants and I think energy producers
11 of all kind have to report lots of data to the federal
12 government about their operations and their consumption,
13 et cetera?
14 **A. Yeah, it's a fair amount of data. I don't want to go**
15 **through the whole list of it, but, yes, there's a lot of**
16 **data they provide in the EIA reports.**
17 **Q.** You're familiar with the EIA database?
18 **A. I am.**
19 **Q.** How long do you think you've been working with it in
20 one way or another?
21 **A. I guess you'd have to define working. Looking at or**
22 **actually pulling information off of it?**
23 **Q.** Well, looking at it.
24 **A. Well, I've been looking at that information for**
25 **probably a decade. In terms of looking at a more detailed**

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1 **analysis, that would be more recent.**

2 Q. The EIA database has coal consumption uses for

3 basically every power plant in the United States, doesn't

4 it?

5 A. **Correct.**

6 Q. And that's broken down by month and year, I think?

7 A. **Yes, month and year.**

8 Q. And it also has the amount of power generated by

9 these power plants as well. I think it may be megawatt

10 hours?

11 A. **Yes.**

12 Q. And so let's just -- I think all of us are old enough

13 to remember the hundred watt or 70-watt light bulb, so a

14 megawatt is a million watts; right?

15 A. **Yes.**

16 Q. And just -- you know this, I don't know this, but

17 what's just a midsized power plant?

18 A. **500 megawatts. Nowadays about that. It's a little**

19 **higher.**

20 Q. Yeah. 5- or 600 million watts?

21 A. **Yeah.**

22 Q. Okay. That's why we burn so much coal.

23 A. **We burn a lot of coal.**

24 Q. And the EIA database goes back a good decade or more?

25 A. **Or more, yeah.**

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1 Q. And so you can use the EIA database to add up the

2 coal tonnages for any power plant or set of power plants in

3 the country; correct?

4 A. **You can add up the total amount of refined coal as**

5 **well as the total amount of coal.**

6 Q. And it's got the megawatt hours that generate for

7 that coal too?

8 A. **Yes.**

9 Q. So then you can figure out -- if you have the

10 megawatt hours you can figure out how much coal they burn to

11 generate that average estimate?

12 A. **Yes.**

13 Q. Those are things you do know how to do?

14 A. **Essentially, yes.**

15 Q. And just to be clear, this EIA database, you can

16 query it, you can download the data and put it in Excel

17 spreadsheets, things like that?

18 A. **You can get it in that form.**

19 Q. Did you pull any EIA data for Mr. Philip Green the

20 plaintiffs' damages expert in this case?

21 A. **No.**

22 Q. The coal tonnage and the number of tons of coal, you

23 could look that up in the EIA database for the power plants

24 owned by a particular utility like Vistra, NRG or Talen or

25 AEP, the utilities that were parties to these agreements?

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1 A. **It's there.**

2 Q. It's there, you can look it up?

3 A. **Yes.**

4 Q. And you can look at the historical consumption data

5 and make an estimate of future consumption; is that fair?

6 A. **Yeah, trajectory.**

7 Q. And that's sort of what you did in providing

8 information to support these license agreements we looked

9 at?

10 A. **Yes.**

11 Q. So turning back to DTX 19, that would be the Vistra

12 agreement, do you know how many tons of coal are covered by

13 that agreement?

14 A. **I can't recall that today. I don't remember. It's a**

15 **fair bit, but I don't remember exact numbers.**

16 Q. Several hundred billion tons?

17 A. **Over what duration?**

18 Q. Well, over six years looking back and then a forward

19 perpetual license for the life of the patent that may be ten

20 years?

21 A. **Ten years worth, probably in that range.**

22 Q. Yeah. 4- or 500 million tons for a big utility like

23 Vistra?

24 A. **Yeah.**

25 Q. And AEP probably similar, couple hundred million

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1 tons?

2 A. **Yeah, I think it would be similar.**

3 Q. And NRG, they're bigger than AEP, so they're maybe

4 more like 400 million, 500 million tons over the relevant

5 time frame?

6 A. **Again, I don't remember the numbers.**

7 Q. Do you remember you were asked some of these kinds of

8 questions at your deposition before?

9 A. **I believe so.**

10 Q. And you testified that, if you recall, that you did

11 know how many tons of the coal an NRG license covers. Do

12 you remember that?

13 A. **Yeah, I think I said I knew however I didn't have**

14 **them at the time. I couldn't recall them on the spot.**

15 Q. What's your best judgment just as we sit here

16 today?

17 A. **I really couldn't make a judgment today.**

18 Q. 3- or 400, 500 million tons for a big utility like

19 NRG over 6 to 10 years?

20 A. **I don't recall.**

21 Q. But that information is in a government database --

22 A. **Yes, yes. I just don't recall those numbers.**

23 Q. It can be looked up?

24 A. **Yes.**

25 Q. And last Talen, do you have a sense of how many

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1 million or hundred million tons the Talen agreement might
2 cover?
3 **A. I did at the final agreement but I don't recall.**
4 **Q.** A couple hundred million tons for a utility like
5 Talen for 8 to 10 years?
6 **A. Probably that. I don't recall. I apologize, those
7 are big numbers. I've done a lot of number crunching on
8 different plants and it's been a few years ago and I've done
9 a lot of number crunching since then so it's hard to pull
10 the numbers out.**
11 **Q.** The brain works a little bit different in your 50s or
12 early 60s than it does when you're 25?
13 **A. Absolutely.**
14 **Q.** I know that for sure. Thank you for your answers and
15 helping us walk through that.
16 And last let's take one more thing we need to
17 cover on those just briefly. Let's look at DTX 19. That's
18 the Vistra agreement and that's the one that's a
19 particularly big utility. You said it could be 4- or 500
20 million tons, maybe 10ish coal fired plants. Let's page
21 down and have a look at what's going to be in section 4.3.
22 So this one, you were probably involved in this, remember it
23 had a sliding scale on the payment for the license versus
24 supply?
25 **A. Yes.**

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1 **Q.** And the more product that Vistra bought from you
2 guys, ME2C, the lower the royalty fee it paid. So it kind
3 of got a rebate or discount on the royalty for buying the
4 product?
5 **A. Yes, it was an incentive to do business, continue to
6 do business.**
7 **Q.** You wanted to have a relationship with them. So they
8 have this payment matrix under the payment section. So if
9 we page down to the next page we can see if we go all the
10 way down if Vistra buys 0 from you guys in the first year it
11 would owe ME2C \$675,000; right?
12 **A. Yeah, based on certain quantity.**
13 **Q.** But if they bought 0 they would still owe 675?
14 **A. Yes.**
15 **Q.** And then they had another payment obligation for
16 years 2 to 4 in similar sliding scale where you're trying to
17 encourage them to buy product but then at the bottom if they
18 buy 0 they've got to pay \$900,000 a year for those three
19 years?
20 **A. Yes.**
21 **Q.** So my math would say 3 times 900,000 is 2.7 million
22 plus 675. 3.375 million is what they paid for the license
23 and the release of maybe 4- or 500 million tons of coal?
24 **A. This was really based on the units that we were doing
25 business with in terms of the license covered broader than**

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1 **that, but this is based not on the tonnage you're referring
2 to.**
3 **Q.** It was a fleet wide license to the whole fleet, every
4 power plant in the fleet had the right to use the patent to
5 the two-part process; right?
6 **A. Yes.**
7 **Q.** Let's look at -- try to move through these more
8 quickly, the other ones, fortunately, I think are simpler.
9 AEP, DTX 20, let's take a look at 4.3 of that agreement. So
10 here we see --
11 MR. SYKES: Let's highlight and zoom in if we
12 could. Mr. Brown, on 4.3.
13 BY MR. SYKES:
14 **Q.** It says the AEP for the license will make a one-time
15 lump-sum payment to ME2C in the amount of \$400,000. Do you
16 see that?
17 **A. Yes.**
18 **Q.** And then it says AEP will allow ME2C to bid for
19 supply at its Pirkey plant if they bought a sufficient
20 amount of product they get their \$400,000 back; right?
21 **A. Yes.**
22 **Q.** But they weren't obligated to buy anything from ME2C?
23 **A. They were only obligated to allow us to make a bid.**
24 **Q.** Make a pitch?
25 **A. Beyond their --**

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1 **Q.** What?
2 **A. Beyond their request for proposal and supply.**
3 **Q.** Let's look at NRG, DTX 21, and look at paragraph 4.3.
4 So at this time NRG was paying for its license and release
5 from the lawsuit one-time lump-sum payment to ME2C in the
6 amount of \$600,000. Do you see that?
7 **A. I do.**
8 **Q.** And that was that really big utility with 4- or 500
9 million tons covered by this agreement?
10 **A. I don't know how much coal. I can't recall that
11 number.**
12 **Q.** Last let's take a look at Talen, DTX 23. So Talen is
13 paying for its license and release a one-time lump-sum
14 payment to ME2C in the amount of \$200,000.
15 **A. I see that.**
16 **Q.** And it's a little smaller than the other ones, it's
17 more like 6 or 7 plants, something like that?
18 **A. Yeah.**
19 **Q.** Now let's take a look, if we can, and I know this
20 isn't too exciting going through this agreements but let's
21 go forward while we're here. Let's take a look, if we
22 could, at PTX 766. And that's the agreement with AJG,
23 Arthur Gallagher, DTE, and Chem-Mod, and those were former
24 defendants in this case; right?
25 **A. Yes.**

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1 Q. And you understand that this license extends to
2 several groups of entities; doesn't it?
3 A. **Yeah, within that group.**
4 Q. And let's just look to try to cut to the chase, let's
5 go to paragraph 3D because it was nice what they did. There
6 are pages of what some people will call legalese that some
7 of us have to live with for a living but in paragraph 3D it
8 says for the sake of clarity, which is nice they did that,
9 "the license entities over AJG, ETE parties, Chem-Mod,
10 Chem-Mod licensees, sublicensees on exhibits A, B and D."
11 And then it says, "exhibit D also lists the customers
12 containing license extends." Did I read that correctly?
13 A. **You read it correctly.**
14 Q. Let's jump over to exhibit D if we can. Exhibit D
15 lists, it's entitled --
16 MR. SYKES: Mr. Brown, there we go.
17 BY MR. SYKES:
18 Q. "Additional license entities," it was the exhibit
19 just referenced in the paragraph for additional license
20 entities. And you see it's a full page of refined coal
21 companies; right?
22 A. **Yes.**
23 Q. And then let's go to the next page of exhibit D.
24 That's another full page of refined coal companies?
25 A. **Yes.**

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1 Q. And then interestingly about two-thirds of the way
2 down the page some of these entities they're saying it says
3 like an Allen GS or Belle River GS. We go from LLC to GS.
4 Do you have an understanding what GS refers to?
5 A. **I do not.**
6 Q. Might that be the additional customers that were
7 referenced in the paragraph we just read?
8 A. **Possibly.**
9 Q. Let's zoom back out and we have a whole nother page
10 of entities. Have you ever tried to count how many entities
11 ME2C licensed under this agreement?
12 A. **No, I haven't.**
13 Q. These are numerous refined coal companies and other
14 customers is what it says and there's pages and pages?
15 A. **I see it, yeah.**
16 THE COURT: Let me ask if counsel and the
17 witness are still talking over each so our court reporter is
18 not getting a good record. Please continue.
19 MR. SYKES: Thank you, Your Honor. I was just
20 realizing I was doing that.
21 BY MR. SYKES:
22 Q. It probably wouldn't surprise you that I counted
23 them.
24 A. **That wouldn't surprise me at all.**
25 MR. SYKES: Mr. Brown, can we have a version of

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1 this where we count them?
2 BY MR. SYKES:
3 Q. So that's first two pages, and let's go to the next
4 page. Looks like 134; does that sound fair?
5 A. **Sure.**
6 Q. And so this was the one you said the payment was
7 about \$28 million?
8 A. **Yes.**
9 Q. Okay. And it's really -- the payment is really
10 27.5 million?
11 A. **Like I said, approximately 28 million.**
12 Q. Yeah. I'm just trying to be precise.
13 A. **Yes.**
14 Q. And so what does that work out to, 28 million or 27.5
15 divided by 134?
16 A. **I have no idea.**
17 Q. About 200,000 apiece, something like that?
18 A. **I guess I don't know why I would try to equate it to
19 that, but...**
20 Q. Well, I'm just trying to do some simple math. If my
21 phone calculator says \$205,223.88, does that sound -- that
22 math is probably right?
23 A. **If you want to look at it that way, yes.**
24 Q. Thank you, Mr. Pavlish. Okay. Let's talk about -- a
25 little bit about inventions and things like that. ME2C, it

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1 sells products that it -- that it -- that are covered by its
2 patents; right?
3 A. **Correct.**
4 Q. You have a number of products. Give them different
5 numbers. SF10, SB50, and -- probably mess them up. Things
6 like that?
7 A. **Yes.**
8 Q. And those are products with the chemical additives to
9 help capture mercury in the way that you described in your
10 previous testimony?
11 A. **Correct.**
12 Q. They -- as we patent lawyers say, they embody your
13 invention?
14 A. **Yes.**
15 Q. And you advertise those products as patented when you
16 sell them?
17 A. **Yes.**
18 Q. And as part of the product offering, you let your
19 customers know that, "If you buy our patented products from
20 us, you have a license to practice our patents along with
21 your purchase"?
22 A. **Yeah, for that particular plant. Not a company-wide.
23 But, yes, if the plant buys products from us, that license
24 is folded into that.**
25 Q. Yeah. It's rolled in just like whatever licenses or

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1 patents are in the iPhone when we buy it.
 2 And it's true, isn't it, that the ME2C process
 3 does not reduce NOx to any appreciable amount, does it?
 4 **A. I really can't make a statement to that. That's**
 5 **something we haven't really looked at. Our focus is on**
 6 **mercury control. We have other products that might. We**
 7 **just haven't targeted that, I guess. I couldn't quantify**
 8 **that.**
 9 **Q.** And, again, you were asked about this in your
 10 previous sworn testimony that you gave on behalf of ME2C --
 11 **A. Yes.**
 12 **Q.** -- right? And do you remember what you answered when
 13 you were asked, "Does the ME2C process reduce NOx?"
 14 **A. Yeah. I believe I said something "not appreciable**
 15 **amount."**
 16 **Q.** That's right. And --
 17 **A. I don't know if I qualified what "appreciable" meant,**
 18 **but it's not overly significant.**
 19 **Q.** It might be measurable, but it's going to be very
 20 little?
 21 **A. Yeah.**
 22 **Q.** Less than 10 percent?
 23 **A. Again, that was a statement that I -- like I said, we**
 24 **hadn't quantified. So it's -- that's my thinking, that,**
 25 **yeah, it probably would be the 10 percent.**

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1 **Q.** It's a statement but a statement given under oath?
 2 **A. Yeah. It's a statement. That was my thinking. I**
 3 **don't think it would be less than 10 percent.**
 4 **Q.** And ME2C has purchased activated carbon for sorbent
 5 from companies like Albemarle and Cabot, didn't it?
 6 **A. Yes.**
 7 **Q.** And Albemarle and Cabot are also ME2C's competitors?
 8 **A. Talking in the past or currently?**
 9 **Q.** Well, I'm just going by what ME2C's 10-K statements
 10 to the public say.
 11 **A. Well, Albemarle has kind of changed their business.**
 12 **At one point, yes. I don't know if they're still a**
 13 **competitor, per se. In general, yes.**
 14 **Q.** Yeah. In general, you guys sell activated carbon
 15 products. And Cabot and Albemarle and companies like that,
 16 they sell activated carbon products to the market?
 17 **A. Yes.**
 18 **Q.** Isn't it true, Mr. Pavlish, that using a halide
 19 additive like bromine in coal with no addition of a sorbent
 20 like activated carbon is not part of your invention, just
 21 doing that step?
 22 **A. It's not part of our claimed invention.**
 23 **Q.** And it's also true, isn't it, that you did not invent
 24 the way of capturing Section 45 tax credits, did you?
 25 **A. No, we didn't do that.**

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1 **Q.** And the Chem-Mod process that CERT uses is a way of
 2 capturing Section 45 tax credits; fair?
 3 **A. It's a way of doing it, yes.**
 4 **Q.** You talked a bit in your job history with the EERC
 5 from -- was it '92 to 2014, something like that?
 6 **A. '93.**
 7 **Q.** '93. So from 2010 to 2014, you were doing the
 8 consulting with ME2C while you were still officially fully
 9 employed -- I'm not trying to say there's anything wrong,
 10 but you -- your main job was at EERC, and you spent a few
 11 hours a week helping ME2C?
 12 **A. Yeah, that's correct. I don't know if it was 2010 or**
 13 **'11. It was two or three years or so before I took full**
 14 **employment.**
 15 **Q.** But while you were at the EERC -- and just to try to
 16 remind everybody, EERC is the Energy and Environmental
 17 Research Center at the University of North Dakota as part of
 18 the university?
 19 **A. Yes.**
 20 **Q.** And that's where this combustion test facility -- I
 21 may get the terminology wrong. There's the combustion --
 22 you tell me. There's two of them?
 23 **A. Yes.**
 24 **Q.** The combustion test facility, and then across the
 25 hall is the pilot test facility?

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1 **A. You have a particular test combustor, and it's like**
 2 **10 feet between the two and the CTF.**
 3 **Q.** CTF and PTC?
 4 **A. Yes.**
 5 **Q.** And so when you looked, you saw an opening with one
 6 of the EERC test reports. And those gentlemen who were
 7 doing the EERC testing for the Section 45 licenses like
 8 CERT, they were at the EERC also with you?
 9 **A. Well, yes.**
 10 **Q.** I mean, you knew all of them?
 11 **A. Well, I know them, yes.**
 12 **Q.** But you personally didn't oversee the EERC's testing
 13 for the Section 45?
 14 **A. No.**
 15 **Q.** And you actually, I believe, hadn't seen any of the
 16 EERC certification reports for refined coal while you were
 17 at the EERC; is that fair?
 18 **A. That's fair.**
 19 **Q.** Do you think maybe yesterday at opening is the first
 20 time you'd really seen one?
 21 **A. Yeah.**
 22 **Q.** And so it's fair to say you've not ever been in
 23 possession of an EERC Section 45 certification before?
 24 **A. That would be fair to say.**
 25 **Q.** And it's true at the time that ME2C filed this case

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1 you would assume that the EERC's client like CERT -- that
2 they were the ones that had actually certified and signed
3 the reports based on the EERC data. Is that kind of what
4 you thought?
5 **A. Well, the question that was asked is if the EERC had
6 signed it, and I think my response was that I doubted that
7 because I thought it had to be signed by a corporate
8 representative. So, yes, I made a statement to that effect.**
9 **Q.** You made an assumption that the client like CERT
10 would sign it, and then you --
11 **A. Yes.**
12 **Q.** And that might be a reasonable assumption, but you've
13 since learned that -- maybe yesterday, through the course of
14 the case, that the EERC -- that Mr. Gunderson signs it,
15 issues it, and then there was another gentleman who's a
16 professional engineer who signs it as a PE, professional
17 engineer, certified in the technology?
18 **A. Yes. That's the first time I noticed that.**
19 **Q.** You know those guys?
20 **A. I do.**
21 **Q.** Worked with them 10, 15, 20 years?
22 **A. Yeah, probably.**
23 **MR. SYKES:** Your Honor, I am about to switch
24 topics. It's straight-up noon. I can keep going. Whatever
25 the Court would like.

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1 **THE COURT:** Let's keep going. We'll take our
2 lunch break at about 12:30.
3 **BY MR. SYKES:**
4 **Q.** Mr. Pavlish, by the years 2004 and 2005, you knew
5 that Chem-Mod was adding bromine to coal; right?
6 **A. I suspected it in that time frame.**
7 **Q.** And let's -- you've actually lived this, and
8 sometimes we feel like we did live this. I'm just trying to
9 get the folks on the jury oriented a little bit.
10 **So the EERC is a research facility that kind of
11 serves the public and power plants and other folks
12 interested in all kinds of emission control research. They
13 can come in there and run tests; right?**
14 **A. Correct.**
15 **Q.** And you've got these two combustion facilities like
16 many coal-fired power plants that can be kind of leased out?
17 **A. Yes.**
18 **Q.** And you guys had technicians who could run the tests
19 and folks like you who knew a lot about the field to help
20 the utilities and so forth?
21 **A. Correct. That's what I mentioned earlier.
22 Nonprofit, you have to have funding to run the facilities.**
23 **Q.** And so the original Chem-Mod folks, I think I got it,
24 but Hamry,, they were among the different people --
25 companies or people who were coming in and using the EERC's

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1 test facilities?
2 **A. Sure.**
3 **Q.** And you were, around that time, doing a lot of your
4 early work that you described already?
5 **A. Correct.**
6 **Q.** All right. And these -- you said these facilities
7 are across the hall from each other?
8 **A. Yeah.**
9 **Q.** So folks bump into each other, and that's how you
10 kind of --
11 **A. They're relatively close to each other.**
12 **Q.** So it was 2004 or 2005 that you learned about
13 Chem-Mod or suspected that Chem-Mod might be adding bromine
14 to coal. But the first time you're aware that anyone with
15 you or from ME2C actually approached a refined coal company
16 and told them something like, "Hey, you're doing bromine on
17 coal. That's part of, you know, Mike Pavlish's patents or
18 IP," that wasn't until this lawsuit was filed, right, in
19 2019?
20 **A. I can't say for certain about that. (Indiscernible)
21 since 2014.**
22 **Q.** And you, Mr. Pavlish --
23 **THE COURT:** I'm going to ask the witness if you
24 would speak up. Re-ask the last question again and get the
25 answer.

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1 **MR. SYKES:** Let me re-ask that question to make
2 sure it's included.
3 **BY MR. SYKES:**
4 **Q.** Mr. Pavlish, you first suspected Chem-Mod might be
5 adding bromine to coal in 2004 or 2005?
6 **A. I think I said 2005, 2006. In that time frame.**
7 **Q.** That time frame. And the first time that you,
8 Mr. Pavlish, are aware of anyone signing to a Chem-Mod
9 licensee or a refined coal company, "Hey, you're infringing
10 Pavlish's mercury control patents," that was the filing of
11 this lawsuit in July 2019; right?
12 **A. Yes, first time I'm aware of that.**
13 **Q.** And to be clear, you're not aware of the EERC who is
14 the owner of the patent from the early 2000s when they were
15 filed through 2017 when ME2C bought them -- you're not aware
16 of them telling a refined coal company that it was
17 infringing any EERC patents; fair?
18 **A. Yeah, I'm not aware of that. I'm not sure I would be
19 aware of that.**
20 **Q.** But after this 2004, '05, '06 time frame, you learned
21 more about Chem-Mod over the years, didn't you?
22 **A. Well, yeah, once we started marketing mercury control
23 technology being on site over -- yeah.**
24 **Q.** Let me show you an e-mail from May 2012. I believe
25 it's DTX 104 in your binder.

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1 **A. Can you restate that number, please?**
2 **Q.** Yes, sorry. It's DTX 104. Looks like it's about a
3 third of the way through.
4 You see that e-mail? That's from you to Marc
5 Sylvester, May 22, 2012. This is an e-mail that you
6 received and then replied to; isn't that right, Mr. Pavlish?
7 **A. Yes.**
8 MR. SYKES: I move to admit DTX 104.
9 THE COURT: Any objection?
10 MR. CALDWELL: No, sir.
11 THE COURT: It is admitted.
12 (Thereupon, Plaintiffs' Exhibit 104 was
13 admitted.)
14 BY MR. SYKES:
15 **Q.** If we could put that on the screen. So this is Marc,
16 Marc Sylvester. He's identified as VP of sales at ME2C.
17 You're still consulting and working at the the EERC; right?
18 **A. Correct.**
19 **Q.** And he's talking about the Section 45 tax credit,
20 that he's learned about it and asking you some questions,
21 and your suggestion is ME2C should take a serious look at
22 how to get into the market; right?
23 **A. Yes.**
24 **Q.** And then you say at the end, both them and Chem-Mod
25 may be rely on adding bromine to coal to achieve mercury

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1 reductions; right?
2 **A. Correct.**
3 **Q.** You didn't tell Mr. Sylvester that they were
4 infringing your patents, did you?
5 **A. I'm sorry, could you repeat that?**
6 **Q.** You didn't tell Mr. Sylvester that you thought
7 Chem-Mod was infringing your patents around then?
8 **A. That wasn't the context, I guess, of that e-mail.**
9 **Q.** Let's take a look at the next one in your binder,
10 DTX -- let's just stay on this just for a second. Stay on
11 104.
12 So the date of that is May 22, 2012; right?
13 **A. Yes.**
14 **Q.** And in this lawsuit, you and ME2C -- as an officer of
15 ME2C, not you, Mr. Pavlish, personally -- but as an officer
16 of ME2C, ME2C sued Chem-Mod for infringement of the
17 '147 patent we looked at, PTX 5 in this lawsuit; right?
18 **A. Originally, yes.**
19 **Q.** So in July 2019 sued Chem-Mod for infringing the
20 '147 patent. And do you remember when the '147 patent
21 issued?
22 **A. I'm saying 2012 time frame.**
23 **Q.** Yeah. May 1, 2012, does that sound right?
24 **A. Sure.**
25 **Q.** So you had just gotten a fresh patent three weeks ago

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1 I think Mr. Caldwell talked to you about how it's kind of
2 exciting to get a patent, and back then the PTO still mailed
3 out the nice ribbon copies.
4 And now they e-mail us a PDF, which is not so
5 great, but -- so it was just three weeks after you got your
6 '147 patent that seven years later you sued Chem-Mod on, but
7 here -- I think this morning you said it was maddening.
8 Maddening was the word to hear about them but
9 there's nothing about that here, is there?
10 **A. Again, the context of this e-mail wasn't related to**
11 **that. That's not what the inquiry was about.**
12 **Q.** You didn't say, Man, these guys, I just got this
13 patent, these guys are infringing on it, they're causing
14 us -- you know, this is going to hurt us. You didn't say
15 anything like that. This is a sales guy you're talking to.
16 **A. I guess, again context as I see it, no.**
17 **Q.** Let's take a look at the next one, DTX 112. So this
18 is an e-mail from September 2013, so we're going to jump
19 forward a year, and this is an e-mail exchange between you
20 and Keith McGee.
21 Who is Keith McGee?
22 **A. It's been a while.**
23 **Q.** He was with ME2C.
24 **A. I think he was hired to assist in business**
25 **development over a decade ago.**

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1 **Q.** So this is an e-mail that was sent to you by Keith
2 and you responded to September 18, 2023?
3 **A. Can you refer -- give me that number? It didn't come**
4 **up on the screen, so which number e-mail are you referring**
5 **to?**
6 **Q.** DTX 112. It should be the very next one in your
7 binder.
8 MR. SYKES: I'm going to move to admit DTX 112.
9 THE COURT: Any objection?
10 MR. CALDWELL: No, sir. I don't have an
11 objection.
12 THE COURT: It's admitted.
13 (Thereupon, Plaintiffs' Exhibit 112 was
14 admitted.)
15 BY MR. SYKES:
16 **Q.** So this again is -- sometimes you use the term T 45
17 for the Section 45 tax credit; right?
18 **A. Yeah it's generally how we refer to it as.**
19 **Q.** Just to clarify that we're -- this is what this is
20 talking about.
21 And you actually say in this one that -- PAC is
22 powdered activated carbon and BAC is bromine activated
23 carbon, right, PAC and BAC?
24 **A. Correct.**
25 **Q.** And that "this is basically what our patented

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1 technology is." Do you see that statement?
2 **A. I'm reading through it.**
3 **Q.** It's right at the fourth line of the top paragraph:
4 "We know that this will be very effective as that is
5 basically what our patented technology is, the combination
6 of a halogen, halide with carbon based sorbent."
7 **A. Yes.**
8 **Q.** And you go on to say, "Chem-Mod or ADA will offer
9 this as a solution. A number of plants are already doing
10 this."
11 And then you say, "I'm not sure if teaming up
12 with Chem-Mod makes sense, if they'd be open to the idea,
13 but if we did team up with them, ME2C would only be
14 providing back end sorbent as they have the halides in
15 place."
16 Do you see that?
17 **A. Yes.**
18 **Q.** So when you were -- you guys were talking about the
19 potential of teaming up with Chem-Mod here in 2013, kicking
20 it around at least?
21 **A. Well, again, I wasn't -- I was just a consultant, so
22 I was either asked for an opinion or thought on it.**
23 **Q.** So, Mr. Pavlish, you're the inventor on a patent that
24 issued in 2012 that you sued Chem-Mod on in 2019, and CERT,
25 you sued us for that.

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1 So here, just a year after that patent is issued
2 while it's really fresh -- I mean, you're talking not about
3 it's maddening -- I mean, it's maddening what they're doing.
4 You're like, Well, maybe we can figure out a way to team up
5 with them.
6 **A. I was referring to maddening that was in reference to
7 more recent times. Back in '013, 245 was just getting
8 going. There wasn't a lot of utilities using that. It
9 wasn't -- I think from ME2C's viewpoint it wasn't perceived
10 as a significant competitor, if you will, at that time.**
11 **Q.** And then it was the next year, is that -- u2013. It
12 was the next year, 2014, November 2014 I think, you came on
13 to ME2C as an employee and officer?
14 **A. Yes.**
15 **Q.** I probably talk too loud. It may help the court
16 reporter if you speak up a bit because I could just barely
17 hear that.
18 **A. Okay.**
19 **Q.** Thank you for your answers.
20 And as we established earlier, even then when
21 you came on as the CTO of ME2C in 2014 and 2015, 2016, and
22 2017 ME2C still didn't say anything to Chem-Mod or any
23 refined coal company like CERT about infringing its patents?
24 **A. I didn't say anything, no.**
25 **Q.** At this point you're the chief technology officer?

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1 **A. Yes.**
2 **Q.** And then in April 2017 ME2C purchased the patents
3 outright from the EERC?
4 **A. Correct.**
5 **Q.** And still you didn't assert infringement of those
6 patents, now you own them, until a couple years later in
7 July 2019?
8 **A. Correct.**
9 **Q.** And let me show you a document, DTX 297. I guess
10 that's the next one in your binder. And ME2C, like any
11 company, you have meetings of your managers, employees and
12 talk business and what's -- you know, what you're trying to
13 do; right?
14 And -- and ME2C, this document, DTX 219, is the
15 second quarter management meeting held at the Hyatt Regency
16 August 24, 25 of 2017; right?
17 **A. Which number or tab are you referring to?**
18 **Q.** DTX 297, Mr. Pavlish. It's the next one in your
19 book.
20 **A. Yes, I see that.**
21 **Q.** And the -- there's a note of "John arriving Delta
22 flight 2385 at 4:09 p.m." That's you, isn't it?
23 **A. Yes.**
24 **Q.** So you were there, and you guys have a -- I don't
25 know what her title is but executive assistant or office

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1 manager, Stacy Hyatt, she -- she's likely the one that
2 prepared these --
3 **A. Correct.**
4 **Q.** -- meeting notes. Is that a yes?
5 **A. Yes.**
6 **Q.** And Stacy -- Ms. Hyatt I should say, she's been there
7 a good while?
8 **A. Several years now.**
9 **Q.** And she generally types up the meetings -- or the
10 minutes from meetings like this?
11 **A. Generally, yes.**
12 **Q.** And I'm going to move -- and you were at this meeting
13 where these minutes -- that these minutes reflect; fair?
14 **A. Yeah, it's fair.**
15 MR. SYKES: I'm going to move to admit DTX 297.
16 THE COURT: Any objection?
17 MR. CALDWELL: No.
18 THE COURT: It's admitted.
19 (Thereupon, Plaintiffs' Exhibit 297 was
20 admitted.)
21 BY MR. SYKES:
22 **Q.** There's lots of, you know, talk about action items,
23 what you guys are going to do. Here's the -- so the jury
24 can see this August meeting. John arriving. They have
25 their agendas, a nice organized -- I can tell Ms. Hyatt is

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1 an organized detailed individual.
2 She's got the deliverables everybody is
3 responsible for. Keeps them all in line it looks like.
4 And -- and it just goes through a lot of topics that you
5 guys were covering.
6 So this was like an out of town retreat; fair?
7 **A. I don't know if it was a retreat. It might have been**
8 **in combination with another reason we were actually there.**
9 **Q.** Yeah, two-day meeting in Pittsburgh. You guys were
10 North Dakota and Ohio then?
11 **A. We're located throughout the U.S. We have to fly**
12 **generally to meet somewhere.**
13 **Q.** Okay. Let's go on page 3. There's a heading
14 IP ME2C. Do you see that?
15 And IP for ME2C, that's kind of your department
16 as a chief technology officer and inventor of these patents;
17 fair?
18 **A. Yes. Yes, I see that.**
19 **Q.** And I asked you that IP ME2C, as the chief technology
20 officer and inventor, that's kind of your department?
21 **A. Kind of, yeah.**
22 **Q.** And the eighth bullet point down begins, "John
23 notes," and that's you John; right? You're the only John at
24 ME2C at this time.
25 **A. At this time, yes.**

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1 **Q.** And it says, "Broadening definition, broadening the
2 definition of flue gas, making argument that anything put
3 into the combustor is a flue gas. Courts are not currently
4 accepting this. If we inject calcium bromide directly into
5 the combustor will instigate a challenge.
6 Did I read that correctly?
7 **A. I think you read it correctly.**
8 **Q.** And broadening the definition of a flue gas,
9 that's -- that's a reference to broadening -- broadening
10 something in a patent application, isn't it?
11 **A. I don't know if this was referred to that or not.**
12 **Q.** You don't know. And then it was the next year in May
13 and June of 2018 -- this is August of 2017. It was the next
14 year in May or June of 2018 that you filed the applications
15 for the patents that we're dealing here this week in this
16 lawsuit?
17 **A. Sounds about the right time frame.**
18 **MR. SYKES:** I'm going to double check my notes.
19 Can I just check at counsel table?
20 **THE COURT:** You may.
21 **MR. SYKES:** I just want to confirm a couple of
22 exhibits, or -- I think they may have been admitted, but if
23 they're not, I'd move to admit them.
24 **PTX 5** is the '147 patent. I move to admit the
25 U.S. patent -- remember the first three digits -- the

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1 '147 patent from 2012, Mr. Pavlish's --
2 **THE COURT:** Is there any objection?
3 **MR. CALDWELL:** No, sir.
4 **THE COURT:** It's admitted.
5 (Thereupon, Plaintiffs' Exhibit 5 was admitted.)
6 **MR. SYKES:** Move to admit PTX 766. That's the
7 Chem-Mod Gallagher AJG agreement.
8 **THE COURT:** Any objection?
9 **MR. CALDWELL:** Absolutely not.
10 **THE COURT:** It's admitted.
11 (Thereupon, Plaintiffs' Exhibit 766 was
12 admitted.)
13 **MR. SYKES:** Move to admit DTX 219.
14 **THE COURT:** Any objection? I'm sorry, did you
15 say DTX 219?
16 **MR. CALDWELL:** I think you mean 19.
17 **MR. SYKES:** It must be DTX 19. I think I
18 admitted this.
19 **THE COURT:** Yeah, DTX 19 was.
20 **MR. SYKES:** That was an error on the notetaker.
21 **THE COURT:** Blame it on them.
22 **MR. SYKES:** With that, I pass the witness. No
23 further questions.
24 **THE COURT:** Thank you.
25 **Mr. Caldwell,** how much redirect do you have?

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1 **MR. CALDWELL:** I'm guessing on the order of
2 15 minutes.
3 **THE COURT:** Why don't we take our lunch break
4 now, and I'll let you come back and do that. We're near
5 12:30, and we'll use this time as a time to break for lunch.
6 Let's have our jury brought out for lunch.
7 (The jury exited the courtroom.)
8 **THE COURT:** All right. Counsel, it's 12:22 now.
9 Why don't we ask counsel to be back by 12:52, and we'll
10 bring the jury out.
11 Anything further, Mr. Caldwell?
12 **MR. CALDWELL:** I'll just flag something. I'm
13 not aware that this requires work at this point, but I don't
14 know if it was intentional. I'm not casting aspersions, but
15 I do think it's technically at least a MIL violation to talk
16 about that they were previously sued on the '147, and that's
17 gone now.
18 That is a granted MIL about dropped claims, and
19 like I said I'm not asking for a remedy at this point. I'm
20 not quite sure what an appropriate one would be that would
21 make it not worse.
22 I just wanted to flag it so it didn't look like
23 I had waived it.
24 **MR. SYKES:** Our position would be, Your Honor,
25 if they thought asking questions about the '147 patent which

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1 was asserted in this case and was actually removed from the
2 case several weeks after the Court's order on that MIL, they
3 thought that was inappropriate, they should have objected
4 during the questioning.

5 THE COURT: Anything further about that,
6 Mr. Caldwell?

7 MR. CALDWELL: I mean, it's an order of the
8 Court. Like I can't waive orders of the Court, so it's a
9 motion in limine, and the idea is they -- toothpaste out of
10 the tube, not stinking the jury box kind of thing, like me
11 making a scene about it at that point, Hey, hey, we dropped
12 that and that's not the solution.

13 So you -- there's an order granting a motion in
14 limine on dropped claims and defenses as many Courts order
15 because they like parties to streamline and don't want to be
16 discouraged from doing so.

17 So it is your order he violated. I don't really
18 think I have the power to waive that, and I'm not even
19 making a big stink about it. I'm just saying it was
20 flagged.

21 I don't really think we should be going down
22 that path.

23 THE COURT: And can I say, just on the issue of
24 timing, Mr. Sykes, what were you saying about when I entered
25 the order versus --

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1 MR. SYKES: Well, the MIL was entered -- I guess
2 it was shortly after the pretrial, and then it was maybe
3 10 days, 2 weeks later, they dropped '147.

4 I think more importantly for that examination,
5 he opened the door to that line of questioning by saying
6 that it was maddening that they were seeing Chem-Mod and
7 calcium bromide on the market during all of those years, and
8 they couldn't do anything about it. He talked about that.

9 I think they also discussed the '147 in the
10 direct and so having talked about the '147 and then, you
11 know, having this colloquy with the witness about years of
12 maddening conduct that finally culminated, well, no, they
13 had a patent the entire time.

14 And so it would have given the jury an incorrect
15 view of the facts to have not heard that testimony.

16 THE COURT: Okay. And let me just say to
17 everyone standing. You may be seated.

18 What I will say here is I do think it's
19 incumbent certainly among all the parties to follow Court's
20 orders.

21 But I also think if a question is asked that one
22 side believes is objectionable in light of the Court's
23 issuance of a prior order, what is some other reason. Do
24 you think it's incumbent upon them to object, and to address
25 the issue with the Court?

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1 There may be some reason why the other side
2 thinks it's not objectionable, like the reason Mr. Sykes
3 proffered here, not saying that's a good reason or not.

4 I think in the moment because the objection
5 wasn't made, the answer given I'm not at this point going to
6 take remedial action. Certainly with regard to that MIL, if
7 counsel believes one side is extending beyond that and they
8 object, we can address that issue.

9 MR. CALDWELL: The reason I didn't is because my
10 understanding is that many Court's reason that it's a ruling
11 in limine as opposed to something that you just object on
12 the fly. It's precisely so it's not singled out for that
13 reason.

14 So as I understand rulings in limine, if he
15 thinks the door has been opened, which is what he's now
16 using as the excuse for having to do so, it was incumbent
17 upon him to approach the Court and say, Hey, I'm going to do
18 something that is addressing a dropped claim or defense, do
19 I have permission because the door's been open.

20 So I just want to explain that that's my
21 position. I didn't realize that we could just determine the
22 door had been opened, go into it, and then we're back to the
23 world where the other party has to object anyway.

24 THE COURT: I certainly though would advise --
25 and regardless of that, I certainly would advise either side

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1 that believes that the other has asked a question that
2 violates one of the motions in limine -- I would encourage
3 them to raise it in an objection.

4 I would certainly advise each side that if
5 you're asking a question that could potentially violate a
6 motion in limine, it would certainly, at a minimum as
7 required, be good practice to -- you know, if you need to
8 get clarity beforehand, seek that clarity.

9 If you think something wasn't otherwise
10 permitted, asking a witness to seek that clarity before
11 asking other at this point I'm not going to take action so
12 we're on the same page.

13 Let you take your lunch break. See you shortly.
14 (A luncheon recess was taken, after which the
15 following proceedings were had:)

16 THE COURT: All right. We'll let our courtroom
17 deputy know we can bring the jury in.
18 (The jury entered the courtroom.)

19 THE COURT: We'll have Mr. Pavlish come forward
20 for redirect. Mr. Caldwell?

21 MR. CALDWELL: Thank you.
22 May I proceed, Your Honor?

23 THE COURT: You may proceed.
24 MR. CALDWELL: Thank you.
25

<p style="text-align: right;">420</p> <p>1 EXAMINATION</p> <p>2 BY MR. CALDWELL:</p> <p>3 Q. Now, you've had another first experience, which is</p> <p>4 cross-examination, and this is the portion that's redirect.</p> <p>5 So I'm going to -- can I look at some of the</p> <p>6 things you were asked on cross-examination?</p> <p>7 A. Sure.</p> <p>8 Q. All right. Something I found interesting is your</p> <p>9 testimony is describing the technology, describing the</p> <p>10 invention, describing your documentation and proving when</p> <p>11 you had the invention, when you filed the patent</p> <p>12 application.</p> <p>13 Do you remember all that technical information</p> <p>14 you gave us?</p> <p>15 A. Yes.</p> <p>16 Q. And the lawyer for the defendant just spent most of</p> <p>17 the cross-examination talking to you about how much someone</p> <p>18 should pay for the invention, right?</p> <p>19 A. Yes.</p> <p>20 Q. Now, I'd like to show DTX 19. I won't traipse</p> <p>21 through all of them, but I want to pull up one of the</p> <p>22 agreements that were shown.</p> <p>23 So you see at the top, DTX 19 is an agreement</p> <p>24 that relates to Vistra?</p> <p>25 A. Yes, it is.</p>	<p style="text-align: right;">422</p> <p>1 were directed to this portion. I would like to point out</p> <p>2 this license.</p> <p>3 Do you see the very last line of the grant of</p> <p>4 rights? The very last line of section 2.1, what does it</p> <p>5 say?</p> <p>6 A. Does not extend to selling or offering to sell</p> <p>7 sorbents or additives to third parties.</p> <p>8 MR. CALDWELL: And now can I jump to the bottom</p> <p>9 of page 4 -- really the top of page 5, which is section 3.1?</p> <p>10 Thank you.</p> <p>11 BY MR. CALDWELL:</p> <p>12 Q. To short circuit this, I want to focus on kind of on</p> <p>13 the end of that. Do you see in the very end, there's a</p> <p>14 sentence that begins, For the avoidance of doubt. It's in</p> <p>15 the lower portion of the screen, right there.</p> <p>16 A. Oh, yes. Yes.</p> <p>17 Q. And what does -- what does that agreement tell us to</p> <p>18 avoid doubt?</p> <p>19 A. It specifically says, This release and discharge does</p> <p>20 not release any non-Vistra entity from a lawsuit. The</p> <p>21 entities that have provided refined coal to coal-fired power</p> <p>22 plants that are owned or operated by Vistra or its</p> <p>23 affiliates.</p> <p>24 Q. This release does not discharge or release entities</p> <p>25 that are provided refined coal?</p>
<p style="text-align: right;">421</p> <p>1 Q. What is Vistra?</p> <p>2 A. It's a large holding company.</p> <p>3 Q. What does it mean for this to be a license and supply</p> <p>4 agreement?</p> <p>5 A. Exactly what it says. It's a license, and they want</p> <p>6 to supply -- provide a supply of our material to them.</p> <p>7 Q. So why would it matter to ME2C to have a supply</p> <p>8 agreement to a large utility like Vistra?</p> <p>9 A. I mean, that's the business we've been trying to</p> <p>10 pursue for many years, so it would mean a lot.</p> <p>11 Q. And were you successful in being able to supply</p> <p>12 materials to Vistra?</p> <p>13 A. We already had Vistra as a customer for some plants,</p> <p>14 and we haven't been able to secure any business beyond that</p> <p>15 at this point.</p> <p>16 Q. Are you a supplier for NRG?</p> <p>17 A. Yes.</p> <p>18 Q. And that's your goal; is that fair?</p> <p>19 A. That is our goal.</p> <p>20 Q. Let me jump to a specific section.</p> <p>21 MR. CALDWELL: Mr. Diaz, if you'd go to page 3,</p> <p>22 sort of around the -- yeah. If you don't mind, will you</p> <p>23 pull up the whole of 2.1?</p> <p>24 BY MR. CALDWELL:</p> <p>25 Q. To the extent there's any confusion, I'm not sure you</p>	<p style="text-align: right;">423</p> <p>1 A. Correct.</p> <p>2 Q. Now, you understand the defendants refer to</p> <p>3 themselves as refined coal; right?</p> <p>4 A. Yes.</p> <p>5 Q. There is a license that does apply to refined coal</p> <p>6 entities that service utilities with AJ Gallagher and DTE;</p> <p>7 correct?</p> <p>8 A. That's correct.</p> <p>9 Q. And how much did those guys pay you for their release</p> <p>10 from license?</p> <p>11 A. 28 million.</p> <p>12 MR. CALDWELL: Briefly, I'd like to pull up</p> <p>13 Plaintiffs' Exhibit 5. It's the '147 patent.</p> <p>14 BY MR. CALDWELL:</p> <p>15 Q. And, sir, you understand that when we show the claim</p> <p>16 boards and talk about what's proving up -- what we're</p> <p>17 proving up for infringement in this case, this isn't one of</p> <p>18 those patents that we'll be proving up for infringement;</p> <p>19 correct?</p> <p>20 A. Correct.</p> <p>21 Q. And I think you were asked some questions where you</p> <p>22 flipped through pages and said, Aww, there's a bunch of</p> <p>23 pictures, but this one picture he was looking for wasn't in</p> <p>24 there.</p> <p>25 A. I recall that.</p>

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1 Q. All right. I would like to go to something -- right
2 to where the words started, and then they finished and took
3 it down. Do you remember that?
4 A. **I do.**
5 MR. CALDWELL: Can we go right to where the
6 words start, Mr. Diaz, and if you would, just -- really the
7 very first sentence in the whole thing, will you blow that
8 up?
9 BY MR. CALDWELL:
10 Q. What does this document say in the very first
11 sentence of the text?
12 A. **It's an application. It's a continuation application**
13 **file serial number -- filed on August 29, 2008, which is a**
14 **division of the U.S. Patent application serial number --**
15 Q. Slow down.
16 Let me just ask you this: We'll -- I can short
17 circuit it for the court reporter.
18 What does this say about the earlier
19 applications you filed?
20 A. **It says that they're all tied back to that**
21 **provisional application that was filed back in August of**
22 **2004.**
23 Q. And does it say they are incorporated by reference?
24 A. **Yes, it does.**
25 Q. Now, was all of this like the provisional and each

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1 application afterwards, all the way to the '114 and '517 and
2 all of these statements about what's incorporated by
3 reference -- was any of that hidden from the Patent Office?
4 A. **No.**
5 Q. What was the purpose of even typing this text in the
6 first place?
7 A. **My understanding is that -- exactly what it says,**
8 **that provisional is incorporated into this.**
9 Q. And was that sent to the Patent Office?
10 A. **Yes, it was.**
11 Q. All right. Thank you. There was a question, I think
12 it was almost exactly, if not exactly: You didn't invent
13 capturing Section 45 tax credits.
14 Do you remember that?
15 A. **I do remember that.**
16 Q. So are Section 45 tax credits flying through the
17 flue gas at a coal plant, sir?
18 A. **No.**
19 Q. What sort of technologist would you need to be to be
20 an expert in capturing Section 45 tax credits? Do you have
21 any idea?
22 A. **Maybe an accountant.**
23 Q. So let me ask you. Do you think that your patent --
24 your patented technology is useful with the EPA's
25 regulations in place for companies that do want to capture

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1 Section 45 tax credits?
2 A. **Yes.**
3 Q. Why?
4 A. **Because our technology is bromine on the coal and**
5 **activated carbon in the back end, and we have to meet a**
6 **certain MATS standard.**
7 Q. So something I'd kind of like to clarify a little
8 bit: Prior to the MATS standard coming into play in sort of
9 that 2015-ish time frame, could you get away with having a
10 coal plant that let a lot more mercury out into the
11 atmosphere?
12 A. **Yes, up to that point.**
13 Q. So we'll set aside the issue of whether -- you know,
14 what you've got to do to test and claim tax credits. But
15 after MATS came into effect, if you wanted to keep on doing
16 the same thing that you were going to claim tax credits for,
17 what happened to the needs in terms of capturing mercury
18 once MATS came into effect?
19 A. **The need significantly went up. I think the**
20 **credit -- my understanding is 40 percent, on average, would**
21 **have to be meet a 90 percent reduction. So you have a**
22 **significantly reduced capture of mercury.**
23 Q. So even if you could claim, with the IRS, a tax
24 credit because you think you meet 40 percent, how many
25 hundreds of millions of tons of coal are you going to be

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1 selling if you don't meet the 90 percent of MATS once that
2 was a requirement?
3 A. **Zero. You have to meet it. Otherwise you shut down.**
4 Q. Thank you. There was a line of questioning about how
5 you didn't pitch a fit and say, "Somebody is infringing my
6 patent in around 2012." Do you remember that?
7 A. **Yes.**
8 Q. Were either of the patents in this case issued at
9 that point, sir?
10 A. **Yes.**
11 Q. No, the patents that are in this case, the '114 --
12 A. **'114 --**
13 Q. -- and the '517 --
14 A. **-- and '517.**
15 Q. Just make sure we're not talking over each other.
16 I'm sorry. And I probably just asked an unclear question.
17 Was the '114 or the '517 patent issued by 2012?
18 A. **No.**
19 Q. And where were you working in 2012?
20 A. **At the EERC.**
21 Q. Do you remember, in opening, Mr. Sykes showed
22 something -- I think he's maybe shown it since, but it was
23 kind of this path of how you've gotten all these other paths
24 that have issued off of your inventions, sort of splits into
25 a couple different paths?

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1 Remember in opening how I made some reference
2 to -- you know, this happens; right? You do divisionals and
3 continuations, and it happens that you have a long path?
4 **A. Yes.**
5 **Q.** If you claim the bromine and activated carbon
6 invention in the '517 and the '114 after those patents were
7 finally in the hands of Midwest Energy and you guys could
8 control the patent prosecution and you told the Patent
9 Office, "Look back to my provisional," did they tell you,
10 "No way. You can't have a patent"?
11 **A. No.**
12 **Q.** What did they do?
13 **A. I submitted the application to the Patent Office, and**
14 **they issued patents.**
15 **Q.** Thank you. Now, is being able to control patent
16 prosecution part of why ME2C wanted to own the patents
17 rather than have them be at EERC?
18 **A. Yes.**
19 **Q.** Thank you. Could you do me a favor and pull up
20 defendants' Trial Exhibit 297.
21 Do you recall being asked about this meeting
22 agenda?
23 **A. I do.**
24 **Q.** All right. I just want to cut right to that thing
25 that was shown where it's like, "We're going to broaden --"

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1 something about the flue gas. Do you remember that,
2 Mr. Diaz? I think, like, on page 3. Yeah, it's the John
3 notes. Can you call up the John notes?
4 You were asked about this question on cross. Do
5 you remember that?
6 **A. I was.**
7 **Q.** And I inferred the suggestion was that you tried to
8 maybe claim something you weren't entitled to in a patent.
9 I don't know. But let me just ask you is that what you were
10 trying to do, or is that what this is talking about? Did
11 you try to claim something you weren't entitled to in a
12 patent?
13 **A. I guess I don't see that in that statement.**
14 **Q.** Now, I want to direct you to something that you
15 weren't shown. Oh, no. Just keep it up, Mr. Diaz. It's
16 literally the thing right below it where it's in blue and
17 says "Action Items." Can we call that up?
18 What does it say are your action items in terms
19 of investigating what notes you have to confirm the timing
20 of your invention, sir?
21 **A. Looks like we're digging into some prior use of**
22 **calcium bromide.**
23 **Q.** And it says on the third line -- and I'll read it.
24 See if you can find it. It says:
25 "John to find notes --"

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1 No. Next one up, Mr. Diaz. Next sentence up.
2 "John to find notes confirming that this was
3 being practiced in early 2000s."
4 Have you shown us those confirmatory notes in
5 this trial of documenting your test in the early 2000s.
6 **A. Yeah. We went through that quite extensively.**
7 **Q.** Is there even the slightest question in your mind
8 whether you had invented the patented two-step process and
9 documented it almost 22 years ago at this point?
10 **A. Not in my mind. I'm positive we had.**
11 MR. CALDWELL: Thank you, sir. I'll pass the
12 witness.
13 THE COURT: All right. Thank you, Mr. Pavlish.
14 You may step down, and the witness may want to take down the
15 binders as well.
16 THE WITNESS: Take them with me?
17 THE COURT: Yes, you can take them with you.
18 Plaintiff may call its next witness.
19 MR. CALDWELL: Yes, Your Honor. I -- we're
20 going to call a deposition, and my colleague Ms. Dellinger
21 is going to introduce the witness for the Court's guidance.
22 THE COURT: Ms. Dellinger.
23 MS. DELLINGER: Good afternoon.
24 Adrienne Dellinger.
25 Plaintiffs call Ms. Leah Schaatt by deposition.

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1 Ms. Schaatt is going to put forward the CERT's numbers, and
2 she is a CPA and vice-president in charge of the capital
3 aspects of the CERT business. And she will discuss how the
4 refined coal business works, the tax credits generated, and
5 the entities that benefits. The runtime is 3 minutes and
6 48 seconds.
7 (A video was played.)
8 BY THE ATTORNEY:
9 **Q.** Can you please state your name for the record.
10 **A. Leah Schaatt.**
11 **Q.** Ms. Schaatt, what company do you work for?
12 **A. Combustion Emissions Reductions Technologies LLC.**
13 **Q.** Is that oftentimes referred to as "CERT"?
14 **A. It is.**
15 **Q.** Can you tell me what your current position at CERT
16 LLC is.
17 **A. Vice president.**
18 **Q.** Is there any specific division or vice president of a
19 certain part of the company?
20 **A. My official title is vice president and treasurer.**
21 **Q.** Are the refined coal companies operating right now?
22 **A. No.**
23 **Q.** When did they cease operating?
24 **A. Late 2021 starting maybe as early as October and as**
25 **late as -- you know, very close to the end of December.**

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1 Q. So if the refined coal facilities were established to
 2 produce refined coal, why did they shut their doors as soon
 3 as the Section 45 tax credit expired?
 4 **A. The product is not economical without the tax credit.**
 5 Q. Would the refined coal company sell refined coal back
 6 to the power plant for more money or less money than it
 7 purchased the raw coal for?
 8 **A. Generally less money.**
 9 Q. Do any of the refined coal companies make a profit?
 10 **A. Define "profit."**
 11 Q. Do any of the refined coal companies make any money,
 12 have a positive cash flow?
 13 **A. Refined coal companies do not have positive cash**
 14 **flow.**
 15 Q. Why would JPMorgan Chase spend tens of millions of
 16 dollars to purchase an ownership interest in a company that
 17 did not make any money?
 18 **A. They received the benefit of the tax credits that**
 19 **were generated by the refined coal facility that was owned**
 20 **by the LLC that they have a 90 percent ownership interest**
 21 **in.**
 22 Q. So a large refined coal facility that's processing
 23 around 4 million tons of coal per year would generate close
 24 to around \$30 million in tax credits per year; is that fair?
 25 **A. That math sounds right.**

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1 Q. So they generate tax credits also because they
 2 operate at a loss, and the companies that own an ownership
 3 interest in those companies are able to write off those
 4 losses; is that fair?
 5 **A. The partnership rules require those losses to be**
 6 **allocated to the members pro rata based on their ownership.**
 7 **I don't have any visibility in where those losses are used**
 8 **or if they're used in the investor's tax returns.**
 9 Q. I'm going to read that paragraph, and you let me know
 10 if I read it correctly. It says:
 11 "The site host receives all associated
 12 environmental benefits of emissions reduction at no cost
 13 while CERT pays a competitive site host lease rate of
 14 approximately \$1.15 per ton of the refined coal consumed by
 15 the host utility."
 16 Do you see that?
 17 **A. I do.**
 18 Q. Was this typical of the arrangements between the
 19 refined coal companies and the host sites, that the refined
 20 coal company would pay the host site a certain fee per ton
 21 of refined coal that the host utility used?
 22 **A. I don't know if the dollar amount is typical, but it**
 23 **was typical that the utilities were provided with a**
 24 **financial incentive to allow us to operate a refined coal**
 25 **facility on their site.**

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1 (The video ended.)
 2 THE COURT: Okay. There's an exhibit mentioned.
 3 Does the plaintiff want to move the exhibit in?
 4 MS. DELLINGER: Yes, Your Honor.
 5 THE COURT: All right. Is there any objection?
 6 MR. DORSNEY: No objection, Your Honor.
 7 THE COURT: All right. Just for the record,
 8 what was the number of the exhibit?
 9 MS. DELLINGER: 580.
 10 THE COURT: Plaintiffs' 580 is admitted.
 11 (Thereupon, Plaintiffs' Exhibit 580 was
 12 admitted.)
 13 THE COURT: All right. Let me ask plaintiffs to
 14 call their next witness.
 15 MR. MCCARTY: Your Honor, plaintiff calls the
 16 CEO of the company, Mr. Rick MacPherson.
 17 THE COURT: We'll have Mr. MacPherson come
 18 forward and be sworn.
 19 THE CLERK: Please raise your right hand and
 20 state and spell your full name for the record.
 21 THE WITNESS: My name is Richard Allen
 22 MacPherson.
 23 THE CLERK: And can you spell that.
 24 THE WITNESS: Richard, R-I-C-H-A-R-D; Allen,
 25 A-L-L-E-N; MacPherson M-A-C-P-H-E-R-S-O-N.

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1 RICK MACPHERSON,
 2 called as a witness on behalf of the
 3 Plaintiff, was sworn, and testified
 4 as follows:
 5
 6 THE COURT: Mr. McCarty you may proceed.
 7 MR. MCCARTY: Thank you.
 8 DIRECT EXAMINATION
 9 BY MR. MCCARTY:
 10 Q. Good afternoon.
 11 **A. Good afternoon, sir.**
 12 Q. Would you please introduce yourself to the ladies and
 13 gentlemen of the jury.
 14 **A. Sure. My name is -- I go by Rick MacPherson, and I'm**
 15 **the CEO of Midwest Energy Emissions.**
 16 Q. Tell us about the company what kind of company is
 17 Midwest Energy?
 18 **A. Midwest Energy Emissions is an environmental**
 19 **technology company that I started back in 2008, and its main**
 20 **purpose was to be able to continue developing technology to**
 21 **remove mercury emissions from coal fire plants which is what**
 22 **we've gone on to do.**
 23 Q. And what responsibility do you have, sir, as the CEO
 24 of the company?
 25 **A. As the CEO, I'm responsible for everything top to**

1 bottom. Basically I oversee the hiring and the new
2 strategies that we employ and the daily operations of the
3 company.

4 Q. Who are your company's customers?

5 A. Power plants.

6 Q. What do we see on the screen here, sir?

7 A. That's power plants representative of our customer
8 base.

9 Q. What about in the corner there?

10 A. That's our logo -- our company logo. ME2C
11 Environmental is what our brand is.

12 Q. Now, before we get into details, can we learn just a
13 little bit more about you personally?

14 A. Sure. So I'm a Canadian citizen, actually, that
15 started working in the U.S. a number of years ago. I grew
16 up in a small town in Nova Scotia on the east coast, a place
17 called Sydney, Nova Scotia. And I went to school there
18 and -- well, elementary, junior high, high school. And then
19 I went to the main city of the province, Halifax, for
20 university.

21 Q. And are you married? Do you have any kids?

22 A. Yes, I'm married, and I have two children -- adult
23 children. One lives in Mexico; another one in -- just
24 outside of DC.

25 Q. So tell us a bit about growing up in Sydney in

1 Canada.

2 A. Small town, blue-collar town. It was a steel town --
3 steel mill town, and the secondary industry was the coal
4 mine -- coal mining area. So I grew up in a blue-collar
5 town. My dad was a milkman back in the days when they
6 delivered milk door to door to the houses and the
7 universities and the hospitals and things of that nature.
8 So, you know, I worked with him on the milk truck from when
9 I was a young kid. Probably 8 years old or so, I started
10 and worked with him up until I was about 14. We would
11 work -- deliver -- I would help him deliver the milk after
12 school and weekends. And then when I was 14, I took a job
13 actually at a motorcycle place. I was a Harley
14 Davidson/Yamaha mechanic for a few years. Did that before I
15 went off to university.

16 Q. Where did you go to university?

17 A. I went to university at the Dalhousie University in,
18 like I say, Halifax, probably about 200 miles the other side
19 of the province.

20 Q. Did you graduate?

21 A. No, I didn't, no.

22 Q. Tell us about that.

23 A. Well, I was there for about a year and a half, and it
24 was just a little too much theory and not enough work, I
25 guess, for me at the time. So I decided to do into the work

1 field.

2 Q. After leaving university, did you immediately go
3 start Midwest Energy?

4 A. Oh, no. That was not for many years to come, no.

5 Q. And so what did you do at that time?

6 A. So a friend of mine that was -- that I grew up next
7 to in the neighborhood ran the television network in
8 Halifax. So I took a job with that TV network in the
9 advertising department.

10 Q. And were you in advertising for some number of years?

11 A. Yeah. I stayed in it for the better part of 20 years
12 and, you know, moved up as sales manager and then regional
13 manager, that sort of thing. I was actually manager of a TV
14 station there for a while, and that was the years where I
15 was raising my children.

16 Q. So at some point in time, did you kind of get the
17 itch to go off and do something on your own and start
18 something like your dad did with his milk business?

19 A. Yeah. You know, I -- so from a young kid, I always
20 wanted to have my own business type of thing. So I did make
21 plans to leave the corporate business and work -- go into
22 business on my own.

23 Q. And how did you make that first breakaway?

24 A. Well, first, you know, I took every bit of money I
25 was making to raise a family. So I had to do something

1 extra on the side, so I basically started to renovate old
2 houses downtown in Halifax by the university. And I would
3 work through the day and then take the suit off and put on
4 the coveralls and start tearing apart these old houses at
5 nighttime and on the weekends and convert them into the
6 student housing.

7 Q. Were you doing the drywall and the painting and
8 carpentry?

9 A. Yeah, I did it all myself.

10 Q. And --

11 A. I had helpers, of course. I didn't do it all myself.
12 I had -- you know, I hired guys to give me a hand. You
13 can't do all that stuff yourself.

14 Q. The electrical work?

15 A. Yeah, not an electrician and not a plumber, so...

16 Q. Transitioning into that, did you start to think about
17 the environment some more?

18 A. Yeah. Well I had always been thinking about it
19 because as a kid when I grew up in Sydney, we had a steel
20 mill. And so they had coke ovens, and they would produce a
21 lot of pollution. And when they would dump the slag from
22 the blast furnace, it would leave this residue of red stuff
23 in the air. I don't know what it was exactly. But every
24 other morning, I'd have to go clean the cars off so -- or it
25 would eat through the paint.

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1 **So I was kind of thinking about that for a long**
2 **time. And, also, our area, there was a higher-than-usual**
3 **cancer rate, things like that. So it always was in the back**
4 **of my mind that if I could do something in that field, I**
5 **would certainly try.**
6 Q. And this time period in your life, did you begin work
7 in the environmental field?
8 A. **Yeah. So at some point after that, I started to work**
9 **with a local combustion company. I worked with them for a**
10 **couple of years, learning more about what they were doing**
11 **and learning more about the industry as a whole. So I left**
12 **those guys after a couple of years and went pretty much on**
13 **my own to see if I could develop something.**
14 **That's when I went down to the energy**
15 **environment research center in North Dakota because, from**
16 **what I read, they were the best at figuring out**
17 **environmental stuff. They had been in the business since**
18 **the '50s, and one of the oldest coal research facilities**
19 **actually used to be part of the DOE. So I went there to try**
20 **to test some different chemicals and compounds that I had**
21 **come across that I thought might work for (indiscernible).**
22 Q. And did your experience growing up in a coal town
23 kind of make you realize the power and the danger of
24 mercury?
25 A. **Yeah. Well, I mean, it was all -- it was a lot**

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1 **written up on it. And, you know, it's a -- it's a miserable**
2 **toxin that causes all kinds of bad things to, you know, the**
3 **population. You know, toxins for the -- your nervous system**
4 **and goes into the water and fish. So I knew it was**
5 **something that was important to get after. And I knew that,**
6 **because there had been a number of state regulations**
7 **incorporated, that it was only a matter of time before the**
8 **federal government regulated it.**
9 Q. Now, you mentioned, at some point in time after
10 learning about mercury and mercury capture, you went down to
11 North Dakota to work with the EERC. What time period was
12 that, sir?
13 A. **I started working with those guys probably 2007.**
14 **2007, 2008.**
15 Q. And was that a -- kind of a leap of faith for you to
16 go down to North Dakota?
17 A. **Oh, yeah. I mean, I was basically going on my own in**
18 **an unknown situation. So that's always...**
19 Q. And what was your impression of the EERC's expertise
20 when you arrived?
21 A. **Oh, they were top-notch. I mean, they've got, I**
22 **don't know, 2 or 300 people that have been working at that**
23 **stuff for years.**
24 Q. Okay.
25 A. **Folks like John Pavlish, one of the leading people in**

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1 **the world, actually, is in the field. So you know what? As**
2 **I tested with them for about six months, I realized, you**
3 **know, these folks were way ahead of anything I was going to**
4 **bring to the table.**
5 **So I went and sat down with the director of the**
6 **operation there at the time, and I said, "Look, you know,**
7 **you've got all these -- all this know-how and patents and**
8 **stuff developed. But, you know, why don't I see if I can't**
9 **take those to the market?"**
10 Q. You mentioned meeting Mr. Pavlish in this time. What
11 was your impression of Mr. Pavlish?
12 A. **Oh, top-notch professional in the field.**
13 Q. And were there also some regulations that you became
14 aware of at this time?
15 A. **Yeah. So they had been trying to pass a federal law**
16 **to capture mercury emissions for a number of years. And it**
17 **kept getting, you know, bantered around between the power**
18 **plants and the government and the EPA. But it looked to me**
19 **that it was on the horizon of being accepted, so I figured I**
20 **would see if I couldn't go down that road.**
21 Q. After you discovered Pavlish at the EERC and you
22 decided to try to build a business around the technology,
23 did you first have to enter into an agreement with the
24 EERC?
25 A. **Yeah. So after I talked to them, they said yes. You**

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1 **know, their business was to develop and research. They both**
2 **were very good at that, and that's what they knew as their**
3 **business model. So they didn't really know what to do with**
4 **the technologies once they had them developed, and they**
5 **needed somebody like me to be able to take them into the**
6 **marketplace and not only to commercialize them but to**
7 **validate them commercially in the real world, and so I**
8 **started in on that process.**
9 Q. And did you enter into an exclusive license?
10 A. **Yeah. There's an exclusive worldwide license with an**
11 **option the buy out the patents in total at some point if I**
12 **elected to do so.**
13 Q. Will you turn, in your witness binder, sir, to Tab 1?
14 A. **All right.**
15 Q. And do you see a document in Tab 1, PTX 48, sir?
16 A. **Yes, I do.**
17 Q. And, tell me, what is this document?
18 A. **It's the original license between my company and the**
19 **EERC for the technologies.**
20 MR. MCCARTY: Your Honor, plaintiffs move into
21 evidence Plaintiffs' Trial Exhibit 48.
22 THE COURT: Any objection?
23 MR. SYKES: No objection Your Honor.
24 THE COURT: It's admitted.
25 (Thereupon, Plaintiffs' Exhibit 48 was

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1 admitted.)
2 BY MR. SYKES:
3 Q. Looking at the -- is this the original license
4 agreement here on the screen of PTX 48?
5 A. **Yes, I believe it is.**
6 Q. Okay. I see you called out a couple things here. Is
7 that your signature at the bottom?
8 A. **Yes, sir.**
9 Q. And I see the signature is underneath "RLP Energy
10 Inc." What was that?
11 A. **That was just an original name I put on the company
12 when I formed it so that we would have -- you know, just
13 have a company to get things underway. It stands for Rick,
14 Louis, and Patrick, just a couple guys I was working with.**
15 Q. And under the licensing contract with the EERC, who
16 was the licensor at the time at the top there?
17 A. **So that would have been the EERC.**
18 Q. And what were they looking to accomplish through
19 this?
20 A. **Well, as you've got highlighted there, you know, I
21 basically had to commit to really take a good crack at
22 making this commercial and do everything I could to take it
23 from the bench scale to the full scale operating technology
24 that would help the public.**
25 Q. And in the top box there, what does it say is the

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1 desire of the EERC?
2 A. **To have the intellectual property developed and
3 commercialized, as I said for the public.**
4 Q. And the bottom portion, who's the company here?
5 A. **That was my company, RLP at the time.**
6 Q. What are you agreeing to do?
7 A. **I'm agreeing to do everything I could to make sure I
8 can take that technology to market and that it would
9 actually become something that the power plants could use to
10 reduce mercury and would be able to commercialize it in a
11 way to continue its growth throughout the industry.**
12 Q. Under this agreement, sir, did your company own the
13 patents yet?
14 A. **No.**
15 Q. As part of negotiating this agreement, did you
16 negotiate, at some point, for the right or the option to
17 purchase that --
18 A. **Yes, sir.**
19 Q. So you've now entered into this agreement with the
20 EERC, and you've founded the company. Were you then
21 immediately able to go start selling product on the market?
22 A. **Oh, no, no. No. I mean, they had done a great job
23 of, you know, working out how the technology was supposed to
24 work and doing all the testing and stuff like that. But
25 somebody needed to take it to market and get the real-world**

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1 **power plants to actually start and do some testing and see
2 that it actually would work and wouldn't hurt the boiler and
3 that it would capture enough mercury to get them into
4 compliance. Because at that point, if you couldn't get into
5 compliance, you basically have to shut down the power plant.**
6 **So what we were trying to do, then, and did for
7 the next three years before we ever got our first business
8 was go plant to plant as many times as we could and test the
9 technology at the plant with the plant guys overseeing it
10 and the EERC people -- EERC people carrying out all the
11 actual testing and stuff.**
12 Q. So what did you do to take the next step?
13 A. **Oh, this is me here. What I've got behind me here is
14 70-pound totes of mostly bromine.**
15 **So what we would do is we'd receive -- I say we,
16 my son and I. There was three of us actually that did the
17 day-to-day work on this thing for years. It was my wife and
18 my son.**
19 **So my -- my son and I would mix this material up
20 every week before. We started a plant demonstration, we'd
21 get about 50,000 pounds of activated carbon, which is like
22 black soot, and we'd get about 30-, 40,000 pounds of
23 bromine, and then we'd get a bunch of luminance silicates
24 too. We just call it clay.**
25 **And then we would have to hand mix all that**

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1 **stuff in these 70-pound boxes or in these big thousand pound
2 totes. Then we'd have to take it into the plant. I'd rent
3 a little storage space as close to the plant as I could get.**
4 **And then we would bring all this down on
5 trailers and forklift it in and up to usually the third or
6 fourth floor of the power plant in order to be able to feed
7 it.**
8 **So then we would basically feed all day and then
9 mix most of the next day ahead of it, after we got our first
10 load put together. These tests would go for -- anywheres
11 from a month to four months, and then typically it would go
12 seven days a week.**
13 Q. Was it hard work?
14 A. **Yeah, it was hard work.**
15 Q. What are you showing on the screen here?
16 A. **Well, that's just me looking like I'm doing nothing,
17 but I'm just probably doing -- you know, you had to do
18 inspections and stuff every once in a while.**
19 Q. And about what time frame were these pictures taken?
20 A. **2008 to 2012, something like that.**
21 Q. And what are you showing on the screen here, sir?
22 A. **That's one of our portable feed systems that our guys
23 built.**
24 Q. And is your logo there in the corner?
25 A. **Yes, sir.**

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1 Q. Now, you mentioned during this time period of sort of
2 developing the marketplace and products and visiting
3 customer sites, you traveled a lot.
4 What are you showing on the screen here?
5 A. **So this represents some, not all, of the actual
6 demonstrations that were carried out or tests at the
7 different power plants across the country.**
8 **So what we would do basically was pack up our
9 gear. We'd just -- you know, we'd drive a one-ton truck and
10 a 25, 30-foot trailer, industrial trailer, so we'd haul our
11 forklift and all of our odds and ends from plant to plant.**
12 **And then we'd have the material shipped to the
13 storage place that we'd rent near the plant where we'd do
14 our mixing, and then we carried out the testing, all of
15 that -- all of the analytical work would be done by the EERC
16 team.**
17 **So they'd just fly in. They'd set up. They'd
18 do all the analytics on a daily basis. We'd have to feed
19 the plant every day, and in a lot of cases, we'd have to
20 change the mixture so that -- you know, if something wasn't
21 working, we'd have to go back the next couple of days and
22 change it up so that they could try something different.**
23 **So we carried out demonstrations at all these
24 plants pretty steady over the first three years, from 2008
25 until we got our first contract in 2011. We keep going. We**

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1 **kept doing testing after that, but the majority of that work
2 was done until we get that first contract up in Centralia,
3 Washington, the far left pin.**
4 Q. During these years of traveling around the country,
5 did that have a strain on your family?
6 A. **Yeah, but, you know, we made a pact, my wife and I,
7 that we were going to do this as a team, so she came with us
8 most of the time.**
9 Q. Now, after years of traveling and customer site
10 visits, did all that hard work eventually pay off in the
11 form of a paying customer?
12 A. **Yea. So we got our first customer, I like to say
13 Christmas, but it's signed off as January 1, 2011, and that
14 was up -- as I say, up there in Centralia Washington, two
15 big 750 megawatt coal units.**
16 Q. And was the power plant company Vistra an example of
17 an early customer of ME2C in the 2015 time frame?
18 A. **Yes, yeah.**
19 Q. And tell us about that contract.
20 A. **So that was a really great contract. That was our
21 biggest contract to date, 12 boilers in -- in total, and
22 Vistra, still a client of ours today, and what was nice
23 about it as well is we were able to get a couple of their
24 plants in compliance that they couldn't get in compliance.
25 So they had -- and they an option of either**

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1 **cutting back on the output of the plant, or they were going
2 to have to shut it down.**
3 **So our guy's John and his team were able to
4 figure out a way with the chemistry to get them into
5 compliance, so that was very helpful to be able to get that
6 contract, and they were super pleased with us being able to
7 do that.**
8 **And as you can see they awarded us this Nexus
9 Award, which is an award for a company that improves their
10 operations dramatically. It also had to meet a bunch of
11 community standards, which -- which we met at the time, and
12 we still do.**
13 **So that's our history with Vistra.**
14 Q. Now, going back to that license with EERC and the
15 option to purchase the patents later on, at some point, did
16 you exercise that option to acquire the patent rights?
17 A. **Yes, sir, we did.**
18 Q. Okay. I'd like to look at that agreement, sir, if
19 you could turn to tab 2 of your witness binder.
20 A. **I'm sorry, which page?**
21 Q. Tab 2.
22 A. **Okay.**
23 Q. And, sir, what is the document in tab 2?
24 A. **So this is the agreement where we actually moved
25 forward and acquired the patents.**

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1 Q. And did you help work on this agreement sir?
2 A. **Yes, I did.**
3 MR. MCCARTY: Your Honor, plaintiffs move into
4 evidence Plaintiffs' Trial Exhibit 54.
5 THE COURT: Any objection?
6 MR. SYKES: No objection, Your Honor.
7 THE COURT: It's admitted.
8 (Thereupon, Plaintiffs' Exhibit 54 was
9 admitted.)
10 BY MR. MCCARTY:
11 Q. Sir, why did Midwest Energy not just stick with the
12 license but rather chose to acquire the patents outright?
13 A. **Well, we had grown the business well enough that we
14 actually would be paying more in a license fee than if we
15 bought them out. So it just made business sense to buy them
16 out at that point.**
17 Q. Did you also have more control at that point as well?
18 A. **Yeah. I would say, yes, given that we owned it, but
19 the main reason is was it was going to cost us more just to
20 keep paying the license.**
21 Q. As part of this agreement, did the EERC assign all
22 rights of the patents-in-suit eventually over to your
23 company?
24 A. **Yes, sir.**
25 Q. Sir, could you please turn in your witness binder to

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1 tab 3. Sir, have you seen the patent assignment documents
2 in tab 3 before?
3 **A. Yes, I have. Yes, there's a lot of them.**
4 **Q.** And what are these documents sir?
5 **A. These would be filings made with the SEC.**
6 **Q.** Sorry. The patent assignment documents, sir, in
7 tab 3?
8 **A. Oh, okay. Yeah. That is the -- that is the patent.**
9 MR. MCCARTY: And, Your Honor -- or excuse me.
10 BY MR. MCCARTY:
11 **Q.** Sir, these are -- PTX 39 through 47, are these the
12 copies of the assignment records showing assignment of the
13 patents-in-suit eventually to your company, Midwest Energy?
14 **A. Yes, they are, sir.**
15 **Q.** Thank you.
16 MR. MCCARTY: Your Honor, plaintiffs move into
17 evidence Plaintiffs' Trial Exhibits 39 through 47.
18 THE COURT: Any objection?
19 MR. SYKES: No objection, Your Honor.
20 THE COURT: They're admitted.
21 (Thereupon, Plaintiffs' Exhibits 39 through 47
22 were admitted.)
23 MR. MCCARTY: Thank you.
24 BY MR. MCCARTY:
25 **Q.** Now, Mr. MacPherson, back to where we were in the

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1 2014, 2016 time period. Okay?
2 After the success of driving around the country,
3 meeting with customers, and getting new customers, did the
4 business grow?
5 **A. Oh, yes. The business started to grow nicely in**
6 **2014, '15, '16 because the federal regulations started to**
7 **come into play.**
8 **Q.** And did your company's financials begin to grow as
9 well?
10 **A. Yes, sir.**
11 **Q.** Let's take a look at those financials, if you could
12 turn in your binder to tab 4. Are you there?
13 **A. Yeah.**
14 **Q.** And, sir, what are the documents in your binder in
15 tab 4?
16 **A. These are the ones I skipped ahead to last time.**
17 **These are SEC filings.**
18 **Q.** And which years are these filings for sir?
19 **A. This would be '14 -- 2014 through '16, I believe.**
20 **Q.** Thank you.
21 MR. MCCARTY: Your Honor, plaintiffs move into
22 evidence Plaintiffs' Trial Exhibits 358, 359, and 360.
23 THE COURT: Any objection?
24 MR. SYKES: No objection, Your Honor.
25 THE COURT: They're admitted.

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1 (Thereupon, Plaintiffs' Exhibits 358, 359, and
2 360 were admitted.)
3 BY MR. MCCARTY:
4 **Q.** Sir, what are you showing on the screen here?
5 **A. This would be showing the years and the gross revenue**
6 **of the company for those three years, '14, '15, '16.**
7 **Q.** Can you explain what the trajectory is, the growth
8 path for the company at this point in time?
9 **A. Sure. So as we move from the state regulations to**
10 **the federal regulations, our -- our technology really**
11 **started to take off.**
12 **So we had a situation where, you know, our**
13 **testing really ramped up in 2014, and we were starting to**
14 **get paid for it at that time. A lot of the early testing,**
15 **we didn't make any money on.**
16 **So then in 2015, we got some nice contracts**
17 **starting out, and then 2016, we added to -- to that with**
18 **some more contracts.**
19 **So we had a gross revenue in 2016 of over**
20 **\$32 million.**
21 **Q.** Did the company head count -- head count grow as
22 well?
23 **A. Yeah. We -- you know, we went from half a dozen**
24 **people to I think about 30 people at the time.**
25 **Q.** And did you expect at the time that growth trend to

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1 continue on forward into the years that followed?
2 **A. Yeah. I mean, all indications were that we were**
3 **going to continue on that path. You know, and I talked to**
4 **the investment community and tell them, you know, as far as**
5 **I can see, I think we're going to keep going in that**
6 **direction because we only -- probably only had -- probably**
7 **only working at 20 percent of the people that in particular**
8 **use those PRB coals and lignite coals.**
9 **And they really needed our technology in order**
10 **to be able to get into compliance at a reasonable price, so**
11 **I expected, you know, that 32 was going to grow nicely.**
12 **Q.** To what?
13 **A. 60 wouldn't have been out of the question.**
14 **Q.** For the following years?
15 **A. For the next say two years. I would say we'd move up**
16 **closer to 60 than where we were at that point.**
17 **Q.** And, sir, did that growth actually bear out in the
18 years that followed?
19 **A. Oh, not at all.**
20 **Q.** Did the revenues stay stagnant or flat?
21 **A. No, they fell off a bit in 2017. Then they went**
22 **downward from there.**
23 **Q.** What happened, sir?
24 **A. Well, in a nutshell what happened was we ended up**
25 **competing against our own technology. This tax credit**

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1 program was basically out there giving away our technology,
2 and not only that, paying people to take it and providing
3 materials in a lot of cases free of charge that we would
4 typically be mixing up and selling.
5 So we were competing against ourselves and --
6 and had no way to win, and it wasn't like a regular
7 competitions. There's not much you could do about it.
8 Q. Sir, I'd like to talk about that a bit. Was there a
9 law in 2009 that introduced some tax credits for refined
10 coal?
11 A. Yeah. There was this tax credit program called T45
12 that was introduced.
13 Q. And did you expect that tax program from Congress
14 would cause the creation of these refined coal companies as
15 tax vehicles?
16 A. Well, I knew they were doing something with it. The
17 refined coal program's what it turned out to be.
18 Q. How did you first start to learn about these
19 investment vehicles in the refined coal industry as you kind
20 of went along in your -- in your tenure?
21 A. So at the time we had about five sales guys, and they
22 were all doing good, but they -- they start running into it,
23 and really they couldn't sell any more.
24 So they would, you know, come back to me. We'd
25 have meetings, and they'd say, Look, we go talk to this guy

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1 about our technology -- you have to understand most people
2 just had an activated carbon system installed at that time.
3 Once the MATS came along, just about everybody
4 installed a back-end activated carbon system. Very few
5 didn't, especially those that were burning PRB and lignites.
6 So we would focus on those folks, and, you know,
7 starting particularly in 2014, '15, we started -- the sales
8 guys started coming back saying, We just can't sell against
9 this because they don't need our stuff; if they've got this
10 and they don't even need to pay for it, how are we going to
11 sell it to them.
12 So that's kind of what we were up against.
13 Q. Did you also start to do research and investigation
14 to kind of try to understand the scope of the -- of the
15 industry?
16 A. Yeah. I started doing as much research as I could,
17 and, you know, basically I discovered just a whack of
18 companies that weren't really -- you know, they weren't
19 operating like we were as a business.
20 They were just -- I don't know whether you'd
21 call them LLCs or paper companies, so I don't know what you
22 want to call them that were manned by accountants and tax
23 people and lawyers.
24 And they weren't really in the business as
25 such -- as much as controlling these things. We would -- we

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1 would talk to the guys at the plant and told people we
2 wanted to do business with them. They would tell us to talk
3 to head office. We'd do our best to get through to get
4 through to head office. Head office guys that we knew in
5 operations would say that's all in the legal department, and
6 lawyers wouldn't talk to us.
7 Q. Did you also come across investigative reports about
8 the refined coal industry at some point?
9 A. Yeah, there was lots of that stuff, like rooter or
10 routers, however you call them, they wrote articles up about
11 it. There was a -- there was a lot in the news about this
12 tax credit program as it got up and running in the mid
13 teens.
14 Q. Can you please turn to tab 5 in your binder, please.
15 Are you there?
16 A. Yes, sir.
17 Q. What is -- what is generally tab 5, the document
18 there, sir?
19 A. It's just another one of these news pieces like the
20 one I mentioned that talks about --
21 MR. SYKES: Your Honor, we -- we would like to
22 object to this before the witness gets too much into -- I
23 don't know how you'd like us to object.
24 We believe this is hearsay. He's just reading a
25 newspaper article that he didn't write. We object to this

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1 exhibit or the testimony regarding it.
2 THE COURT: Your objection is on hearsay
3 grounds. Mr. McCarty, what's your response?
4 MR. MCCARTY: Your Honor, our first response is
5 that Your Honor's order requires defense counsel to lodge
6 that objection before the witness takes the stand pursuant
7 to Your Honor's pretrial order of February 14, 2024.
8 THE COURT: What portion of the pretrial order
9 says no objections can be made?
10 MR. MCCARTY: Any objection to an exhibit of a
11 witness needs to be made the night before, and it will be
12 waived if not raised and dealt with Your Honor before the
13 witness takes the stand.
14 THE COURT: Are you saying his objection was not
15 raised the night before? I thought it was. I thought I
16 remembered it was raised in the parties' list of disputes
17 that we didn't get a chance to resolve.
18 MR. MCCARTY: Correct. And under your Court's
19 ruling, it needs to be raised and dealt with prior to the
20 witness taking the stand, so that's my first issue, just
21 make sure that I raise that --
22 THE COURT: Just to make sure I understand, the
23 pretrial order requires that the objection be raised. It
24 was raised by the other side. I think we agree on that; is
25 that right?

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1 MR. MCCARTY: Yes, it was raised, sir.
2 THE COURT: And we weren't able to resolve it
3 prior to the beginning of trial today; correct?
4 MR. MCCARTY: It was not resolved; correct.
5 THE COURT: Okay. So I'm going to -- I'm going
6 to entertain the objection, but what's the -- what's the
7 response with regard to hearsay.
8 MR. MCCARTY: We're not introducing this
9 document for the truth of the investigative report. The
10 document is being introduced for several reasons, including
11 the notice of the refined coal industry that -- that the
12 witness had as he went through as part of kind of responding
13 to some of the timeline implications that have been made in
14 opening statements.
15 THE COURT: Mr. Sykes?
16 MR. SYKES: Yeah. We -- we further objected to
17 this in our submission to the Court on 402 and 403 grounds.
18 We just think that this is not relevant. It's chockful of
19 out-of-court statements. They're not particularly relevant
20 to the patent infringement case that's before Your Honor.
21 And this is trying to try Congressional policy,
22 and it's really not our role here to be guessing -- second
23 guessing Congress.
24 THE COURT: Okay. So I'm going to sustain the
25 objection on the grounds that newspaper articles like these

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1 are rarely admitted, absent exceptional circumstances.
2 Indeed they would include hearsay and double
3 hearsay, and I believe at a minimum even if there was some
4 other argument for non-hearsay purpose, Rule 403 would
5 require exclusion.
6 So I'll sustain the objection.
7 MR. MCCARTY: Thank you, Your Honor.
8 BY MR. MCCARTY:
9 Q. Now, as you begin to learn about the refined coal
10 industries, was it your understanding that these companies
11 were environmental technology companies like ME2C?
12 A. **No. The more I looked into it, the more I realized**
13 **they were not like us or other emission control companies.**
14 **They were set up entirely differently and operated**
15 **differently from us and others like us.**
16 Q. At this time in your company's history, were you
17 forced to make some hard decisions about your staff?
18 A. **Oh, yeah. I mean, our business basically fell right**
19 **off. We went from 32 million down to about 8 million. I**
20 **had to lay the sales staff off, cut back on all personnel**
21 **across the board, and cut all our costs out.**
22 **Myself and John and others in the company took**
23 **pay decreases in order to be able to keep things alive.**
24 **So, yeah, drastic changes to the company.**
25 Q. Was that difficult?

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1 A. **Yeah, it was very difficult.**
2 Q. Now, once you gathered more information about the
3 refined coal and the investment LLCs doing business, did
4 you -- did you reach out to those companies and tell them to
5 stop doing what they were doing?
6 A. **Well, we tried, but you really couldn't get ahold of**
7 **anybody. They -- you know, as you might have noticed in**
8 **Mr. Caldwell's display earlier in the trial, they had -- it**
9 **was a hard group to try to figure out, you know.**
10 **As I mentioned, you know, we go to power plants,**
11 **they wouldn't -- they'd put us on the head office. Go to**
12 **head office, they'd refer us to the lawyers to put it all**
13 **together, and then it was really nowhere to go after that.**
14 **It was really very difficult to try to figure**
15 **out who to talk to about it because we were used to, you**
16 **know, carrying out business at the power plants, and so it**
17 **wasn't like they had a big refined coal company that you**
18 **could go to. Most of these places existed just as LLCs with**
19 **operating or overseeing the business of spraying something**
20 **on coal.**
21 Q. Were you here during opening statements?
22 A. **Yes, sir.**
23 Q. Did you hear from CERT that before filing this
24 lawsuit, there wasn't an outreach made through letter in
25 that this lawsuit came out of the blue?

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1 A. **Well, if you talk to anybody that they were working**
2 **with at the power plants or at the head offices, they would**
3 **know that we had been trying to get in touch with them, but**
4 **they're really -- I heard what they said, but I don't think**
5 **that's fair.**
6 Q. Now, there's been some discussion about having to
7 bring some actions against power plant customers of yours?
8 A. **Yes.**
9 Q. Did you have to enforce your rights against some of
10 your own power plant customers?
11 A. **Yeah. I mean, that was really tough, and nobody ever**
12 **wants to sue the people that they're doing business with,**
13 **but we couldn't find any other way to get them to take**
14 **notice, so we had to -- we had to file suit against them.**
15 Q. Did you meet with them?
16 A. **Yes, as soon as I could. You know, we made the**
17 **filing, and then we immediately reached out to them and**
18 **said, Look, we'd rather find a business solution to this.**
19 **Since I started the company, we've always just wanted to do**
20 **business with the power plants.**
21 **So I -- I reached out to them, and it took about**
22 **six months before they sorted through the legal stuff, and**
23 **then I arranged meetings, and I went and saw all of the**
24 **first four that we had involved in the litigation, and we**
25 **settled with every one of them.**

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1 **Every one of them, they sat down with us and**
2 **here's what we had to say, and they all took a license.**
3 Q. Now, did any of those power plants that were part of
4 this eventually become customers again or for the first
5 time?
6 A. **Yeah. So the power plants, which is great for us --**
7 **I mean, we did a license with them, but that was only part**
8 **of it, you know. The biggest part for us in getting a**
9 **license with those folks was to be able to sell them**
10 **products because that's what -- that's where we do most of**
11 **our business.**
12 **So in all of the cases that we have licenses**
13 **with power plants, we actually have a supply side to it, and**
14 **our biggest client right now is the first ones that we had**
15 **sued that did a license with us, and now they're our best**
16 **clients in terms of product supply.**
17 Q. Is the deal like you just described with power plant
18 customers something that you would negotiate with a refined
19 coal company?
20 A. **No, totally different business model.**
21 Q. Have you also struck some licensing deals, however,
22 with refined coal companies?
23 A. **Yes, sir.**
24 Q. How many patent licenses have you entered into with
25 refined coal companies as opposed to actual power plants?

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1 A. **Two of them so far.**
2 Q. And did you structure the licenses with the refined
3 coal companies in the same way that you structured the
4 customer power plant licenses?
5 A. **No, not at all. No.**
6 Q. Okay. Can you explain why not?
7 A. **Well, as I mentioned, you know, the CERT crowd, they**
8 **were -- they're not in the same business as a power plant,**
9 **and so there's -- there is not -- was no chance of supplying**
10 **them.**
11 **So what we did with the power plants was did a**
12 **license and then a supply addition to that license.**
13 **With the CERT folks, we did a license with them**
14 **for the use of the technology while they were selling**
15 **refined coal.**
16 Q. Let's have a look at those agreements, if you could
17 turn, sir, in your binder to tab number 6.
18 A. **Yeah.**
19 Q. There's two documents in here. The first document is
20 PTX 766, which has been admitted into evidence, and the
21 second document I want you to look at, sir, is PTX 763. If
22 you could pull that up.
23 A. **Okay.**
24 Q. And what is PTX 763, sir?
25 A. **763?**

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1 Q. It should be the second document in Tab 6?
2 A. **That's a license between Midwest Energy and one of**
3 **the CERT companies Alistar Enterprises.**
4 Q. Thank you.
5 MR. MCCARTY: Your Honor, plaintiffs move into
6 evidence Plaintiffs' Trial Exhibit 763.
7 THE COURT: Any objection?
8 MR. SYKES: No objection, Your Honor.
9 THE COURT: All right. It's admitted.
10 (Thereupon, Plaintiffs' Exhibit 763 was
11 admitted.)
12 BY MR. MCCARTY:
13 Q. Are these documents on the screen, 766 and 763, sir,
14 the contracts that you entered into with the refined coal
15 companies?
16 A. **Yes, they are.**
17 Q. Let's look at the first document, 766. Who are the
18 parties to this agreement, sir?
19 A. **That was Midwest emissions and our corporate company**
20 **and AJ Gallagher and Detroit Edison.**
21 Q. Are these companies power plants?
22 A. **AJ Gallagher is a CERT company -- refined coal**
23 **company. I'm sorry. Not CERT, of course. Refined coal**
24 **company. And DTE is a refined coal company.**
25 Q. How much did these refined coal entities pay ME2C

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1 under this agreement?
2 A. **They paid us \$27.5 million.**
3 Q. And did you give these companies a discount?
4 A. **Yes, sir, indeed we did.**
5 Q. Why would these companies get a discount?
6 A. **Well, first off, they were the first ones to come to**
7 **the table and recognize that we were valid and that we were**
8 **owed something. And so we gave them a discount based on**
9 **being the first ones to come forward and settle with us.**
10 **Secondly, you know, all of the power plants that**
11 **are still out there that we need to try to do more business**
12 **with would look at this settlement, I would think, and see**
13 **the validity of what our claims are.**
14 **And last but not least, you know, I've been at**
15 **this for 15 years now. And, initially, a lot of friends and**
16 **family invested in this with me. And I wanted to make sure**
17 **that we had enough of a win under our belt that we would be**
18 **able to keep growing.**
19 Q. Now, there's another agreement at PTX 763. Who are
20 the companies to this agreement, sir?
21 A. **This is actually one of the CERT operators which is**
22 **why I got mixed up. This is the Alistar Enterprise LLC.**
23 **These are all LLCs, and these are the second guys that**
24 **settled with us.**
25 Q. Did you give Alistar the same discount that you gave

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1 the other refined coal companies?

2 **A. Not on a per-ton basis, no. We charged them a dollar**

3 **a ton for every ton of refined coal that they burned but**

4 **just, of course, from the time we filed the suit. So we**

5 **charged them a dollar a ton. They agreed with that, and**

6 **they paid it.**

7 **Q.** And what do you understand to be the request for

8 damages in this case, sir?

9 **A. I think it would only be fair if we got a dollar a**

10 **ton for each ton of refined coal that they burned from the**

11 **time at least from when we filed suit. So a dollar a ton is**

12 **what I would like you folks to look at as being a fair**

13 **settlement as we go forward.**

14 **Q.** Now, before we conclude, are you aware whether or not

15 the CERT companies at issue in this case are still operating

16 in the market at the power plants?

17 **A. I don't think so. I think when the tax credit thing**

18 **was finished, they just packed up and either turned over the**

19 **equipment, maybe sold it, maybe just idled it in case**

20 **another one of these tax programs comes along. I don't see**

21 **CERT operating any environmental efforts in the country**

22 **anymore.**

23 **Q.** Now that CERT is out of the market, from your vantage

24 point, has business started to pick up, sir?

25 **A. Yes, it has started to come back.**

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1 MR. MCCARTY: Thank you for your time.

2 THE WITNESS: Thank you.

3 THE COURT: Thank you. All right.

4 Cross-examination.

5 MR. HITCH: May I approach the witness, Your

6 Honor?

7 THE COURT: You may.

8 MR. SYKES: May I proceed, Your Honor?

9 THE COURT: You may, Mr. Sykes.

10 EXAMINATION

11 BY MR. SYKES:

12 **Q.** Mr. MacPherson, Paul Sykes. You and I have met two

13 or three times.

14 **A. Yes.**

15 **Q.** And I learned something today. I knew you were

16 Canadian, but I didn't know you grew up in Nova Scotia. And

17 I have this funny dog that's a Nova Scotia toller. Have you

18 ever come across --

19 **A. Little red toller, yeah. The red --**

20 **Q.** He's a little toller raised in Nova Scotia, so

21 somebody finally knows what kind of dog I have.

22 Mr. MacPherson, we'll start kind of where you

23 left off about the Alistar case. And as you said, you had a

24 damages claim against Alistar for all the tonnage they had

25 sold since the beginning -- since you filed the lawsuit.

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1 And I just wanted to show you -- if we could put

2 it up on the screen, Mr. Brown.

3 Do you recognize that this is -- this was ME2C's

4 pretrial damages claim against Alistar right here just

5 before the last -- just a few months ago in November 2023.

6 I believe this document ME2C filed with the Court in late

7 October 2023, so just a few months ago.

8 And if you can see, the refined coal tonnage at

9 ME2C represented its claim was for was 1.424,924 tons -- so

10 a million and 424 tons for a damages award of -- at \$1 a ton

11 of \$1,424,924. Do you see that?

12 **A. I see that, sir.**

13 **Q.** Yeah. And so that settlement was actually for

14 \$107,000, wasn't it?

15 **A. I believe it was just over 100,000, yes.**

16 **Q.** Yeah, 107,000. So \$107,000 divided by 1.4 million,

17 well, that's not dollars. That's about \$0.08 a ton, isn't

18 it?

19 **A. I'm not privy to the exact math on this article**

20 **you're showing me, sir. But your math is correct. I just**

21 **don't know if it's represented correctly here.**

22 **Q.** You just don't know if this was actually what your

23 company that you're the CEO of filed with this Court and

24 represented to the Court was its damages award based upon

25 its statement that this was out of the expert report of

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1 Philip Green, Docket Entry 547 and other citations?

2 **A. If they submitted it, then it must be accurate.**

3 **Q.** It might be accurate?

4 **A. Must.**

5 **Q.** Must be accurate. Okay. We will work on getting

6 this document into evidence. If we could...

7 So just to review, the Alistar settlement

8 agreement you're pointing to is \$107,000 which you said was

9 a dollar a ton. And the actual claim in the case was

10 1.4 million tons. Works out, as you agree, to a lot less,

11 about \$0.08 a ton.

12 Okay. And are you aware of what the damages

13 claim was against the other defendants that you referenced

14 that you gave a discount to?

15 **A. Not off the top of my head sir, no.**

16 **Q.** And I think, just to try to finish up these license

17 agreements, you testified about them before, the NRG/Talen

18 agreements. And you testified, I believe, that the

19 licensees -- they represented a -- as far as you were

20 concerned, a -- ME2C considered those license payments in

21 those agreements a fair price for their use of ME2C's

22 technology at the power plants?

23 **A. Those license agreements I signed thinking they were**

24 **a good fair price given the completeness of the agreement,**

25 **yes, not just the license itself.**

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1 Q. Okay. And the power plants actually perform the
2 two-step process, as you guys call it; right?
3 A. **If they have a license from us, yes.**
4 Q. But I'm saying that they have the -- they're burning
5 the coal -- combusting the coal and then, downstream,
6 treating the flue gas with the activated carbon?
7 A. **Upstream, sir, they would be adding some halogen,**
8 **yes.**
9 Q. But just the point I'm trying to make is the power
10 plants do perform the two-step process, according to you
11 guys?
12 A. **I'm sorry?**
13 Q. The power plants perform the two-step process from
14 your perspective when they use your --
15 A. **The licensed ones do, yes.**
16 Q. And, Mr. MacPherson, you're CEO of the company; and I
17 believe you testified you're the founder. You're also the
18 largest shareholder; correct?
19 A. **Correct.**
20 Q. And about what's -- do you know how many shares you
21 have in the company?
22 A. **I have about 12 million shares and about 3 or**
23 **4 million offshoots.**
24 Q. And what percentage ownership do you have?
25 A. **Well, I started out with a hundred, but I'm down now**

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1 **to probably about 15.**
2 Q. But it's fair to say that you have a financial stake
3 in the outcome of this?
4 A. **Of course.**
5 Q. Just to -- just to recap a couple of things, PTX 48,
6 that was the ME2C EERC license agreement from 2009.
7 A. **Which one was it?**
8 Q. It's been admitted as PTX 48.
9 A. **48?**
10 Q. Yeah. So it would be -- there you go. And this was
11 the agreement that your company at the time, RLP Energy,
12 signed with EERC to license the EERC's mercury control
13 portfolio. And then some years later after the license
14 agreement ran, you guys exercised your option to buy those
15 patents?
16 A. **That's correct.**
17 Q. So that exclusive license to those patents and patent
18 applications, that's a very important asset to ME2C to what,
19 at that time, was sort of a young, starting-up company?
20 A. **Yes, sir.**
21 Q. And you considered those to be quite valuable to your
22 business?
23 A. **Well, they had great potential value, yes, sir.**
24 Q. And later in 2017, you purchased the EERC patents
25 outright for \$2.5 million cash and about \$900,000 or so in

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1 stock for a total of about 3.4 million. Does that sound
2 about right?
3 A. **That sounds about right.**
4 Q. In 2017 when you made that purchase, you considered
5 that \$3.4 million price to be a fair price for the patents
6 that you were buying from a public research institute like
7 the EERC?
8 A. **At that time in our development, yes.**
9 Q. I'm just going to transition for a second to just
10 your -- just a bit about your products, and then we'll get
11 maybe a little bit -- cover some things about your business.
12 So I think, as we established previously, ME2C
13 sells products it considers to be covered by one or more of
14 its patents; right?
15 A. **Yes, sir.**
16 Q. And I think you told me that -- told us that your
17 first contract to sell those products was in 2010. So it's
18 been selling mercury control products for about 14 years,
19 something like that?
20 A. **Actually, it was in January 2011, but yeah.**
21 Q. Yeah. Christmas 2010/January 2011?
22 A. **Yeah.**
23 Q. 13 years. So -- and when ME2C sells its patented
24 products to power plant customers, that sale includes a
25 license to the power plant to use those products to perform

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1 the two-part process?
2 A. **Yes. So the license -- you get the license a couple**
3 **of different ways. One, either we're supplying you and you**
4 **get a license as a nominal fee; or you buy a license in**
5 **order to use the system of the patented process, and you may**
6 **or may not buy a product from us.**
7 Q. So from -- you had exclusive license to the patents
8 in 2010 to 2017, and you've owned the patents since 2017 to
9 the present. You've been selling your patented products the
10 whole time period. And during that entire time frame from
11 2010 to the end of 2021 and up through today, has ME2C --
12 it's not received a single Section 45 tax credit in
13 connection with those sales, has it?
14 A. **No. That was never our business.**
15 Q. So the amount of Section 45 tax credits that ME2C has
16 gotten from the use of its products is zero?
17 A. **I'm sorry, sir?**
18 Q. The amount of Section 45 tax credits ME2C has
19 received from the sale of its patented products or practice
20 of its patents is zero?
21 A. **From the T45 program, you mean?**
22 Q. Yes.
23 A. **Yeah, no, of course. No, nothing.**
24 Q. How many -- I want to shift gears and kind of talk a
25 bit about your business and a bit about the evolution, some

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1 of the things we talked about -- or you guys talked about on
2 direct.
3 Mr. MacPherson, you have in your notebook --
4 flip over to -- starting at DTX 372, I've got some 10-Ks.
5 Let's see. The first one, 372, 373, 374 I think are in the
6 record. So let's flip over to 375.
7 **A. Sir, which of these binders am I looking at?**
8 **Q.** You should be looking at the black one.
9 **A. The big black one?**
10 **Q.** The big black one. And if you flip to about the
11 middle of it, you'll see it labeled "DTX 375."
12 **A. Yeah.**
13 **Q.** And that's your 10-K for the year ending 2017;
14 correct?
15 **A. Yeah.**
16 **Q.** And then the next one in your binder, DTX 376, is
17 your 10-K for the year ending 2018?
18 **A. Yes, sir.**
19 **Q.** And then your next one, DTX 377, is your 10-K for the
20 year ending 2019?
21 **A. Mm-hmm.**
22 **Q.** And the next one, 378, is your 10-K for the year
23 ending 2020?
24 **A. Yes, sir.**
25 **Q.** And 379 is your 10-K for the year ending 2021?

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1 **A. Yes.**
2 **Q.** And you're a CEO. You sign off on these reports?
3 **A. Yes, sir.**
4 MR. SYKES: I move to admit DTX 376 through 379.
5 THE COURT: Any objection?
6 MR. MCCARTY: No, sir.
7 THE COURT: They're admitted.
8 (Thereupon, Plaintiffs' Exhibit 376 through 379
9 was admitted.)
10 BY MR. SYKES:
11 **Q.** Let's just look at 376. It's the one for the year
12 ending 2018. This is the first page filed with the
13 Securities and Exchange Commission. And if we just jump
14 down to the end of it -- page up one more time.
15 **A. Do you mean the back page, sir?**
16 **Q.** The back page -- it's actually next to the last page.
17 It may be easier just to see it on the screen. That's for
18 you as the CEO. You signed off on the accuracy of the
19 report?
20 **A. That's right, sir.**
21 **Q.** And I know you're not a lawyer and certainly not a
22 securities lawyer, but you understand that when it's
23 referencing Section 13 and 15 of the *Securities and Exchange*
24 *Act of 1934* that you're certifying the information is true,
25 and you're not omitting information that would make this

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1 report misleading about information it's describing?
2 **A. Yes, sir.**
3 **Q.** So let's get back to -- let's look at about page 5,
4 if we can.
5 **A. Which year, sir?**
6 **Q.** We're on -- we're on DTX 376, the same...
7 And there's the heading "Regulations and
8 Markets." Do you see that?
9 **A. Yes, sir.**
10 **Q.** And then there's the sort of second large paragraph,
11 and you're describing -- we kind of just view the company as
12 describing these MATS regulations we talked about. Kind of
13 went in or promulgated, as lawyers say, in 2011.
14 And this is now -- you filed this for the year
15 in 2018, and you said at the time that MATS was promulgated
16 in December 2011, there were approximately 1,250 coal-fired
17 BTUs affected by the rule. Since that time, such EGUs have
18 been shut down as a result of this regulation. Did you see
19 that?
20 **A. Yes, sir, I do.**
21 **Q.** And they've been shut down as a result of the MATS
22 regulations. And, also, they've been shut down due to the
23 competitive disadvantage of newer gas-fired EGUs. Do you
24 see that?
25 **A. Mm-hmm.**

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1 **Q.** And a newer gas-fired EGU would be a natural gas kind
2 of equivalent to an employer?
3 **A. Yes, sir.**
4 **Q.** And then you say at the end of 2018 there's 450
5 coal-fired EGUs remaining in the power market. So EGU,
6 electrical generating unit?
7 **A. That's correct.**
8 **Q.** Okay. So sort of contrary from sort of being set on
9 an expected glide path of MATS making the market buy your
10 product, it actually -- what you saw was your customer base
11 decrease from 1,250 to 450. That's about a two-thirds drop
12 in seven years as a result of MATS itself and then -- and
13 then natural gas; right?
14 **A. No, that's not right.**
15 **Q.** That's not what it says?
16 **A. Well, that might be what it says, but that's not what**
17 **happened in the real world.**
18 **Q.** All right. Well, you swear that this is true and
19 accurate, and this is something the investing public is
20 entitled to rely on; right?
21 **A. No, sir. I'm just suggesting here that it's reduced**
22 **and that there is a risk. However, what actually happened**
23 **was a lot of consolidation happened, and those plants that**
24 **remained open burnt more coal.**
25 **Q.** We went from 1,250 to 450 from 2011 to --

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1 **A. Yes, that's true. That's a true statement.**
 2 **Q.** And you attributed that to the MATS regulation itself
 3 and natural gas?
 4 **A. That's why they used the number, yes, sir.**
 5 **Q.** Let's look at page 9, if we can. Let's take a look
 6 under the heading "Competition," and here you identified
 7 Cabot, Albemarle, Carbonxt, and a number of others as your
 8 competitors; right?
 9 **A. That's right.**
 10 **Q.** And what makes these companies your competitors is
 11 they sell activated carbon as a commodity?
 12 **A. Yes, they sell activated carbon. That's what they**
 13 **do, yeah.**
 14 **Q.** And these are pretty sizable companies, aren't they?
 15 **A. Yes, sir.**
 16 **Q.** I mean, some of them are international, I would
 17 think?
 18 **A. Yes, they are.**
 19 **Q.** And then your next statement is:
 20 "They have employed large sales staff and are
 21 well positioned in the market."
 22 Right?
 23 **A. That's correct.**
 24 **Q.** And then you end the statement -- the paragraph, "You
 25 guys have better technology," which I'm sure you believe.

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1 And then say:
 2 "With our experienced team of sales and
 3 technical staff, we can compete effectively."
 4 Right?
 5 **A. That's correct.**
 6 **Q.** And just to make a point here, when you are required
 7 to identify your competition or when you did identify your
 8 competition certified as true, certified as not omitting
 9 anything that would make this misleading, you didn't list
 10 refined coal or Chem-Mod or the CERT companies in your
 11 statement of competitors, did you?
 12 **A. No, we didn't, sir.**
 13 **Q.** And this was for the year ended 2018. I believe this
 14 to be filed in about April 2019; right? Does that sound
 15 about right?
 16 **A. I don't know what the file date is, but most likely,**
 17 **yes. We didn't -- this is what we filed for that return.**
 18 **Q.** Yeah. The way it works is you have to get to the end
 19 of the year, close your books out, work with accounts and
 20 the lawyers, and it takes a few months to file the 10-K.
 21 **A. Correct.**
 22 **Q.** And so probably spring 2019 for the one ending
 23 December 31st, 2018?
 24 **A. Usually about mid April.**
 25 **Q.** Okay. Anyway, the lawsuit was filed mid July that

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1 year?
 2 **A. Yes, sir.**
 3 **Q.** So four years before the lawsuit, you didn't identify
 4 refined coal or CERT or Chem-Mod as your competitor, did
 5 you?
 6 **A. No, sir.**
 7 **Q.** Let's look at page 10, the next page. And this
 8 Item 1(a), "Risk Factors." That's a required disclosure.
 9 You've got to tell the investing public of various risks
 10 your business might be subject to in its market; fair?
 11 **A. Yes.**
 12 **Q.** And so there are a lot of them, and companies always
 13 list this. It's not unusual to have a list of risk factors
 14 for any company, from you guys to some large tech company;
 15 right?
 16 And so we look over on page 11, and you have
 17 a -- first of all, you talk about your industry being highly
 18 competitive. Do you see that?
 19 **A. Yes.**
 20 **Q.** And there again you list Cabot, Calgon, Albemarle,
 21 and others and then the additional statement about their
 22 large sales staff and the need to maintain your sales staff
 23 to compete with them; right?
 24 **A. That's correct, sir.**
 25 **Q.** All right. And then two headings down, you list as a

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1 risk factor that you depend upon third party suppliers for
 2 materials to implement your technology?
 3 **A. Yes, sir.**
 4 **Q.** And you note that you buy your raw materials -- that
 5 would be like activated carbon -- for mercury removal
 6 technology from third-party suppliers?
 7 **A. Yes, sir.**
 8 **Q.** And those third-party suppliers, at least some of
 9 them, would be Cabot or Calgon or Albemarle or those type of
 10 companies?
 11 **A. That's correct.**
 12 **Q.** So you're buying your raw materials, your carbon,
 13 from your competitor?
 14 **A. That's correct.**
 15 **Q.** Okay. And do you have any reason to believe that
 16 your competitors are giving you a sweetheart deal on the
 17 pricing of the carbon?
 18 **A. No. They treated us like a customer. Actually, now**
 19 **that you mention it, Cabot is our biggest supplier and they**
 20 **still are today, and we do good business with them as our**
 21 **supplier. NOR is actually the company that handles it.**
 22 **Q.** And the utilities, that's your customer utilities;
 23 right?
 24 **A. Yes, the power plants.**
 25 **Q.** And I think you said they're pretty big entities

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1 also?

2 **A. Yes, they are, sir.**

3 **Q.** And you might have a power plant that's owned by a

4 parent company like Vistra and NRG, and they cover one or

5 two states?

6 **A. Yes, sir.**

7 **Q.** And the -- I guess you probably are familiar that

8 sometimes the power plants -- individual power plant is a

9 subsidiary of the parent?

10 **A. Yeah. Most of them have a direct relationship with**

11 **the -- with the parent.**

12 **Q.** And the parent utility like Vistra or NRG, it

13 exercises control over its subsidiaries by negotiating bulk

14 agreements or products and services related to mercury

15 control; right?

16 **A. Not always. Sometimes we put a deal together with**

17 **the plant itself, but that could go the other way, too,**

18 **where the parent company could buy. Let's say what happens**

19 **is we add new plants to -- you know, you might have a fleet**

20 **of power plants and might get one of them. So you just deal**

21 **with that plant. And then if you go to get more of them,**

22 **you might have to go back to corporate and make a**

23 **presentation to get more of the plants.**

24 **Q.** But the parents -- it's fair to say the parent

25 companies -- they negotiate and influence the decisions of

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1 their -- of their subsidiary and individual power plants as

2 to where they're going to buy things like activated carbon

3 or emission control products; is that fair?

4 **A. Not necessarily. Again, sir, to a degree, they do.**

5 **But a lot of cases, they don't want to get in front of the**

6 **guys operating the plant in case they, you know, don't buy**

7 **the right stuff or --**

8 **It's not just a matter of negotiating for price,**

9 **which is what the accountants in the head office would do.**

10 **The guys at the plant know really what needs to be bought.**

11 **And so in a lot of cases, we deal with the plant or**

12 **alongside the head office.**

13 **Q.** Mr. MacPherson, you -- as CEO, you authorized the

14 filing of the complaints in this lawsuit; correct?

15 **A. Yes, sir.**

16 **Q.** And you believe that what ME2C alleged in its

17 complaints -- you believe that those were true allegations,

18 didn't you?

19 **A. Of course.**

20 **Q.** And I just want to draw your attention to the first

21 amended complaint filed in this case. It's Docket

22 Entry 130. And if we can, let's take a look at it.

23 **MR. MCCARTY:** Your Honor, may I approach real

24 quick? I'd like to lodge an objection, but I think we need

25 to do it at sidebar.

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1 **THE COURT:** The parties can come to the sidebar.

2 (Thereupon, a discussion was held at sidebar.)

3 **THE COURT:** What's the nature of the objection?

4 **MR. MCCARTY:** It's a concern I have about MIL

5 number 2 for a new drop claim, dropped parties, dropped

6 patents, dropped issues. It's the motion in limine that my

7 colleague, Mr. Caldwell, mentioned before lunch.

8 I think it was the complaint that was put up has

9 a bunch of parties that I'm assuming are no longer an issue,

10 and it looked like we filed against the parties that have

11 now been dropped.

12 I don't know where the line of questioning is

13 going, but given the Court's guidance this morning, I wanted

14 to raise it and make sure exact wording -- getting into

15 things like you had a bunch of patents-in-suit that you

16 dropped, had a bunch of parties and they're dropped.

17 That's very prejudicial, and I believe it's

18 covered by the MIL, and we shouldn't be going there.

19 **THE COURT:** What's your response?

20 **MR. SYKES:** We're not getting into that sort of

21 questioning on this, Your Honor. There is an allegation

22 that he just said he believes is true, that the utilities --

23 the parent utilities control the decision making and

24 exercise veto power over the power plant's decisions to

25 purchase activated carbon.

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1 And that goes directly to the causation issue in

2 this case, who was making the decision, who was causing the

3 utility power plant to buy activated carbon.

4 **THE COURT:** I'm not sure I understand. So we're

5 using the complaint that was filed to address an issue that

6 relates to who is causing the power plants.

7 **MR. SYKES:** It's their allegation, and he just

8 said was true -- a true statement, and it just explains what

9 they've actually said is the decision making chain of

10 command on buying -- makes decisions and purchasing

11 activated carbon.

12 **THE COURT:** Just to step back, I'm not sure you

13 answered my question, or I didn't ask it well.

14 The purpose for which this portion of the

15 complaint is going to be used is -- relates to demonstrating

16 why power plants or how or what causes them -- I'm not sure

17 I understand. What's the purpose for which you're

18 attempting to use this portion of the complaint?

19 **MR. SYKES:** The first purpose is just to plain

20 straight up impeachment his testimony, that he said they

21 don't necessarily control. They allege the opposite.

22 **THE COURT:** They don't control? I'm not

23 following.

24 **MR. SYKES:** The utilities don't control.

25 **THE COURT:** The power plants?

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1 MR. SYKES: You typically have the parent entity
2 in the utility, and it owns the power plants, and what their
3 allegation -- they say is true is that the utility controls
4 the power plant's purchases of activated carbon, that they
5 negotiate and influence those decisions and exercise veto
6 power over those decisions.
7 THE COURT: Utilities like your clients are
8 talking about?
9 MR. SYKES: Like Vistra. The allegation in the
10 case is that we, CERT, are causing the power plants to
11 buy -- we're controlling and causing them to buy activated
12 carbon, and we somehow encourage them, or that we're part of
13 that decision making chain.
14 And this just undercuts that.
15 THE COURT: Encourage them to perform the
16 methods in the patents, that's the allegation?
17 MR. SYKES: Right. You have to buy the
18 activated carbon in order to perform the methods.
19 THE COURT: To use it, okay.
20 So I understand that's the allegation in the
21 case. You said you're using this to impeach his testimony?
22 MR. SYKES: Just because we -- yeah. I mean,
23 he's saying something different than ME2C has represented to
24 this Court to be the truth.
25 THE COURT: I'm not totally sure I'm following,

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1 I'm sorry.
2 MR. DORSNEY: He testified that those
3 controlling entities don't actually have control over the
4 power plants is what he testified, and in the complaint it
5 says the opposite of that.
6 THE COURT: He testified that the controlling
7 entities meaning the entities.
8 MR. DORSNEY: The utilities do not have control
9 over the power plants.
10 THE COURT: Did he testify to that?
11 MR. SYKES: Yeah, yes.
12 MR. DORSNEY: I think that's the part you were
13 missing.
14 THE COURT: The plaintiff says different.
15 MR. MCCARTY: I don't have realtime, so I can't
16 confirm exactly what he testified to. I'm pretty sure he
17 said in some instances when he did -- the reason I came up
18 here is I don't understand why we have to get into the first
19 amended or second amended complaint.
20 That's only going to dredge up issues of why was
21 that one dismissed or why was that one dropped, why are we
22 going back to an allegation from 40 years ago, which parties
23 and experts and witnesses are talking about things going on
24 now based on the record the --
25 That's a MIL concern I have. He's entitled to

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1 impeach a witness, but I don't think he needs to get into
2 this complaint.
3 THE COURT: It seems like it may not be on the
4 question of -- was that a first complaint. That issue is
5 not going to come out in a way in terms of the issues with
6 regard to the other side's knowledge.
7 MR. MCCARTY: It's unclear whether they're even
8 making that argument. So far they haven't put on their
9 evidence yet.
10 THE COURT: In any event, to the extent that
11 defendant believes that the witness said something about an
12 overarching entity's ability to control a power plant and
13 believes there's a statement -- particular statement in the
14 complaint that might be impeachment material doesn't seem
15 like that's getting into an issue.
16 Let's not go into dropped claims and patents and
17 entities.
18 By the way on that front, I do want to say I
19 think one of Mr. Sykes's response to that was the MIL was
20 entered back in November, and the '147 got dropped later.
21 The MIL would control, and if we agree there's not going to
22 be references to dropped claims, they can come afterwards
23 and say that MIL applies.
24 I want to make that clear for the record.
25 MR. DORSNEY: For the record I want to say that

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1 the actual transcript will come close to something along
2 what my colleague said, not in all instances, but in some
3 instances the power plant is not controlled by the --
4 THE COURT: That's just a question about -- so
5 I'm going to overrule the objection to the extent there is
6 an objection because I'm not sure that the plaintiff has
7 pushed an objection.
8 I understand the plaintiffs' larger concern
9 which is it doesn't want to get into something that would
10 clearly violate the spirit or letter of the MIL number 2.
11 Mr. Sykes, I do want to say we've got to do this
12 because it's going to be hard for the court reporter. It's
13 been happening a lot. When I'm speaking, you can't be
14 speaking. You can't try to interrupt me when you're
15 speaking. It really makes it difficult.
16 I'm finished speaking now.
17 MR. SYKES: My apologies.
18 On the MIL issue, what I said before which is
19 inartfully stated that was -- there was -- the MIL was to
20 not reference dropped claims and discovery disputes and that
21 kind of stuff.
22 And defendants agreed to that and said we
23 were -- really two points in dispute, and that's laid out in
24 Your Honor's order.
25 So at the time that the defendants made an

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1 agreement to the scope of the MIL, '147 patent was in the
2 case.
3 THE COURT: I'm sorry to interrupt you. I'm
4 saying the argument is not in there. It's not in there
5 because once we agree to the case that I ordered that we
6 won't reference dropped claims, the claim gets drops and
7 that applies to -- it doesn't matter that he dropped it.
8 Does that make sense unless there's a carveout
9 here for exceptions, if it falls into it, that's fine, but
10 this control as to dropped claims, I'm not sure anymore that
11 we're addressing the objection, so I want to get back to our
12 testimony.
13 Thank you.
14 (The discussion at sidebar ended.)
15 THE COURT: So with the objection overruled,
16 we'll ask plaintiffs' counsel -- or defendants' counsel to
17 please repeat the question and move on.
18 MR. SYKES: Thank you, Your Honor.
19 Mr. Brown, if you could pull up DI 130. Let's
20 just jump down to paragraph 201.
21 THE COURT: I'm sorry, Mr. Sykes, this is not an
22 exhibit that's been admitted, so does the witness have a
23 copy of it? Take it down, Mr. Sykes. We talked earlier
24 about in general documents aren't exhibits yet.
25 MR. SYKES: Your Honor, may I approach?

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1 THE COURT: You may approach.
2 MR. SYKES: May I approach the witness?
3 THE COURT: You may.
4 BY MR. SYKES:
5 Q. So if we could turn to the tab in the document that's
6 entitled first amended complaint in the most recent binder.
7 A. **Sorry, sir. What was it you want me to turn to?**
8 Q. It's entitled the first amended complaint?
9 A. **Called complaint timeline?**
10 Q. No, it's a document --
11 THE COURT: Mr. Sykes, you may approach if you'd
12 like to show the witness where it is.
13 MR. SYKES: Unfortunately, I believe my separate
14 notebook of this is elsewhere.
15 BY MR. SYKES:
16 Q. Paragraph 201, Mr. MacPherson.
17 A. **Can you maybe put it up on the screen? I can't seem**
18 **to find it.**
19 THE COURT: Mr. MacPherson, I told them not to.
20 THE WITNESS: Oh, I see. I'm sorry.
21 What page is that?
22 BY MR. SYKES:
23 Q. The paragraphs were numbered in order, 1, 2, 3, and
24 then if you follow the paragraphs along, you --
25 MR. SYKES: May I approach the witness,

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1 Your Honor?
2 THE COURT: You may.
3 THE WITNESS: So number 201?
4 BY MR. SYKES:
5 Q. Yes, sir.
6 A. **Okay.**
7 Q. And in paragraph 201, ME2C alleges that you -- that
8 the firm -- was a truthful statement when you made it, "that
9 Vistra is a utility company, exercises control over its
10 subsidiaries by providing technical, administrative,
11 logistical and financial services to the subsidiaries and/or
12 negotiating standard form or bulk agreement for product and
13 services related to mercury control."
14 Did I read that correctly?
15 A. **Yes, sir.**
16 Q. And then you go on to say, "For example, Vistra
17 negotiates or exercises veto power over decisions to sign
18 supply contracts for activated carbon in bromine containing
19 additives."
20 Did I read that correctly?
21 A. **Yes, sir.**
22 Q. And then last, "In so doing, Vistra takes part in the
23 decisions regarding supply contracts influences the other
24 Vistra entities to select suppliers for the plant including
25 those that provide bromine containing additives and

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1 activated carbon."
2 A. **Correct.**
3 Q. And you agree those are accurate statements?
4 A. **Yes, sir.**
5 Q. Was -- this may be a bit of a tangential -- something
6 I thought would be straightforward, but let's get back to
7 DTX 376, your 10-K.
8 And so the risk factor of trying to sell to
9 utilities and competing against your activated carbon
10 suppliers, that proved too difficult ultimately for your --
11 for your sales force; is that -- is that fair?
12 A. **Yes. We needed -- we had to layoff sales force**
13 **because of what was going on with refined coal.**
14 Q. Now, you gave a deposition in this case; right?
15 A. **Yes, sir.**
16 Q. And do you remember you were asked a similar question
17 as to why the sales force was disbanded after 2018?
18 A. **I don't recall the question exactly, sir, but if you**
19 **say it was asked, I would have given a similar answer, we**
20 **had to lay them off.**
21 Q. You didn't say anything in your 10-K about
22 competition from refined coal as being even a risk factor of
23 even a competitor, did you?
24 A. **No, sir.**
25 Q. And I think as we established, it has a risk of

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1 utilities just shutting down the power plants or the
 2 coal-fired boilers entirely, right?
 3 **A. Yes, sir, it exists all the time.**
 4 **Q.** And -- and that was a significant factor in the drop
 5 in revenue you had 2017 to 2018?
 6 **A. No, sir.**
 7 **Q.** The shutting down of your customers was not a
 8 significant factor?
 9 **A. No. I -- I can't recall exactly if we lost any**
 10 **clients that year from shutdowns, so I can't answer that**
 11 **truthfully, sir. I don't really recall.**
 12 **Q.** And again you gave a deposition in this case under
 13 oath; right?
 14 **A. Yes.**
 15 **Q.** And I believe you may have a copy of your deposition
 16 upon your table amongst the many notebooks. It would be the
 17 spiral bound one.
 18 **A. Sure. Do you want me to take that out?**
 19 **Q.** Yes, please.
 20 **A. Okay.**
 21 **Q.** And turn to page 280, the bottom of 280, and we're
 22 going to carry to the top of 281. We were discussing this
 23 very section, and the question was:
 24 "Question: And the section goes on to say the
 25 decrease from the prior year -- decrease in revenue is

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1 primarily due to the loss of customer EGUs. Do you see
 2 that?"
 3 Your answer was "yes."
 4 "And that's an accurate statement; correct?"
 5 "Answer: Yes."
 6 "And you certified that as an accurate
 7 statement; correct?"
 8 "Answer: Yes."
 9 That's how you testified previously; right?
 10 **A. Yes, sir.**
 11 **Q.** And it's fair to say that the drop in revenue when
 12 competing against activated carbon suppliers and having your
 13 customers actually shut down the coal-fired power plants,
 14 that was a driving reason behind disbanding the sales force?
 15 **A. No, sir.**
 16 **Q.** You don't think so?
 17 **A. I think it was part of it.**
 18 **Q.** And again do you remember testifying --
 19 **A. Yes, sir, I know the rest of it too, and the rest of**
 20 **it reads -- adds more information.**
 21 **Q.** Well, I'm asking you, your counsel --
 22 **A. That part that you read is correct, sir.**
 23 **Q.** Okay. If you could, let's take a look, since you've
 24 got it open to page 277 in your deposition.
 25 On page 277, question beginning at line 10:

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1 "You said ME2C's disbanded its sales force in
 2 2018; correct?"
 3 The answer was "yes."
 4 "And that's the same year as this big drop in
 5 revenue; correct?"
 6 "Yes. We established drop in revenue related at
 7 least in part to customers shutting down their coal-fired
 8 power plants.
 9 "Is it fair to say that this greater than
 10 50 percent drop in revenue caused ME2C to disband its sales
 11 force?"
 12 "Answer: I think the result of lack of sales
 13 overhead led to sales force decline..
 14 "And that's reflected in the loss of this
 15 revenue?"
 16 "Answer: Correct."
 17 "It says a loss of revenue is at least a factor
 18 in letting the sales force?"
 19 "Yes, it was. They were convention sales people
 20 to do --"
 21 **A. I just -- and I may have heard you wrong, sir, but I**
 22 **think you interjected there something about plants shutting**
 23 **down. I couldn't find that on the page.**
 24 **Q.** Well, we talked about just a moment ago that --
 25 **A. It's not on this page, sir, as you were reading it.**

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1 **Q.** Okay. But the 50 percent drop in revenue was
 2 attributable to the plant shutting down. You just U about
 3 that?
 4 **A. It was part of it, yes.**
 5 **Q.** And today through, at least through 2022, ME2C still
 6 doesn't have anyone in charge of going out in the field and
 7 selling ME2C's products and services, does it?
 8 **A. Yes, we do, sir.**
 9 **Q.** As of 2022, you did not at the time you gave your
 10 deposition?
 11 **A. Well, we don't have a sales force per se, but our**
 12 **vice president of operations is constantly looking for new**
 13 **business.**
 14 **Q.** That would be Jim Trettel?
 15 **A. That's correct.**
 16 **Q.** And again the deposition, again paragraph -- page 36,
 17 if you could look at page 36, line 25.
 18 **A. Line 25?**
 19 **Q.** That's correct.
 20 "Is someone in charge of going out into the
 21 field and selling ME2C's product and services today?"
 22 And your answer was, "No one specifically."
 23 **A. Yes. As I said, our VP ops tried to do the best he**
 24 **can, but we don't have a salesperson out there specifically**
 25 **selling.**

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1 Q. Mr. MacPherson, in your direct exam, you talked about
 2 competing against the refined coal companies and how there
 3 was -- I think you said there was no way to win and not much
 4 you could do about it.
 5 Do you recall that testimony?
 6 A. **Yes, sir.**
 7 Q. And you suggested and you still seem to be suggesting
 8 that you blame the decline in your business on -- from early
 9 20 teens to the late 20 teens on refined coal?
 10 A. **Mostly from '15 onward.**
 11 Q. And you were aware of Chem-Mod many years before
 12 that, weren't you?
 13 A. **I was aware of them, yes.**
 14 Q. And just to kind of orient us, Chem-Mod is a process
 15 by which refined coal can be made; fair?
 16 A. **It plays a role in it, yes.**
 17 Q. And as early as 2009, January 2009 even before your
 18 license, you were aware of Chem-Mod?
 19 A. **I think our license was before that, but I -- like I**
 20 **said, I was aware of Chem-Mod, yes.**
 21 Q. If we take a look in your exhibit notebook at DTX 48.
 22 A. **Is that the big one?**
 23 Q. The big one.
 24 A. **Which number sir?**
 25 Q. 48, Mr. MacPherson.

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1 A. **Yeah.**
 2 Q. And there's an e-mail from you to Mr. Pavlish dated
 3 May 28, 2009; right?
 4 A. **Yes, sir.**
 5 Q. And you've seen this e-mail before, and you recognize
 6 it, don't you?
 7 A. **I don't remember it, but I do see it coming from me**
 8 **to John.**
 9 MR. SYKES: I'll move to admit DTX 48.
 10 THE COURT: Any objection?
 11 MR. MCCARTY: No objection.
 12 THE COURT: It's admitted.
 13 (Thereupon, Defendants' Exhibit 48 was
 14 admitted.)
 15 BY MR. SYKES:
 16 Q. This is just a simple e-mail from you to John
 17 entitled "Chem-Mod: What's the deal with these guys?"
 18 Right?
 19 A. **Yeah.**
 20 Q. And that probably prompted a conversation with
 21 Mr. Pavlish about Chem-Mod?
 22 A. **I'm not sure, sir. I don't know if he responded or**
 23 **what.**
 24 Q. Yeah. I mean, sitting here now you probably don't
 25 remember, but at least as early as 2009, you were hearing

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1 about Chem-Mod?
 2 A. **Yeah. As I mentioned, I was aware of them.**
 3 Q. Let's -- let's take a look at the next exhibit. It
 4 should be the very next tab over in the binder, DTX 077.
 5 Turn one tab.
 6 A. **Okay.**
 7 Q. And this is a letter by ME2C October 11, 2012 to
 8 Mr. Mark Curtis, plant engineering in Joppa, Illinois, and
 9 you recognize Joppa as a power plant in Illinois; correct?
 10 A. **Correct.**
 11 Q. And this is an e-mail from ME2C to a potential
 12 customer; fair?
 13 A. **Yes. It's from my sales guy.**
 14 MR. SYKES: I move to admit DTX 77.
 15 THE COURT: Any objection?
 16 MR. MCCARTY: No objection.
 17 THE COURT: All right. It's admitted.
 18 (Thereupon, Defendants' Exhibit 77 was
 19 admitted.)
 20 BY MR. SYKES:
 21 Q. This letter is the proposal to work with Joppa. ME2C
 22 says, "It's pleased to provide the following breakdown of
 23 pricing for its services. For your current mercury capture
 24 program as well as injecting the dose rate with the Chem-Mod
 25 control program that's in the process of being installed."

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1 Do you see that?
 2 A. **Yes, sir.**
 3 Q. And then you go on to say, "With the Chem-Mod
 4 program, we believe we can provide Joppa a 25 to 30 percent
 5 cost reduction over other methods for meeting the Illinois
 6 state mercury limits."
 7 (Stenographer clarification.)
 8 THE COURT: The court reporter is having trouble
 9 hearing. Maybe if you could speak up, Mr. Sykes.
 10 BY MR. SYKES:
 11 Q. And in this letter, DTX 11, ME2C is proposing to work
 12 with Chem-Mod; correct?
 13 A. **No. We were proposing to work with the power plant.**
 14 Q. But alongside the Chem-Mod's refined-coal they're in
 15 the process of installing?
 16 A. **What we're trying to do here is, sir, is we're trying**
 17 **to be the front end supplier for the material for this plant**
 18 **that's going forward with this refined coal program.**
 19 Q. You didn't tell Joppa that use of the Chem-Mod's
 20 program was infringing any ME2C patents, did you?
 21 A. **Not in this particular e-mail it appears, but I'm**
 22 **sure there was a lot more communication than this.**
 23 Q. And there was a communication in July 2019 when you
 24 actually filed a lawsuit over the Joppa use of Chem-Mod;
 25 correct?

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1 **A. I don't recall. You'd have to refresh me with a**
2 **document.**

3 **Q.** Let me show you an exhibit marked as DTX 56. That
4 would be the other direction in your binder as the tab
5 marked 56. I think you'll see Exhibit 56, the e-mail
6 exchange, December 2014, Marc Sylvester and Allen Kelly,
7 employees of ME2C, to you and Mr. Pavlish and others.
8 Take a minute to review that.
9 MR. SYKES: Move to admit DTX 56.
10 THE COURT: Is there any objection?
11 MR. MCCARTY: No objection, Your Honor.
12 THE COURT: All right. It's admitted.
13 (Thereupon, Defendants' Exhibit 56 was
14 admitted.)
15 BY MR. SYKES:
16 **Q.** So this is two years later, and your sales guy,
17 Marc Sylvester, is noting that Newton and Edwards are using
18 CCS refined coal. Do you see that?
19 **A. Yes, sir.**
20 **Q.** Now, calcium bromide on the belt and back is
21 brominated activated carbon; is that right?
22 **A. Yes, sir.**
23 **Q.** So Joppa again using Chem-Mod's. So this doesn't say
24 anything about the Chem-Mod being an infringement of patents
25 or ME2C's intellectual property does it?

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1 **A. Not this particular piece of e-mail, no.**
2 **Q.** If -- and ME2C didn't write Chem-Mod or any refined
3 coal company alleging infringement, did it?
4 **A. I'm not aware of any at this time.**
5 **Q.** Not until it filed the lawsuit in 2019?
6 **A. No, sir.**
7 **Q.** And ME2C didn't write to EERC, the North Dakota
8 Institute, who was the owner of the patents -- you were
9 their licensee. You didn't write the EERC and tell them
10 that you thought that Chem-Mod was infringing patent rights,
11 did you?
12 **A. I'm not sure, sir.**
13 **Q.** If -- if you had written such an e-mail or letter,
14 ME2C surely would have turned it over to us in this lawsuit;
15 is that fair to say?
16 **A. I would think so.**
17 **Q.** And you didn't receive any kind of letters from the
18 EERC to do so either, did you? I mean, you didn't see a
19 notice from the EERC that Chem-Mod was infringing its
20 patents?
21 **A. No, sir.**
22 **Q.** And you generally as a company try to abide by your
23 contracts; right?
24 **A. Of course.**
25 **Q.** And especially obligations in your license agreement,

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1 very important agreement with the EERC to the mercury
2 control patents and technology that you're building your
3 business around; fair?
4 **A. That's fair.**
5 **Q.** Well, let's -- let's look back at the license
6 agreement that is PTX with the number again.
7 MR. SYKES: Do you have it, Mr. Brown, EERC
8 license agreement? They admitted it. Let's just go down to
9 paragraph 7.1.
10 BY MR. SYKES:
11 **Q.** So both ME2C and the EERC, both of you had an
12 obligation in this agreement -- very important agreement to
13 your company to provide written notice to the other party
14 promptly after becoming aware of any infringement of the
15 patent office; fair? That's what it says?
16 **A. I'm sorry, yes, you're correct in what it says.**
17 **Q.** And neither ME2C nor the EERC provided any such
18 notice all of these many years that refined coal as being
19 made?
20 **A. Correct.**
21 **Q.** And all it would have taken on your part is just an
22 e-mail?
23 **A. Yes, sir, we could have notified with an e-mail.**
24 **Q.** And you said something in your direct about you
25 couldn't find CERT. You didn't know who we were. You

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1 didn't know how to contact us. I assume you knew how to
2 contact us when you filed this lawsuit. You...
3 **A. You know, it took us a long while to be able to track**
4 **it all down.**
5 **Q.** Really?
6 **A. Yeah.**
7 **Q.** We happen to be organized in this great state of
8 Delaware. And, you know, the CERT documents have registered
9 agents that you could have just, off the internet, gotten
10 their address and written a letter for, I guess -- what's a
11 stamp? -- 49 cents. And you guys didn't do that, did you?
12 **A. No, sir.**
13 **Q.** And you actually listed the street address of the
14 companies down in Birmingham, Alabama, in your complaint,
15 didn't you?
16 **A. I'm not sure about the complaint exactly, sir. I'll**
17 **have to see.**
18 **Q.** You reviewed the complaints before they were filed
19 and authorized to be filed?
20 **A. It was some time ago, sir. I don't remember the**
21 **address offhand.**
22 **Q.** So you would agree that if it has a street address in
23 Birmingham, that ME2C had that?
24 **A. Yes, I would say we had the address of an agency**
25 **representing an LLC, yes.**

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1 Q. Well, you had the agent in Delaware, but you had a
2 street address for the company in Birmingham, Alabama, too?

3 A. **Again, sir, we'd have to go back to the documents.
4 I've never been to the street address in Alabama.**

5 Q. I'll tell you what. We'll just move on.

6 THE COURT: Mr. Sykes, about how much more
7 minutes do you think you have?

8 MR. SYKES: I probably have, Your Honor -- it
9 may be a good time for a break.

10 THE COURT: That's fine. It's about the time
11 that we take our afternoon break. So if that's convenient
12 for you, then -- it's 3:15 let's take a 15-minute break, and
13 the jurors can be led out now.

14 THE CLERK: All rise.
15 (The jury exited the courtroom.)

16 THE COURT: All right. Let's come back at 3:15.
17 The Court will stand in recess.

18 THE CLERK: All rise.
19 (A recess was taken, after which the following
20 proceedings were had:)

21 THE COURT: We'll let the witness retake the
22 stand. We'll bring the jury in.
23 (The jury entered the courtroom.)

24 THE COURT: We'll continue with the
25 cross-examination, Mr. Sykes.

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1 MR. SYKES: Thank you, Your Honor. I'd just
2 like to move to admit DTX 375. That's the 10-K -- ME2C's
3 10-K from the year ending 2017.

4 MR. MCCARTY: No objection.

5 THE COURT: It is admitted. Please continue.
6 (Thereupon, Plaintiffs' Exhibit 375 was
7 admitted.)

8 BY MR. SYKES:

9 Q. Mr. MacPherson, before the break, we had a little
10 exchange of discussion of the layoff of the sales force in
11 2018 -- the 2017, 2018 time frame. And you suggested that
12 that, in part, was due to refined coal or some alleged
13 infringement; fair?

14 A. **That's fair.**

15 Q. But the patents you're suing under didn't issue until
16 a couple years later in 2019 and 2020; right?

17 A. **I'm not certain of that, sir.**

18 Q. You're not certain of the years that the patents
19 we're dealing with this week --

20 A. **Yeah.**

21 Q. -- were issued?

22 A. **I believe they were issued -- sorry.**

23 Q. Yeah. They were issued in 2019 and 2020?

24 A. **Correct.**

25 Q. So there was certainly no infringement of those

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1 patents back in 2017?

2 A. **I'm not sure, sir, whether or not they come into play
3 prior to their actual issuance. But I'd have to leave that
4 to the attorneys.**

5 Q. And the one patent that you did have you later
6 asserted you didn't write any letters or send any notices to
7 a refined coal company or Chem-Mod or anybody.

8 A. **No, sir.**

9 Q. During these years, one of the things that ME2C was
10 looking at or actually did was enter a license agreement
11 with Cabot, one of these raw materials suppliers; right?

12 A. **Correct.**

13 Q. And you thought that Cabot might get ME2C's
14 technology into new markets like Europe?

15 A. **It was specifically for the European market, yes.**

16 Q. But the Cabot agreement ultimately wasn't successful?

17 A. **No. They decided it was more valuable for them to
18 just sell their raw product than try to change the market.**

19 Q. And they paid ME2C zero in royalties for that?

20 A. **They were not successful, no, sir.**

21 Q. And, you know, ME2C, like any business, you have
22 periodic management meetings sometimes and off-site
23 conference for a couple of days to strategize; fair?

24 A. **Once in a while, yes.**

25 Q. Let me show -- let's look at what's marked as DTX 92

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1 in your binder. So that would be towards the front.
2 They're in numerical order. Tab DTX 92. And this is a
3 document on ME2C letterhead with your name,
4 "Rick MacPherson, President, CEO, Confidential," dated
5 November 28th, 2017. Do you see that?

6 A. **Yes, sir.**

7 MR. SYKES: I move to admit DTX 92.
8 THE COURT: Any objection?
9 MR. MCCARTY: No, sir.
10 THE COURT: It's admitted.
11 (Thereupon, Plaintiffs' Exhibit 92 was
12 admitted.)

13 BY MR. SYKES:

14 Q. And it sounds like you wrote this.
15 "I am confident that the following strategic
16 development from Midwest Energy Emissions Corp. will take
17 our growing company to the next level."
18 Do you see that?

19 A. **I'm sorry. Which part is that?**

20 Q. Just the very first sentence.

21 A. **Yes, sir.**

22 Q. So this is the first person. You wrote this?

23 A. **Yes.**

24 Q. And you recognize this document; right?

25 A. **I don't remember it. It's a while back, but it looks**

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1 **like I wrote it.**
2 Q. And November 2017, that's -- you bought the
3 patents -- or ME2C bought the patents in April 2017; fair?
4 A. **Correct.**
5 Q. And the first heading, "Corporate Rework," you note
6 the company is transitioning into new technologies company.
7 First line there for "Overview." I read that correctly?
8 A. **Yes, sir.**
9 Q. All right. Let's look at -- let's look at the next
10 paragraph. I'm just going to read it:
11 "The initial concept of building value in the
12 patents and technologies was sound but did not fully
13 consider the costs and time required to realize their
14 inherent value. A company needs a champion to lead the
15 enforcement charge, whether by sheer size or direct defense.
16 The relationship built over the past three years with Cabot
17 is that preferred champion. The alternative route is that
18 of a litigious patent troll approach which would see us
19 litigate the very market we're here to serve."
20 Did I read that correctly?
21 A. **Yes, sir.**
22 Q. And you wrote that?
23 A. **Yes, sir.**
24 Q. And the Cabot deal didn't turn out to be successful
25 did it?

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1 A. **No it didn't.**
2 Q. And then it was -- it was after this corporate rework
3 in late November 2017 that ME2C filed the applications we're
4 dealing with today in first half of 2018; is that right?
5 A. **I would think so, yes, sir.**
6 Q. And just take a look at another set of meeting notes,
7 DTX 97. That will be -- sorry, that is not in my binder.
8 Is that in your binder?
9 A. **No.**
10 Q. It was somehow left out.
11 Do you ever remember, Mr. MacPherson, writing a
12 set of meeting notes, July 2019, just before this lawsuit
13 was filed on July 2nd, about two weeks before the case was
14 filed, announcing the consistent messaging to the industry?
15 A. **No, sir, I don't recall.**
16 Q. You don't recall saying that ME2C management -- the
17 message was to tell its customers "to do business with us or
18 be heaped onto the litigation pile"?
19 A. **I'm sorry. What was that?**
20 Q. "Do business with us or be heaped on the litigation
21 pile"?
22 A. **No, sir, I don't remember saying that to anybody.**
23 MR. SYKES: I'll pass the witness.
24 THE COURT: All right. Mr. McCarty, redirect?
25 MR. MCCARTY: Just a few questions.

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1 THE COURT: Okay.
2 MR. MCCARTY: May I proceed, Your Honor?
3 THE COURT: You may. Thank you.
4 EXAMINATION
5 BY MR. MCCARTY:
6 Q. Thank you, Mr. MacPherson. Do you recall CERT's
7 counsel asking about ME2C's competitors in the industry?
8 A. **Yes, sir.**
9 Q. And, in fact, Mr. Sykes put up your company
10 financials that you have to sign every quarter and annually
11 where you discuss your business; correct?
12 A. **Yes, sir.**
13 Q. Okay. You remember that. Who are ME2C's
14 competitors?
15 A. **Well, we list them typically as being the folks that
16 are in business that provide the same services that we do.
17 They sell products to capture mercury.**
18 Q. There seemed to be a suggestion, I think, that you
19 and ME2C should have listed the CERT defendants as
20 competitors. Did you get that sense?
21 A. **Yes, I got that sense, yeah.**
22 Q. Does that notion make any sense to you?
23 A. **Not really, no, because we weren't in their business.
24 We were selling products and services under our patents to
25 power plants to remove mercury. We weren't in that tax**

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1 **program business.**
2 Q. Do you recall some questions, sir, again about why
3 you didn't reach out to these tax entities before initiating
4 litigation?
5 A. **Yeah. And as I responded, you know, we made it our
6 best effort. I mean, we talked to the guys at the plants.
7 We talked to management. We talked to whoever would listen
8 to us at the head offices, but we couldn't get anywhere
9 because it was a very complex program through these LLC
10 companies that were really difficult to track down.
11 And so we reached out to them. And, you know,
12 as we showed them the different documents, we tried to
13 approach plants to see if we could even be a part of the
14 supply side when they were on the program. But we couldn't
15 compete because of the incentives they were getting to take
16 the product from the refined coal people.**
17 Q. Were you here during opening statements?
18 A. **Yes, sir.**
19 Q. Do you recall Mr. Caldwell putting up a board of
20 those various tax entities and how they're structured?
21 MR. SYKES: Your Honor --
22 A. **Yes, sir.**
23 MR. SYKES: Yes, Your Honor, I object to counsel
24 referring to the defendants as, quote, "tax entities."
25 THE COURT: Okay. That is sustained, and

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1 counsel will refer to the defendants by their names or
2 shortened parts of the names.
3 MR. MCCARTY: Yes, Your Honor.
4 BY MR. MCCARTY:
5 Q. Do you recall seeing some of the names of the
6 companies there in the middle like Senescence LLC?
7 A. **Yes.**
8 Q. And Larkwood Energy LLC?
9 A. **Yes.**
10 Q. Are these household names in the energy industry?
11 A. **No. I don't think, other than the, you know,**
12 **management people at the corporate offices of the power**
13 **plants or corporations would even know who they are outside**
14 **of themselves.**
15 Q. Could you go talk to the plant operators or fellow
16 CEOs in the company to track down all of these LLCs and have
17 business-to-business discussions at the time?
18 A. **No. As I mentioned, sir, we tried, but they were**
19 **hard to find.**
20 Q. In fact, to initiate litigation, did you include some
21 "John Doe" companies as defendants because you just didn't
22 know the names yet?
23 A. **Yeah. I mean, it took months and months just even**
24 **for the lawyers to figure out who they were.**
25 Q. Sir, you were asked some questions about the time

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1 period in 2011, 2012, and 2014 where you were sending some
2 correspondence regarding business prospects, and there were
3 some letters and e-mails. Do you recall those?
4 A. **Yes, sir.**
5 Q. And you were asked by Mr. Sykes about why you and
6 your company didn't pipe up about your patents at the time.
7 Do you recall those questions?
8 A. **Yes, sir.**
9 Q. Let's look at one of those. Mr. Diaz, can you put up
10 DTX 77. Can you zoom in, sir, on the date of this document.
11 Sir, at the top there, what's the date of the
12 document that Mr. Sykes showed you?
13 A. **October 11th, 2012.**
14 Q. Did Mr. Pavlish work at the company at that time?
15 A. **Yes.**
16 Q. Did you have ownership rights in the patents at the
17 time?
18 A. **No. Just let me think for a second.**
19 Q. Did your company acquire --
20 A. **We had --**
21 Q. -- all the patents?
22 A. **We had the licenses but, we didn't acquire them until**
23 **later.**
24 Q. And as you talked about with Mr. Sykes, did the
25 patents-in-suit issue in 2019 and 2020?

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1 A. **Yes.**
2 Q. Sir, how could you write to companies in 2012 about
3 patents that would not issue for eight years later? Does
4 that make any sense to you?
5 A. **No, it couldn't.**
6 Q. You were asked very early on in the cross-examination
7 about the Alistar agreement. Do you recall that question?
8 A. **Yes, sir.**
9 Q. And I think there was a discussion about the total
10 amount paid under that agreement. Do you recall that?
11 A. **Yes.**
12 Q. Would you please remind the jury what amount per ton
13 Alistar paid under its license to your company for the
14 patents in this case?
15 A. **Sure. So to the best of my understanding, they paid**
16 **a dollar a ton for all of the refined coal that they burned**
17 **since the time we filed the suit.**
18 Q. Sir, what is your understanding of the Alistar's
19 connection to the CERT entities in this case?
20 A. **Well, they apparently were just one of the operating**
21 **entities, one of those LLCs that operated a refined coal**
22 **program.**
23 Q. And are you asking the jury to award the same exact
24 amount in this case than what Alistar paid under that
25 agreement?

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1 A. **Yes, I am. I'm asking the jury to consider paying**
2 **the same amount as the first CERT folks paid when they**
3 **settled.**
4 Q. And that amount is how much?
5 A. **That amount is one dollar for each refined coal ton**
6 **that they burned in their program, and that's only from the**
7 **time that we filed the suit onward to the end of the**
8 **program.**
9 MR. MCCARTY: Thank you. No further questions.
10 THE COURT: You may step down. Thank you.
11 THE WITNESS: Thank you, Your Honor. Thank you,
12 folks. Do I have to take these books with me?
13 THE COURT: Counsel will help you. Thank you.
14 MR. CALDWELL: Your Honor, quick question. I'm
15 just wondering if Mr. MacPherson can be excused from the
16 rules so that he can stay in the courtroom and watch the
17 rest of his company's trial.
18 THE COURT: Discuss with the other side.
19 MR. DORSNEY: Your Honor, on this issue, the
20 parties have reached an agreement in the pretrial order
21 prior to the start of trial regarding the witnesses that
22 would be present in the courtroom throughout the trial.
23 We'd like stick to the Court's order.
24 THE COURT: Okay. Very well, then. The request
25 will be denied.

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1 Mr. Nemunaitis?

2 MR. NEMUNAITIS: Just here to call the next

3 witness.

4 THE COURT: We're ready.

5 MR. NEMUNAITIS: Plaintiffs call William Whitney

6 by video deposition. Mr. Whitney is an employee of

7 MidAmerican which operates a number of coal-fired -- a

8 number of coal-fired power plants. He will talk about

9 burning refined coal, operating activated carbon systems,

10 and power plant operating permits. The time for plaintiffs

11 is 3 minutes and 49 seconds. The time for defendants is

12 5 minutes and 30 seconds.

13 (A video was played.)

14 BY THE ATTORNEY:

15 Q. Can you please tell me your name.

16 A. **William Whitney.**

17 Q. And who do you work for Mr. Whitney?

18 A. **MidAmerican Energy Company.**

19 Q. And what's your job title at MidAmerican Energy

20 Company?

21 A. **General manager, engineering services.**

22 Q. Are you familiar with how MidAmerican handles coal at

23 its coal-fired power plants?

24 A. **Yes, I am.**

25 Q. And is it part of your job to understand and manage

521

1 how the MidAmerican power plant controls mercury?

2 A. **Yes.**

3 Q. The four power plants that you identified as being

4 power plants that use activated carbon injection for

5 MidAmerican are Louisa Generating Station, George Neal

6 Energy Center Unit 3, George Neal Energy Center Unit 4, and

7 Walter Scott Energy Center Unit 3 and 4; is that correct?

8 A. **Yes. Five units total.**

9 Q. Right. Now, is it okay for purposes of today if we

10 refer to the George Neal Energy Center Unit 3 as "George

11 Neal North"?

12 A. **Sure.**

13 Q. And can we refer to George Neal Energy Center Unit 4

14 as "George Neal South"?

15 A. **Yes.**

16 Q. Is it also fair to refer to the Walter Scott Energy

17 Center Units 3 and 4 as "Walter Scott"?

18 A. **Yes, except there may be certain things that are**

19 **different between the two units there.**

20 Q. Right. Okay. I'll -- thank you. I'll keep that in

21 mind. Can you tell me approximately when Louisa, George

22 Neal North, George Neal South, and Walter Scott Units 3 and

23 4 started using activated carbon injection?

24 A. **Walter Scott Unit 4 started using it in 2007, and the**

25 **other four units would have been about 2014.**

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1 Q. For the Louisa, George Neal North, George Neal South,

2 and Walter Scott Unit 3 that use activated carbon injection,

3 have they been using activated carbon injection continuously

4 from 2014 until at least the end of 2021?

5 A. **Yes.**

6 Q. And for Walter Scott Unit 4, has it been using

7 activated carbon injection continuously from 2007 until at

8 least the end of 2021?

9 A. **Yes.**

10 Q. For these power plants that use activated carbon

11 injection, why do you use it continuously as opposed to

12 turning it off for some period of time?

13 A. **Well, we had mercury emission limits in our permits,**

14 **and we wanted to make sure we're in compliance with those.**

15 **So we need to inject it to make sure our mercury emissions**

16 **are low enough to meet those limits.**

17 Q. And when you refer to "limits," are you referring to

18 state and federal regulations?

19 A. **Yes.**

20 Q. Does MidAmerican ever adjust the amount of carbon

21 being injected or the rate of activated carbon injection for

22 these power plants?

23 A. **Yes.**

24 Q. And can you tell me, just at a high level, why that

25 would be done?

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1 A. **Well, certain facilities have emission monitors. So**

2 **if -- that are continuous. So if they see a change in the**

3 **emission rate, they may adjust it up, or they may adjust it**

4 **down if they know that they're controlling beyond where they**

5 **need to. So it's basically just to make it as economical as**

6 **possible while still meeting the emission criteria.**

7 Q. Do Louisa, George Neal North, George Neal South, and

8 Walter Scott Units 3 and 4 all have mercury monitoring?

9 A. **No. Walter Scott 3 and 4 do. The others do not.**

10 Q. For Louisa, George Neal North, and George Neal

11 South -- do those power plants make adjustments for the

12 amount of activated carbon being injected?

13 A. **Yes. They use sorbent traps, so they do get**

14 **information on what the mercury level is, but it's just not**

15 **continuous. You pull a trap, analyze it, see what the**

16 **emission level is, and then they may make an adjustment**

17 **based on that if they need to.**

18 Q. MidAmerican has had coal purchase agreements with

19 refined coal suppliers for Louisa, George Neal North, George

20 Neal South, and Walter Scott; is that right?

21 A. **Yes.**

22 Q. And did those power plants combust the refined total

23 they received?

24 A. **Yes.**

25 Q. Is the fact that the activated carbon is listed in

524

1 title five permit mean that this power plant is required to
2 operate the activated carbon injection equipment?
3 **A. Yes, and it's an acknowledgment that that is what we**
4 **need to do to meet our emission requirements and that it's**
5 **an improved part of our emission controls.**
6 **Q.** I just have a few questions for you about a couple of
7 topics that we covered earlier today. You mentioned during
8 Mr. Nemunaitis's questioning that the supply of refined coal
9 to the power plants that MidAmerican operates is sometimes
10 paused or interrupted for various reasons. Do you recall
11 that?
12 **A. Yes.**
13 **Q.** And is that true for each of the four facilities:
14 George Neal North, George Neal South, Louisa, and Walter
15 Scott?
16 **A. Yes.**
17 **Q.** What about the activated carbon systems used at those
18 plants? Do the activated carbon systems in use at George
19 Neal North ever get turned off or disengaged for any reason?
20 **A. Yes, if they need to, like, clean the nozzles or**
21 **something like that.**
22 **Q.** And is that also the case with George Neal South?
23 **A. To my knowledge, yes.**
24 **Q.** Is that also the case for Walter Scott?
25 **A. Yes.**

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1 **Q.** Is that also the case for Louisa?
2 **A. Yes.**
3 **Q.** Do you know, for George Neal North, the amount of
4 time in a given year that the activated carbon system
5 disengaged or turned off for any reason?
6 **A. I don't know that.**
7 **Q.** Is that information that MidAmerican keeps track of?
8 **A. The only way I know that we could track that is**
9 **there's information in our control system that says whether**
10 **it's on or not. I suppose you could go through the**
11 **historian of our control system and figure that out, I**
12 **believe, but I've never tried to do that.**
13 **Q.** Do you believe that the history of the control system
14 at the other plants -- George Neal South, Walter Scott, and
15 Louisa -- might also provide the information?
16 **A. I believe it would, yes. I do not know how long that**
17 **data is stored.**
18 **Q.** Are there every times when refined coal is burned at
19 MidAmerican plant while the activated carbon system is
20 turned off?
21 **A. Yes, I believe there would be.**
22 **Q.** Mr. Whitney, about how long does it take to clean the
23 nozzles on an activated carbon injection system?
24 **A. Probably an hour or two. I don't know exactly. That**
25 **would be my guess.**

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1 **Q.** So if you wanted to ballpark the amount of time in a
2 year where MidAmerican turns off the activated carbon
3 injection system at its plants, are we talking months of
4 time or hours of time?
5 **A. Hours.**
6 **Q.** And if MidAmerican wanted to shut off the activated
7 carbon injection systems at its plants for, you know, a more
8 sustained period of time, for months at a time or years at a
9 time, would they need to apply for a new permit to do that?
10 **A. Possibly or might have to leave the plant out of**
11 **service.**
12 (The video ended.)
13 THE COURT: All right. Mr. Nemunaitis?
14 MR. NEMUNAITIS: Plaintiffs are ready to call
15 their next witness, Your Honor.
16 THE COURT: Please do so.
17 MR. NEMUNAITIS: Plaintiffs call Mr. Philip
18 O'Keefe.
19 THE COURT: Mr. O'Keefe, come forward and be
20 sworn.
21 THE CLERK: Please raise your right hand and
22 state and spell your full name for the record.
23 MR. O'KEEFE: My name is Philip O'Keefe,
24 P-H-I-L-I-P, O-'-K-E-E-F-E.
25 PHILIP O'KEEFE,

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1 called as a witness on behalf of the
2 Plaintiff, was sworn, and testified
3 as follows:
4
5 THE COURT: Counsel, we've got some binders that
6 say 2 of 2, some that say 1 of 3. How many binders?
7 MR. NEMUNAITIS: There are a number of large
8 exhibits so we have multiple volumes to contain all the
9 exhibits. I believe there's one binder with his reports and
10 two binders with his exhibits.
11 THE COURT: I'm not going to need exercise this
12 week. I'm in good shape. Okay.
13 DIRECT EXAMINATION
14 BY MR. NEMUNAITIS:
15 **Q.** Could you please tell us your name?
16 **A. My name is Philip J. O'Keefe.**
17 (Stenographer clarification.)
18 BY MR. NEMUNAITIS:
19 **Q.** You might need to speak more in the microphone.
20 THE COURT: You may approach, Mr. Nemunaitis, if
21 you want to help.
22 (Off the record.)
23 BY MR. NEMUNAITIS:
24 **Q.** Are you an ME2C employee, Mr. O'Keefe?
25 **A. No, I'm not.**

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1 Q. Are you what's called an expert witness?

2 A. **Yes, I am.**

3 Q. What's the role of an expert witness?

4 A. **To review materials in the case and render opinions**

5 **based on experience and education.**

6 Q. As part of your work in this case, did you have

7 access to a database of evidence from the case?

8 A. **Yes, I did.**

9 Q. And did you use that evidence to prepare a report on

10 your investigation?

11 A. **Yes, I did.**

12 Q. Was that report provided to the defendants before

13 this trial started?

14 A. **Yes.**

15 Q. Are you being compensated for your role as an outside

16 expert?

17 A. **Yes.**

18 Q. What's your compensation?

19 A. **\$300 per hour.**

20 Q. Does your compensation have anything to do with who

21 wins or loses the trial?

22 A. **No.**

23 Q. All right, Mr. O'Keefe. Can you tell us a little bit

24 about yourself and where you're from?

25 A. **I'm from Chicago. I spent most of my life there in**

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1 **the Chicago area, and I moved to rural Minnesota about**

2 **20 years ago.**

3 Q. About how old are you?

4 A. **I'm 65.**

5 Q. Do you have any kids?

6 A. **Yes, I have three children. I have a daughter -- two**

7 **daughters and a son.**

8 Q. Did you go to college?

9 A. **Yes.**

10 Q. Where did you go?

11 A. **I went to the Illinois Institute of Technology.**

12 Q. And did you get a degree there?

13 A. **Yes.**

14 Q. What was your degree?

15 A. **A bachelor of science in mechanical engineering.**

16 Q. How did you get interested in engineering?

17 A. **I was always interested in technology, and it just**

18 **was natural for me.**

19 Q. What topics did you study for mechanical engineering?

20 A. **Well, I studied a variety of topics which includes**

21 **thermodynamics and heat transfer, which is used a power**

22 **plants and machine design, material science, a lot of**

23 **different things, even aerodynamics.**

24 Q. Sorry about that. What did you do after you

25 graduated?

530

1 A. **I went to work for an electrical utility called**

2 **Commonwealth Edison. They're an electric utility in the**

3 **northern third of Illinois.**

4 Q. Where were you first posted at ComEd?

5 A. **A coal-fired power plant in Hammond, Indiana, that**

6 **was known as Stateline Station.**

7 Q. Can you tell us about the first day at the job there?

8 A. **Sure. I was interviewed in a general office. I had**

9 **never been in a power plant before, and the HR rep from the**

10 **downtown general office offered me a job, which I accepted.**

11 **And I asked him -- I said, Well, how should I**

12 **dress when I go out to a power plant. I've never been to a**

13 **power plant before. Oh, he said, Why don't you wear a**

14 **three-piece suit, so I got all dressed up, you know, looking**

15 **really sharp, kind of like I am today.**

16 **And everybody was wearing blue jeans and flannel**

17 **shirts and work boots, and I stuck out like a sore thumb.**

18 Q. Was your job pretty hands-on at ComEd?

19 A. **It's very hands-on. I had to crawl through boilers**

20 **and do equipment inspection, and it's a great way to learn.**

21 Q. What was your first role for ComEd?

22 A. **Well, I had to be a tech staff engineer, and I**

23 **primarily ran efficiency tests on boilers and turbines and**

24 **all the auxiliary equipment in the power plant and**

25 **determined how well they were operating, how efficiently**

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1 **they were operating and recommended the kind of repairs or**

2 **corrective actions to improve the efficiency.**

3 Q. Did you move on to another role after being a tech

4 staff engineer?

5 A. **Yes, I went into the training department, and I had**

6 **to put together a first line supervisor training program.**

7 Q. What did that entail?

8 A. **It was more or less putting together a training**

9 **program about how a power plant operates and all the**

10 **equipment that goes into a power plant and makes it go.**

11 Q. Did you train new engineers coming into ComEd?

12 A. **No, I didn't at that point. I -- I was primarily**

13 **interested in training first line supervisors, and that**

14 **position, I went into the fossil division training**

15 **department, training center for the entire coal-fired power**

16 **plants and the utility.**

17 **And there I had trained new tech staff engineers**

18 **and existing tech staff engineers on power plant operations**

19 **and conducting tests.**

20 Q. Did you have any other roles at ComEd?

21 A. **Yes. I went into the engineering department, and I**

22 **had to decide burn management and combustion control**

23 **systems, and a lot of auxiliary control systems, primarily**

24 **industrial control system design.**

25 Q. When you were at ComEd, did you work with pollution

532

1 control equipment?

2 **A. Yes, I did.**

3 **Q.** Did that include mercury capture technology at the

4 time?

5 **A. No.**

6 **Q.** Why is that?

7 **A. Well, the plants weren't required to capture mercury**

8 **at that point.**

9 **Q.** As part of your involvement in this case, have you

10 reviewed mercury capture regulations and the technology at

11 issue in this case?

12 **A. Well, only in this case.**

13 **Q.** Are you comfortable talking about the technology and

14 the mercury control issues in this case?

15 **A. Sure.**

16 **Q.** How long did you work at ComEd?

17 **A. I was an employee at ComEd for 14 years.**

18 **Q.** Around what time did you leave?

19 **A. I left around 1995, and I went to go work in the food**

20 **industry.**

21 **Q.** Did you continue doing engineering after you left

22 ComEd?

23 **A. Oh, sure.**

24 **Q.** You said food industry. What kind of work did you do

25 after leaving ComEd?

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1 **A. I was a plant engineer in a food manufacturing plant,**

2 **and I did that for about 18 months, and from there I went**

3 **into outdoor power equipment manufacturing.**

4 **Q.** Even when you were working at these other roles at

5 that plant -- at that point in time, did you continue

6 teaching about power plants after leaving ComEd?

7 **A. I did later on after the turn of the century.**

8 **Q.** Are you a professional engineer, Mr. O'Keefe?

9 **A. Yes, I am.**

10 **Q.** What does that mean?

11 **A. Well, that means I'm licensed to practice engineering**

12 **in the state of Minnesota. That's where I'm from, and in**

13 **order to get my PE license, I had to take an eight-hour exam**

14 **to begin with about engineering.**

15 **I had to pass that, and that gave me EIT**

16 **certification, engineer in training, and after a few months**

17 **I took another test, a PE test, and I had to pass that to**

18 **get my PE license.**

19 **Q.** Have you had involvement with patents before working

20 on this case?

21 **A. Oh, yes.**

22 **Q.** And have you previously testified as an expert in a

23 patent proceeding?

24 **A. Oh, yes, I have.**

25 **MR. NEMUNAITIS:** Your Honor, plaintiffs offer

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1 Mr. Philip O'Keefe as an expert in the filed of power plant

2 operation including operation and regulation of coal-fired

3 power plant equipment and related equipment for pollution

4 control.

5 **THE COURT:** So noted.

6 **BY MR. NEMUNAITIS:**

7 **Q.** All right. Mr. O'Keefe, do you have some slides to

8 assist n your testimony today?

9 **A. Yes, I do.**

10 **Q.** Mr. O'Keefe, can you give us an overview of the

11 topics that you're going to be discussing?

12 **A. Sure. I want to talk about some -- various topics.**

13 **First off is I want to discuss the patents-in-suit. Then I**

14 **want to talk about the tests that I applied for deciding**

15 **infringement of those patents.**

16 **And then I want to talk about defendants'**

17 **refined coal operations, and then I want to talk about power**

18 **plant infringement analysis that I performed and then**

19 **defendant infringement analysis and additional information**

20 **for damages.**

21 **Q.** And just to preview where we're going to end up, what

22 was your ultimate conclusion regarding infringement in this

23 case?

24 **A. Well, the defendants infringed the two**

25 **patents-in-suit.**

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1 **Q.** Can we begin with your first topic. What's that one?

2 **A. Sure.**

3 **Q.** What topic -- are we going to talk about the patents?

4 **A. Sure. There's two patents in this case. As -- as**

5 **mentioned before, we talk about the abbreviation which is**

6 **the '517 and '114 patents.**

7 **Q.** And for the record, those are PTX 3 and PTX 1; is

8 that right?

9 **A. Yes.**

10 **Q.** Now, Mr. O'Keefe, do you need to be a lawyer to

11 understand those patents?

12 **A. No.**

13 **Q.** As part of your investigation in this case, did you

14 need to determine what's called the level of skill in the

15 art?

16 **A. Yes, I did.**

17 **Q.** And just generally when we're talking about patents,

18 what does that mean, the term level of skill in the the art?

19 **A. Well, that's a person that I opine can understand the**

20 **technology in the patents and make and use the invention.**

21 **Q.** And what is the level of skill that you identified

22 for the patents at issue in this case?

23 **A. Okay. I said, "A person of ordinary skill in the art**

24 **of the patent-in-suit at the time of the invention would**

25 **have a bachelor's degree in mechanical engineering, chemical**

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1 **engineering, or chemistry or related technology and at least**
2 **two years of experience with power plant operation and/or**
3 **pollution control equipment.**
4 **"Additional work experience and relative**
5 **industries could compensate for less education or education**
6 **in a different field. Similarly advanced education degrees**
7 **compensate for less work experience."**
8 Q. How do you know that that's the appropriate level of
9 skill as it applies to the patents at issue in this case?
10 A. **Well, I based my opinion on my engineering education**
11 **and also my experience in coal-fired power plants.**
12 Q. Now, if we think back to the time before mercury
13 regulations were in effect and before Mr. Pavlish came up
14 with his invention, am I right that power plants weren't
15 required to capture mercury at that point; right?
16 A. **That's correct.**
17 Q. Even though they weren't required at that point, was
18 it known in the industry that that would eventually be
19 important?
20 A. **Well, eventually it was known that, you know, they**
21 **would be required to remove mercury.**
22 Q. Could you open your first binder to tab 3.
23 A. **I'm sorry, which tab?**
24 Q. Tab 3.
25 A. **Okay.**

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1 Q. Can you tell me what that document is?
2 A. **It's a study prepared by the Federal Environmental**
3 **Protection Agency.**
4 Q. And is that something you reviewed in this case?
5 A. **Yes.**
6 Q. And did you rely on that to prepare your report?
7 A. **Yes.**
8 MR. NEMUNAITIS: Your Honor, we move to admit
9 PTX 57.
10 THE COURT: Any objection?
11 MR. DYESS: No objection, Your Honor.
12 THE COURT: It's admitted.
13 (Thereupon, Plaintiffs' Exhibit 57 was
14 admitted.)
15 BY MR. NEMUNAITIS:
16 Q. In this report, Mr. O'Keefe, does the EPA explain
17 what prompted the interest in mercury capture?
18 A. **Yes. They -- they did the study, and they listed the**
19 **reason for it, and I can read it if that's okay.**
20 Q. Yes.
21 A. **"They performed a study of hazards to public health**
22 **reasonably anticipated to occur as a result of emissions by**
23 **electric utilities, steam generating units of hazardous air**
24 **pollution after the the requirements of this act."**
25 Q. Does the report go on to talk about what the EPA

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1 concluded regarding mercury at the time it was prepared?
2 A. **Yes.**
3 Q. And what is the date on this report?
4 A. **The date is let's see, February 1998.**
5 Q. So what -- what did the EPA conclude regarding
6 mercury at that point in time?
7 A. **Well, the conclusion here is, "Based on available**
8 **information and current analysis, the EPA believes that**
9 **mercury from coal-fired utilities is a hazardous air**
10 **pollutant of greatest potential concern and merits**
11 **additional research and monitoring."**
12 Q. Did the report also consider available technologies
13 at the time?
14 A. **It certainly did.**
15 Q. And what was the conclusion there?
16 A. **Regarding potential methods for reducing mercury**
17 **emissions the EPA --**
18 MR. DYESS: Your Honor?
19 THE COURT: I'm sorry, if you could pause for a
20 second.
21 MR. DYESS: The witness is testifying from a
22 slide. We have an exhibit, and we're not being told what
23 the reference in the exhibit is.
24 MR. NEMUNAITIS: We gave them the slides last
25 night.

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1 THE COURT: Is there some confusion about where
2 to look in the document?
3 MR. DYESS: Yes, Your Honor. I mean, there are
4 pictures on the slides that you can't make out.
5 THE COURT: Why don't we ask counsel to confer
6 with opposing counsel to let me know where in the documents
7 these are.
8 Mr. Nemunaitis?
9 BY MR. NEMUNAITIS:
10 Q. Did the EPA ultimately conclude that they had not
11 identified any demonstrated add-on control technologies
12 currently in use in the U.S. that effectively removed
13 mercury from the utility emissions?
14 A. **Right.**
15 Q. Is that the problem the inventors were trying to
16 solve?
17 A. **It certainly was.**
18 MR. NEMUNAITIS: Mr. Diaz, can you give me
19 PTX 3.
20 BY MR. NEMUNAITIS:
21 Q. Now, Mr. O'Keefe, the jury saw the patent video and
22 explained some of the parts of the patent in this case, but
23 could you identify on here who owns the patent that's
24 identified as the '517 patent?
25 A. **Well, the entity that owns the patent is Midwest**

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1 Energy Emissions Corporation. It's known as the assignee,
2 and it's listed -- it's highlighted here on the front of the
3 patent, the first page.
4 Q. And are the inventors also identified?
5 A. **Yes. Edwin S. Olson, Michael J. Holmes, and John H.**
6 Pavlish, who testified earlier.
7 Q. And I think Mr. Pavlish gave some testimony about
8 this, but did these inventors file additional applications
9 related to the technology in this patent?
10 A. **Yes, they did.**
11 Q. And is that listed here in the patent as well?
12 A. **Yes, it is.**
13 Q. And where is that?
14 A. **It's related to U.S. application data.**
15 MR. NEMUNAITIS: And, Mr. Diaz, if you could
16 grab the rest of that related U.S. application data from the
17 next page.
18 BY MR. NEMUNAITIS:
19 Q. So these portions of the patent labeled as related
20 U.S. application data, are these the applications you were
21 talking about?
22 A. **Yes.**
23 Q. Okay. Mr. O'Keefe, could you take a look at tabs 4
24 through 16 in your binder?
25 A. **Okay.**

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1 Q. Are those the applications related to the patents at
2 issue in this case?
3 A. **Yes, they are.**
4 Q. And did you review those applications as part of your
5 work on the case?
6 A. **I certainly did.**
7 Q. And did you rely on them in forming your opinions?
8 A. **Yes.**
9 MR. NEMUNAITIS: Your Honor, we move to admit
10 exhibits PTX 2, PTX 4, PTX 5, PTX 15, 16, 17, 19, 20, 21,
11 22, 24, 25, and 26.
12 THE COURT: Any objection?
13 MR. DYESS: Your Honor, no objection. I would
14 make a request and you did it this time, just identify the
15 tab because they don't wind up in the exhibit.
16 THE COURT: Just ask the Court if you have a
17 request. So you're asking to say the tab they're speaking
18 of?
19 MR. DYESS: Yes. The tabs aren't exhibit
20 numbers. They're just tabs.
21 THE COURT: Okay. Fair enough. We'll ask
22 plaintiffs' counsel. Thank you. They're admitted.
23 (Thereupon, Plaintiffs' Exhibits 2, 4, 5, 15,
24 16, 17, 19, 20, 21, 22, 24, 25, and 26 were admitted.)
25 MR. NEMUNAITIS: Could you zoom out, Mr. Diaz?

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1 BY MR. NEMUNAITIS:
2 Q. Now, what's listed below this related U.S.
3 application data labeled "references cited" there?
4 A. **Well, references cited is just a listing of prior art**
5 references, and it's going to include other patents,
6 documents, papers that were written, newspaper articles, all
7 kinds of different information.
8 **And that has to be disclosed to the application**
9 because, you know, reference to prior art for the examiner
10 and the examiner is also looking at their own prior art they
11 find.
12 MR. NEMUNAITIS: And if we could skip ahead to
13 Claim 1, Mr. Diaz.
14 BY MR. NEMUNAITIS:
15 Q. What's the purpose of the patent claim?
16 A. **Well, the patent claim is a legal description of the**
17 invention. As you were instructed in the video, it's like a
18 description -- a legal description of the invention, and it
19 tells potential infringers, you know, this is the
20 property -- intellectual property that's claimed, stay away
21 or license it or whatever.
22 Q. Is this what you focused on to decide infringement in
23 this case?
24 A. **It sure is.**
25 Q. Can we move on to talking about the test for

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1 infringement? Can I have my slides back, slide number 9.
2 A. **Yes.**
3 Q. How do you determine direct infringement?
4 A. **Well, direct infringement requires that each and**
5 every element of a claim is like copied or used or infringed
6 upon in order to make a competing invention for example.
7 Q. So do you have to check off all the boxes?
8 A. **Yes.**
9 Q. Is that the only way to infringe a claim?
10 A. **Yes. Well, directly infringe a claim.**
11 Q. Are there indirect ways to infringe a claim?
12 A. **Yes, there are.**
13 Q. What is contributory infringement?
14 A. **Well, contributory infringement is selling a**
15 component of a patented process knowing that it will be used
16 to infringe.
17 Q. And what about induced infringement?
18 A. **Intentionally acting to encourage or influence**
19 someone else to infringe.
20 Q. Of these three types of infringement, which ones did
21 the defendants do in this case?
22 A. **Contributory and induced infringement.**
23 Q. All right. Mr. O'Keefe, what was the next topic
24 we're going to move on to?
25 A. **I want to talk about the defendants' refined coal**

<p style="text-align: right;">544</p> <p>1 operations.</p> <p>2 Q. Were you here for Mr. Pavlish's testimony?</p> <p>3 A. Yes.</p> <p>4 Q. Do you remember him showing this slide?</p> <p>5 A. Yes.</p> <p>6 Q. Now, I believe Mr. Pavlish testified that he thought</p> <p>7 a number of the power plants at issue in this case might be</p> <p>8 using activated carbon. Was he right about that?</p> <p>9 A. Ing yes.</p> <p>10 Q. As part of your investigation, did you look into</p> <p>11 whether the power plants were also using refined coal?</p> <p>12 A. Yes, I did.</p> <p>13 Q. And did you look into where the chemicals for</p> <p>14 preparing refined coal were being applied to the coal?</p> <p>15 A. Yes, I did.</p> <p>16 Q. And where did that occur?</p> <p>17 A. It occurred between the coal pile and the power</p> <p>18 plant. Mainly it's shown here in the diagram as a</p> <p>19 pulverizer. That's where the power plant begins.</p> <p>20 Q. What was the process that defendants used to add</p> <p>21 chemicals to the coal to prepare refined coal?</p> <p>22 A. They sprayed the two chemicals on to the coal as it</p> <p>23 was passing through the refining plant on the way from the</p> <p>24 coal pile to the pulverizer.</p> <p>25 Q. And who brought the coal into the coal pile? Was</p>	<p style="text-align: right;">546</p> <p>1 (The discussion at sidebar ended.)</p> <p>2 THE COURT: Plaintiffs' counsel is withdrawing</p> <p>3 the question.</p> <p>4 BY MR. NEMUNAITIS:</p> <p>5 Q. Mr. O'Keefe, did you see any evidence to explain what</p> <p>6 financial benefits the defendants received from selling</p> <p>7 refined coal at a loss?</p> <p>8 A. Yes, I did.</p> <p>9 Q. What's that?</p> <p>10 MR. DYESS: Your Honor, we have another</p> <p>11 objection. Can we approach?</p> <p>12 THE COURT: Let's go to sidebar.</p> <p>13 (Thereupon, a discussion was held at sidebar.)</p> <p>14 THE COURT: Okay.</p> <p>15 MR. DYESS: I think we're going to have to deal</p> <p>16 with this a few times. We might as well deal with it now.</p> <p>17 There are a number of subjects that Mr. O'Keefe</p> <p>18 is not qualified to testify to in this case. He has not</p> <p>19 testified this he has any background on reviewing the</p> <p>20 financial information, the financial operations of a power</p> <p>21 plant.</p> <p>22 He's been qualified to talk about the operations</p> <p>23 of boilers and combustion rooms and things like that, but</p> <p>24 he's about to give testimony about the financial incentives</p> <p>25 that pass between clients.</p>
<p style="text-align: right;">545</p> <p>1 that the power plant or the refined coal defendants?</p> <p>2 A. The power plants did.</p> <p>3 Q. And then did the defendants take possession of that</p> <p>4 coal on the conveyer belt?</p> <p>5 A. Yes. They bought it from the power plant for a</p> <p>6 certain dollar amount at the time.</p> <p>7 Q. And then what did they do after they bought it?</p> <p>8 A. Well, they would refine it. They'd spray it on to</p> <p>9 the two chemicals, and then they sold it back to the power</p> <p>10 plant for less money than they paid for it.</p> <p>11 Q. Why did they sell it back for less money than they</p> <p>12 paid?</p> <p>13 MR. DYESS: Objection, Your Honor. Can we</p> <p>14 approach, Your Honor?</p> <p>15 THE COURT: You may.</p> <p>16 (Thereupon, a discussion was held at sidebar.)</p> <p>17 THE COURT: All right.</p> <p>18 MR. DYESS: The objection is he was asked the</p> <p>19 question why did they do something. He isn't asked to</p> <p>20 testify what evidence did he see. He's asking why is a</p> <p>21 state of mind -- why is an intent, statement and you ruled</p> <p>22 he cannot testify to these things.</p> <p>23 THE COURT: That sounds correct.</p> <p>24 MR. NEMUNAITIS: I'll withdraw the question.</p> <p>25 THE COURT: Okay. Great.</p>	<p style="text-align: right;">547</p> <p>1 We think this is one of those areas where he is</p> <p>2 simply casting the facts that the plaintiffs want him to</p> <p>3 testify to, and you said we would take that up at the time.</p> <p>4 He's not qualified to give opinions on things</p> <p>5 like financial incentive, indemnities, things like that.</p> <p>6 Here's the first one. It's financial incentives.</p> <p>7 THE COURT: You mentioned that I said we would</p> <p>8 take this up at the time. Are you referring to an order?</p> <p>9 MR. DYESS: The order on the Daubert motion</p> <p>10 where you denied the motion and said, I'm paraphrasing, I'm</p> <p>11 not going to read through every opinion in his report to see</p> <p>12 whether he's qualified to give each individual one, or if</p> <p>13 it's a fact casting exercise, but we can take it up</p> <p>14 contemporaneously.</p> <p>15 THE COURT: Do the parties have the prior order</p> <p>16 on them?</p> <p>17 MR. DYESS: I do at the table, Your Honor. I</p> <p>18 apologize. Apologize. I just have one copy Your Honor.</p> <p>19 The reference I'm specifically making is to footnote 15.</p> <p>20 THE COURT: I think you're saying footnote 9.</p> <p>21 MR. DYESS: I'm sorry, footnote 9 on page 15.</p> <p>22 I'm sorry, Your Honor.</p> <p>23 THE COURT: So the portion of the Daubert</p> <p>24 opinion that counsel is referring to is a portion in which I</p> <p>25 cited certain statements in Mr. O'Keefe's report that I</p>

<p style="text-align: center;">548</p> <p>1 thought was improperly making commentary on the state of 2 mind of the defendants.</p> <p>3 And then there's a paragraph thereafter where I 4 said beyond statements like these in which Mr. O'Keefe 5 proffers specific opinions with respect to intent, motive, 6 and state of mind his opinions regarding the underlying 7 facts that may show state of mind may be relevant to other 8 claims or defenses are not necessarily improper.</p> <p>9 And the footnote 9 says the Court notes that 10 defendants call out Mr. O'Keefe for including long fact 11 recasting narratives in portions of his reports while some 12 Courts are noted, it's improper for an expert to engage in 13 unnecessarily long summaries of the facts in evidence that 14 are not sufficiently connected to their opinions on issues 15 within their technical expertise. . . The Court cannot now 16 necessarily conclude Mr. O'Keefe will do this at trial.</p> <p>17 That's the footnote you're referring to.</p> <p>18 MR. DYESS: If I could, Your Honor, in the same 19 order you pointed out the appropriate expert witness 20 standard, which is on page 3 of that order the 702 year -- 21 must order whether the expert witness has specialized 22 knowledge regarding the area of testimony.</p> <p>23 They haven't offered him of having any 24 specialized knowledge in these financial incentives areas. 25 They offered him on the operation of a power plant. He's</p>	<p style="text-align: center;">550</p> <p>1 or factually to it?</p> <p>2 MR. NEMUNAITIS: I'm not intending any extended 3 discussion on this I really meant this to be background to 4 move into it. But I believe the ruling at the hearing was 5 that he can identify the elements of attribute to your 6 inducement and make sure he checks everything off in order 7 for that to make sense to say there's an e-mail where a 8 certain person is receiving communications of JPMorgan. It 9 would be helpful to unction why the parties are commune at a 10 timing like this that's part of marshalling the evidence 11 that experts do.</p> <p>12 THE COURT: I'm asking about the connection 13 between the financial I think I understand your point to the 14 extent there is an information rereviewed that is directly 15 related to his infringement analysis that he's doing I'm 16 asking me may be able to speak to that but the content of 17 what's happening here I'm not seeing you make that 18 connection I guess part of the question is do you need to go 19 this route here are we arguing about something that maybe.</p> <p>20 MR. NEMUNAITIS: I would like for him to be able 21 to say tax credits. That would seem to be a relevant part 22 of this to explain one of the elements of induced 23 infringement is inducing them and the financial incentive is 24 a big part of that. It was in his report and appropriate 25 for him to provide that information. Since he can't opine</p>
<p style="text-align: center;">549</p> <p>1 testified about boilers, that type of thing, but not 2 financial incentives.</p> <p>3 THE COURT: Mr. Nemunaitis, what's the nature of 4 the testimony that Mr. O'Keefe is about to deliver with 5 regard to tax credits, and what's your response to 6 Mr. Dyess's objection?</p> <p>7 MR. NEMUNAITIS: It's really meant to be a segue 8 question to explain the difference between tax credits and 9 contributory infringement that's come up a number of times 10 so I didn't want to -- the ruling is he can opine on his 11 ultimate conclusion of induced contributory as well as 12 marshall the evidence in support to providing the financial 13 background as to why this makes sense will seem appropriate 14 to provide context of his opinions and why he found 15 infringement.</p> <p>16 THE COURT: More specifically so we have a 17 witness here who's proffered as an expert witness with 18 regard to infringement and validity. Technical expert, 19 obviously. To some extent the defendant is objecting 20 because it sounds like your witness is going to start 21 talking about economics and tax credits and which people use 22 them and why they do it. What is the connection between the 23 infringement analysis, the technical infringement analysis 24 that Mr. O'Keefe is going to give, and, like, an extended 25 discussion of a Section 45 tax credit program or its import</p>	<p style="text-align: center;">551</p> <p>1 on state of mind, he has to opine on circumstantial 2 evidence.</p> <p>3 THE COURT: I think the opinion has -- at least 4 some reference to the Section 45 tax credit program may be 5 necessary to reference a fact relevant to an aspects of the 6 infringement analysis that the induced infringement 7 analysis -- what contributory infringement, the extent it 8 plays, why what is the motive for causing. That, I think, 9 is the argument.</p> <p>10 MR. DYESS: And, Your Honor, that's the point. 11 We're making with this objection. He has no expertise that 12 allows him to do that. And I want want to make sure the 13 distinction is clear here. If he's giving opinions on the 14 direct infringement of a power plant, what do they put on 15 the coil, how does the coal move through, how do they burn 16 it, we're not going to cross him on those things. We're not 17 objecting to him giving this testimony.</p> <p>18 But keep in mind, Your Honor, in order to prove 19 induced infringement, if he's giving an opinion that we 20 induced infringement, he has to testify that we intended to 21 cause somebody to infringe. How in the world is he going to 22 do that?</p> <p>23 THE COURT: He's not going to speak directly to 24 the issue. He's not going to say, "I conclude that they 25 intend to do it." That's part of the problem.</p>

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1 MR. DYESS: Counsel, he just said from that
2 stand that we induce infringement of these patents. How can
3 he reach that conclusion unless he has reached the opinion
4 we intend to cause infringement?
5 THE COURT: Let me see. I thought I made it
6 clear by showing what I'm thinking so it is clear. There's
7 a distinction, I think, that the Courts make and the Federal
8 Circuit makes that in the one area that is clear and seems
9 to be the third rail is an expert can't speak the words "I
10 conclude that a defendant" -- or plaintiff in this case --
11 "defendant intended to do -- I conclude that they had the
12 state of mind of X."
13 Can't use that phraseology. The expert, though,
14 can give an opinion on the overall issue of infringement,
15 whether there's direct infringement, indirect infringement.
16 But the thing Courts seem to the point the expert to stay
17 away from is specifically talking about the intent and what
18 is their intent. Here, I ruled that Mr. O'Keefe can't say
19 those words. He can't say, "So I believe defendant X
20 intended -- I believe that defendant X had the state of mind
21 that blank."
22 Otherwise he could speak to elements and provide
23 the overall opinion that he concludes that there is
24 infringement, and that's the line that at least I think the
25 Courts are drawing and I was trying to draw.

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1 MR. DYESS: There are statements in his report
2 certainly where he opines about what the intent of parties
3 are and I realized --
4 THE COURT: Ruled he can.
5 MR. NEMUNAITIS: Not do that.
6 MR. DYESS: I don't know how he gets from A to Z
7 without crossing the bridge.
8 THE COURT: Ultimately, evidence will come into
9 the case and the closing arguments, to the extent there's
10 evidence that has been made or otherwise been provided, that
11 plaintiffs speak to the issue. They're going to argue that
12 in closings. The expert is not going to say the words "I
13 believe they intended." That's what they cannot do.
14 MR. DYESS: And, Your Honor, apologies. We may
15 have gotten far afield from the original objection. Our
16 objection is here is -- he doesn't have the expertise to
17 give the testimony that he was going to elicit.
18 THE COURT: And Mr. Nemunaitis' response when I
19 asked that what's the connection of the CERT and any
20 connection to Section 45 tax credits, Mr. Nemunaitis said it
21 speaks to the issue of relating to the issue of causing
22 infringement with regard to induced infringement, the motive
23 behind it. What is your answer to that?
24 MR. DYESS: Again, motive behind it, Your Honor,
25 I think is an issue that crosses the line and he doesn't

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1 have the expertise to evaluate the motive behind it.
2 THE COURT: Anything further, Mr. Nemunaitis?
3 MR. NEMUNAITIS: He's certainly not going to
4 speak to anyone's state of mind but he can marshal the
5 evidence to support the elements of contributory induced
6 infringement. He can talk to cause.
7 MR. DYESS: Your Honor, this is -- you're not
8 going to hear from any of our power plants. That was not
9 our power plant you just heard from. What they're trying to
10 do is have they're trying to have Mr. O'Keefe substitute for
11 the power plant as to the inducement, and we just think
12 that's improper in this instance. Beyond his technical
13 expertise, it's not based on anything from the power plant.
14 MR. NEMUNAITIS: The state of mind of the power
15 plant doesn't matter. They're the direct infringers.
16 THE COURT: And that's correct. Were you
17 suggesting otherwise?
18 MR. DYESS: I wasn't suggesting otherwise.
19 However, they're claiming we induced the power plants to
20 infringe.
21 THE COURT: Okay. I think let me tell you what
22 my ruling is here. So I'm going to deny the objection in
23 the following way. I think the original statement about the
24 basis for the objection was that it was based on my Daubert
25 ruling because we've had a Daubert process.

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1 So we've had an opportunity to the parties to
2 make the best Daubert arguments and for me to grant them or
3 deny them. Certainly, if a party is doing something in
4 violation of my Daubert ruling, that's something I'll
5 enforce. They continue do it, but I think defendants'
6 counsel's statement was the thing that's happening here that
7 is potentially in violation of my ruling related to footnote
8 9, talking about the issue of fact, recasting narratives.
9 There may be a point if the testimony gets so
10 extreme in terms of going through every fact in the record
11 and gets far afield of the elements of infringement where I
12 might invoke that footnote. I don't think we reached that
13 point at this stage. Otherwise, I'm not going to order that
14 in no way can Mr. O'Keefe make no reference to Section 45
15 tax credits.
16 I don't know exactly what the scope is. I
17 suggest to the plaintiffs' side that testimony -- the
18 further it gets afield from things like technical aspects of
19 infringement and elements of infringement could be too far,
20 and for various reasons it could be problematic in the
21 future. I'd limit it but for now, I'm not going to make a
22 blanket ruling he can't speak to it at all because I do
23 think there's at least some relationship between that issue
24 and elements of infringement because we talk about induced
25 infringement here. We're causing that. Causing something

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1 is at issue.

2 I'll deny the objection for now and I caution

3 plaintiffs if he gets too deep with the weeds of economics

4 and tax policy so it's clear he's speaking on something

5 outside the limbed purpose.

6 MR. DORSNEY: For purposes of record, the

7 witness was not offered to be the expert in the field of

8 economics and the field of any of the motive surrounding

9 those claims for contributory inducement; correct,

10 Your Honor? He's not offered an expert in those fields.

11 THE COURT: I can almost barely hear you. I

12 think what you're saying is you want a clarification on the

13 record that the witness is not being offered as an expert in

14 economics.

15 I think everybody knows that. We know what the

16 witness is being offered for. I don't understand that

17 comment. I don't understand that comment because we know

18 exactly what the expert witness has been offered for. They

19 have listed in the record all the things he testified to

20 including infringement. There's no reason to say that

21 because we all know the witness is not being offered.

22 MR. DORSNEY: As an economic. He's going to

23 testify as to the financial motive. I thought he was going

24 to testify to the financial motive for why they would

25 have --

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1 THE COURT: It has been proffered that at least

2 some testimony with regard to these tax credits has run into

3 the issue of induced infringement because an element of that

4 claim is causing infringement and the plaintiffs' case is,

5 their assertion is, that in some way these tax credits

6 relate to this causation, that reason for the causation.

7 I'm saying on that basis, it has to be a small

8 group of questions to be asked. I'm not saying it can't be

9 asked I'm not sustaining the objection. We all know what

10 the the experts have been offered for. It's listed, and we

11 know the witness is not an expert in economics.

12 Thank you.

13 (The discussion at sidebar ended.)

14 THE COURT: Mr. Nemunaitis, you want to re-ask

15 the question?

16 BY MR. NEMUNAITIS:

17 Q. Mr. O'Keefe, did you come across evidence that the

18 defendants generated tax credits in connection with their

19 sales of refined coal?

20 A. Yes.

21 Q. Now, the jury has heard something about these tax

22 credits and EPA regulations. Can you make sure everybody is

23 clear on the differences between those things?

24 A. Sure.

25 Q. Can you explain what the refined coal tax credits

558

1 were and what the time period was for that?

2 A. Sure. The refined coal tax credits started in

3 January 1, 2011, and tax credits ended on December 31, 2021,

4 so in that time period, anyone who refined coal to help

5 reduce mercury by at least 40 percent and NOx by at least

6 20 percent got a 5 to \$7 per ton tax credit on refined coal.

7 And this was enacted by Congress, and they gave

8 power to the --

9 MR. DYESS: Your Honor?

10 THE COURT: Mr. O'Keefe, can you pause for a

11 second?

12 Mr. Dyess?

13 MR. DYESS: This is the objection we discussed,

14 Your Honor. This is far afield from his technical

15 expertise.

16 THE COURT: And I overruled the objection for

17 now, and I will still overrule it. We'll see how much

18 information is gone into this area, and I'll allow you at

19 some point to raise it again.

20 BY MR. NEMUNAITIS:

21 Q. When did the EPA regulations go into effect?

22 A. Well, the EPA regulations were much later. They

23 began in 2015 and 2016. Some of the plants had to comply in

24 2015 and the rest in 2016.

25 So it began about five, six years after the

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1 40 percent refined coal tax credits enacted by Congress

2 through the IRS.

3 Now, EPA tightened the regulation standard to

4 90 percent, so it went from 40 percent to 90 percent of

5 mercury had to be removed from the emissions before they

6 went up to smokestack.

7 Q. All right. Can we talk about the defendants in this

8 case and what they did?

9 A. Sure.

10 Q. There's a number of defendants that have been named.

11 Did you analyze infringement for each defendant?

12 A. Yes.

13 Q. Do you remember in opening when Mr. Caldwell put up

14 the board and started identifying the names of the

15 defendants?

16 A. Yes.

17 Q. And do you have a slide that's similar to that to

18 identify each of these defendants?

19 A. Sure, yes.

20 Q. Oh, I'm sorry, I forgot to ask a question.

21 What is the infringement time period for your

22 analysis?

23 A. Well, the infringement time period begins July 17,

24 2019, which is when the lawsuit was filed by ME2C, and the

25 time period extends to when the tax credits ended for

560

1 refined coal which is December 31, 2021.

2 Q. So when the jury is looking at the actions and the

3 refined coal that matters, is that the time period they need

4 to focus on?

5 A. Yes.

6 Q. All right. Can we move on to talking about the

7 different defendants in this case?

8 A. Yes, we can.

9 Q. Who are the CERT contracting defendants?

10 A. Well, the CERT contracting defendants as the name

11 implies wrote the contracts for the power plants that

12 directly infringe, and I listed all those plants in the

13 bottom of the slide. I believe there were eight of them

14 altogether, and they directly infringed the patents.

15 Q. Who were the CERT operating defendants?

16 A. The CERT operating defendants constructed and

17 operated the refined coal facility at the infringing power

18 plants.

19 Q. And did the CERT operating defendants operate the

20 sprayers that provided refined coal to what's labeled here

21 as directly infringing power plants?

22 A. Yes, they did.

23 Q. What are the CERT partners?

24 A. The CERT partners oversaw the CERT operating

25 entities, the CERT contracting defendants, and the CERT

561

1 operating defendants. The CERT partners were Jeff Green,

2 Leah Schaatt, Raymond Bean, and Barr Linton.

3 Q. And who are the CERT investors?

4 A. They were the people who upfronted the money to build

5 the refined coal facilities, or they assumed ownership, like

6 a certain percentage, and they received the tax credits.

7 Q. And can we illustrate that on the slide?

8 A. Yes.

9 Q. And what did the CERT partners get out of this

10 arrangement?

11 A. Well, they got paid from the investors, JPMorgan,

12 Kiewit Mylan --

13 MR. DYESS: Objection, Your Honor.

14 THE COURT: I'll -- let me hear the objection.

15 MR. DYESS: Your Honor, again this is very far

16 afield from Mr. O'Keefe's technical expertise as a plant

17 engineer.

18 THE COURT: Mr. Nemunaitis, it seems to.

19 MR. NEMUNAITIS: That was my final question, and

20 I can move on.

21 THE COURT: I'm going to sustain that objection

22 and strike the question and beginning of the answer. Okay.

23 Thank you.

24 Please continue.

25 BY MR. NEMUNAITIS:

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1 Q. All right. Mr. O'Keefe, can we move on to the direct

2 infringement part of your analysis?

3 A. Sure.

4 MR. NEMUNAITIS: Your Honor, I have some foam

5 boards if I could have a moment to set those up.

6 THE COURT: You may.

7 MR. DORSNEY: Your Honor, we reached an

8 agreement to move the easel out of the way.

9 THE COURT: The parties can discuss it.

10 (Off the record.)

11 BY MR. NEMUNAITIS:

12 Q. Can you see that, Mr. O'Keefe?

13 A. Yes.

14 MR. DYESS: I'm sorry, Your Honor. I believe

15 the agreement was to move it a little further so we could

16 also see the exhibit.

17 THE COURT: And certainly counsel -- counsel can

18 feel free to move their chairs if they wish.

19 BY MR. NEMUNAITIS:

20 Q. Can you still see it, Mr. O'Keefe?

21 A. Yes.

22 Q. What is shown on that foam board, Mr. O'Keefe?

23 A. Well, Claims 1 and 2 of the '517 patent.

24 MR. NEMUNAITIS: It's a bit far from the

25 lectern, Your Honor. May I be free to move back and forth?

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1 THE COURT: You may be free, but keep your voice

2 up if you're speaking.

3 BY MR. NEMUNAITIS:

4 Q. All right. Mr. O'Keefe, this first section here

5 says, "A method for reducing mercury in a mercury containing

6 gas."

7 Did you find evidence that that limitation was

8 met by each of the power plants at issue in this case?

9 A. Yes. Incidentally, that's known as a preamble of the

10 claim.

11 Q. And how do you know that that limitation is met by

12 each of the power plants at issue in this case?

13 A. From my analysis and research.

14 Q. And any dispute that they need to comply with the

15 MATS regulations?

16 A. Yes, they do. I mean, MATS came into effect in 2015,

17 2016 and required a 90 percent reduction in mercury

18 emissions.

19 Q. Can I check that one off?

20 A. Yes.

21 Q. All right. Mr. O'Keefe, the next part of this

22 limitation says "combusting coal in a combustion chamber."

23 Did you find evidence that that part of the

24 claim was met?

25 A. Yes. Each power plant combusts coal and has a

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1 combustion chamber inside the furnace.

2 Q. Any dispute about that?

3 A. No.

4 Q. The next part says, "The coal comprising an additive

5 comprising Br₂, HBr, a bromine compound or a combination

6 thereof to form a mercury containing gas."

7 Did you find evidence that that limitation was

8 met?

9 A. Yes.

10 Q. Could you turn to tab 17 in your binder. Can you

11 tell me what that document is?

12 A. It is the Material Safety Data Sheet for MerSorb,

13 which is one of the chemicals sprayed on coal during the

14 refining process.

15 Q. And is that something you reviewed in this case to

16 prepare your report?

17 A. Yes, it was.

18 MR. NEMUNAITIS: Your Honor, we'd move to admit

19 PTX 125.

20 THE COURT: Any objection?

21 MR. DYESS: No, Your Honor.

22 THE COURT: It's admitted.

23 (Thereupon, Plaintiffs' Exhibit 125 was

24 admitted.)

25 MR. NEMUNAITIS: Mr. Diaz, can I have slide 34?

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1 Mr. Diaz, can you please bring up PTX 125?

2 BY MR. NEMUNAITIS:

3 Q. All right. Mr. O'Keefe, what does PTX 125 say about

4 what MerSorb is?

5 A. Well, it lists the chemical composition of MerSorb,

6 which is one of chemicals sprayed in the refining process.

7 Q. Is MerSorb a bromide compound?

8 A. Yes, it is. It's listed in the data sheet.

9 Q. And was MerSorb sprayed on all the refined coal sold

10 to the power plants at issue in this case during the damages

11 period?

12 A. Yes, it was.

13 Q. Can we check off this limitation?

14 A. Yes.

15 Q. Now, the next limitation requires collecting mercury

16 in the mercury-containing gas and -- let me stop there.

17 What equipment at the power plants at issue in this case

18 actually collects the mercury?

19 A. There's two devices. One or both could be used.

20 They're known as a bag house and electrostatic precipitator,

21 ESP.

22 Q. And can you give me my slide number 22, Mr. Diaz.

23 And is the bag house or ESP shown on this slide?

24 A. Yes, it is.

25 Q. Did you confirm that all the power plants at issue in

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1 this case employ a bag house or ESP?

2 A. Or both, yes.

3 Q. Can you explain how one of these devices actually

4 collects the mercury?

5 A. Sure. We can first talk about the bag house. The

6 bag house is essentially a box where the dirty flue gas or

7 combustion gases are directed into, and this box contains a

8 fabric filter a lot like your vacuum cleaner at home. And

9 the filter attracts particular matter containing mercury and

10 fly ash and drops it off when it accumulates sufficiently

11 into the hoppers where it's removed from the bottom, and the

12 clean gas passes out of the filter elements, and it's passed

13 up the stack.

14 Q. If we zoom in on one of the filter elements, can you

15 explain how that collects the mercury?

16 A. Sure. Like, I think I mentioned the filter itself is

17 made out of fabric material. So it passes the combustion

18 gases through, but it collects particular matter like fly

19 ash and particles of carbon containing mercury. And that

20 particular matter is dropped off in ash hoppers that

21 accumulates on the filter, and it's removed from the

22 combustion gas. So the clean gas passes out of the filter.

23 Q. What is pre-coating material?

24 A. Well, the particular matter is abrasive, and the

25 pre-coating material helps to improve the strength of the

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1 filter elements of the bag house. It helps reduce wear and

2 helps the filters last longer.

3 Q. Can you explain how an ESP or electrostatic

4 precipitator collecting mercury?

5 A. Sure. The electrostatic precipitator uses static

6 electricity to attract the particular matter to either

7 plates or rods that are positively and negatively charged

8 electrically. And when the plates and rods accumulate a

9 certain amount of ash, they're shaken, and the ash falls

10 off. The particular matter falls off into ash hoppers down

11 below. So it operates a lot like a bag house, but it uses

12 static electric charges. So the clean flue gas is passed

13 out of the ESP up to the stack.

14 Q. All right. Mr. O'Keefe, if we can look back at the

15 claim language, it continues that the collecting mercury and

16 mercury-containing gases with a sorbent added to the

17 mercury-containing gas, the sorbent comprised activated

18 carbon. Did you find evidence that that element is met?

19 A. Yes.

20 Q. Did the defendants ultimately admit that all of the

21 power plants at issue in this case use activated carbon?

22 A. Yes, they did.

23 Q. Can you turn to tab 18 and tell us what that document

24 is?

25 A. Yes.

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1 Q. What is that document?

2 A. **It's the defendants' objections and responses to the**

3 **plaintiffs' first request for admission to defendants.**

4 Q. And is this something you reviewed and relied on in

5 preparing your report?

6 A. **Yes.**

7 MR. NEMUNAITIS: Your Honor, we move to admit

8 PTX 598.

9 THE COURT: Any objection?

10 MR. DYESS: No objection.

11 THE COURT: Mr. Nemunaitis, you have time for

12 one more question left. We're just about at 5:00.

13 (Thereupon, Plaintiffs' Exhibit 598 was

14 admitted.)

15 BY MR. NEMUNAITIS:

16 Q. What did each of the contracting defendants admit

17 with regard to the use of activated carbon pertaining to the

18 power plants in this case?

19 A. **Well, they admitted that the infringing power plants**

20 **are using activated carbon.**

21 MR. NEMUNAITIS: Is now a good time to stop,

22 Your Honor?

23 THE COURT: I think so. You could have maybe

24 got one more in, but we're going to cut it off there. So

25 we'll conclude the testimony for today. We want to thank

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1 our jurors as always, and we'll have our jury removed.

2 THE CLERK: All rise.

3 (The jury exited the courtroom.)

4 THE COURT: Mr. O'Keefe, you may step down. We

5 can leave the exhibits over there. They'll be used

6 tomorrow. All right. Is there anything -- oh, let me say a

7 couple things that came to mind.

8 On the excusing-the-witness issue, we looked up

9 what the language was from the pretrial order, and -- I'm

10 not finding it here, but I think the gist -- oh, yeah, it

11 says something to the effect of fact witnesses for the jury

12 trial, other than witnesses who have already testified and

13 have been excused, shall be sequestered.

14 Now, it's always possible the witness who

15 testifies could be recalled. And so if there's request to

16 excuse but the other side objects, I don't whether a recall

17 could happen. And the whole point is sequestration is so

18 the witness's testimony is not unfairly infringed but by

19 what they see in the trial. Under that circumstance, I'm

20 not going to allow the request for excusal, so that's

21 further on what was going on.

22 And there's one other thing I wanted to say just

23 because I know it's something I think the parties wanted to

24 talk about possibly this morning, and I just noted it. I

25 think there was a part of Mr. O'Keefe's slides when we get

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1 to the elements that deal with intent; and there's, like,

2 some boxes that say "knew that," et cetera. And then it

3 looks like the boxes are going to be checked off as if he's

4 saying "I think they knew" or "I opined they knew."

5 When I saw that, I was concerned that may get

6 too close to the line that we don't want the expert witness

7 directly and specifically opining on state of mind. So

8 unless there's a fight about it, I was going to suggest to

9 the plaintiffs that they reconfigure their slides so they

10 don't appear as if Mr. O'Keefe is opining on state of mind

11 in that direct way. Any issue with that Mr. Nemunaitis?

12 MR. NEMUNAITIS: No. We had proposed a new

13 version of that that was sent over, and it just didn't get

14 into the e-mail to Your Honor.

15 THE COURT: Fair enough. Okay. All right.

16 Then let me ask before we conclude is there anything the

17 parties think I need to address before the end of the day?

18 Mr. Nemunaitis, on plaintiffs' side?

19 Mr. Caldwell?

20 MR. CALDWELL: Is there a point at which we

21 could maybe reconcile where the parties are on time

22 allocations? Because I know some things are sort of maybe

23 up for determination about Your Honor in terms of allocation

24 and whatnot. I'm just wondering if, at some point, now and

25 before the end of the night, whatever, at some point, if we

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1 can sort of see where we are at least in terms of your chess

2 clock?

3 THE COURT: Oh, yeah. In fact, at the end of

4 every day, our courtroom deputy or clerk should be coming

5 out to confirm with you what our numbers are. I think that

6 was done last night.

7 MR. DORSNEY: It was, Your Honor, and we plan to

8 do so again.

9 THE COURT: Okay. And we're going to do it

10 again tonight after court just to make sure you're on the

11 same page.

12 Anything from the defendants?

13 MR. DYESS: No, Your Honor.

14 THE COURT: So I'll wish you a good evening and

15 look forward to seeing you tomorrow. With that, the Court

16 will stand in recess.

17

18 **CERTIFICATE**

19 I, Deanna L. Warner, a Certified Shorthand Reporter,

20 do hereby certify that as such Certified Shorthand Reporter,

21 I was present at and reported in Stenotype shorthand the

22 above and foregoing proceedings.

23

24 _____

25 Deanna L. Warner, RPR, CSR
Official Court Reporter
U.S. District Court

<p style="text-align: center;">576</p> <p>1 I can see it that we're not going too close to invading the 2 jury's province regarding state of mind, while speaking to 3 the issues that it's properly --</p> <p>4 So I think back to the slides, I see the 5 plaintiffs have inserted, and I assume they will in 6 questioning, make it clear that Mr. O'Keefe is speaking only 7 to evidence that he believes relates to an element, that he 8 will not say the words that I said he cannot say. It may 9 even behoove plaintiffs to make it clear that he is not and 10 cannot speak to the issue of intent in the questions. As 11 long as they do that I don't have an objection to the slides 12 they've given. They sufficiently walk that line in an 13 appropriate way.</p> <p>14 The parties have raised -- the defense has 15 raised an issue about certain of the slides of Mr. O'Keefe 16 that I see relate to a time period prior to the complaint 17 for which he believes relates to elements of contributory 18 infringement. They cited the <i>Roach</i> case and in my view with 19 regard to that objection for now I'm going to overrule it. 20 I've overruled the first objection for now is my 21 inclination. The second issue is the <i>Roach</i> issue. I 22 overruled that concern because in my view in reading <i>Roach</i>, 23 what I think <i>Roach</i> really says, and I think it makes total 24 sense, if you're arguing induced infringement as a 25 plaintiff, the acts of inducement must occur within the</p>	<p style="text-align: center;">578</p> <p>1 about throughout the case. If there is nuances between the 2 differences between the term sheet and the agreement I'm 3 sure that can be brought out in cross examination for sure.</p> <p>4 This is the PTX 762 dispute with regard to 5 Green. It generally seemed relevant to me, but I didn't 6 have enough information about -- it seems like there's a 7 statement about something Green said in his prior reply 8 report that might contradict this. I didn't have enough 9 information about that to draw a final conclusion. I guess 10 it's an issue that could be dealt with in cross but not 11 totally sure.</p> <p>12 And then there are a couple of issues with 13 regard to Mr. Green, who's the defendants' Mr. Green, and 14 Ms. Senior. With regard to the former, those seem to be 15 about the issue of defense of the state. Again, this 16 evidence is stuff that can be talked about as I ruled. I 17 think the parties in their questioning, including in 18 plaintiffs' questioning and defendants' questioning of 19 plaintiffs' expert and also in their questioning of the 20 other side, the parties know what the law on contributory 21 infringement is going to be, what the pole is going to 22 matter with regard to the elements, and what argument can be 23 made about the issue of mistake of law regarding knowledge. 24 Seems like they can bring that out in their questioning of 25 folks. And so, in any event, I didn't see an initial basis</p>
<p style="text-align: center;">577</p> <p>1 damages period that's what <i>Roach</i> stands for. Now if you 2 have a case and you're the plaintiff and you don't point to 3 acts of inducement from 2019 on you can't win. What <i>Roach</i> 4 does not say is that no evidence from the time period prior 5 to the damages period could in any way be irrelevant to 6 issues of induced infringement -- time period before. Like 7 state of mind or intent, et cetera. Of course the specifics 8 may depend on what the evidence is or how it comes up but 9 there's no basis for me to preemptively rule that these 10 exhibits can't be discussed at this stage.</p> <p>11 Slide 74 of Mr. O'Keefe's slides, is I guess an 12 indemnification agreement. To the extent there was an 13 objection that the discussion of that agreement would be 14 beyond the scope of the report -- that does seem to be like 15 he was talking about, issues like this. So based on what 16 I've seen I don't have a basis to sustain that objection at 17 this stage.</p> <p>18 Mr. Green, the plaintiffs' damages expert, there 19 was objection from defense about PTX 761, and in that regard 20 761 was related to -- it's a term sheet regarding the 21 agreement that the settling defendants signed. I was 22 intending to overrule that objection, I don't see any -- for 23 the reasons stated by the plaintiffs. I don't see anything 24 objectionable to discussing that term sheet related to the 25 agreement the parties have been talking about and talking</p>	<p style="text-align: center;">579</p> <p>1 to grant the plaintiffs' objection with regard to the 2 evidence that the defendants' Mr. Green wants to talk about.</p> <p>3 Lastly, with regard to the issue about 4 Ms. Senior and her slides, I think some of the issue, one I 5 just talked about, there and some of it if there's a beyond 6 the scope objection it looked like from the paragraphs in 7 her report that she was speaking to these issues. And 8 ironically the defendants' expert there is speaking on 9 infringement speaking a bit about Section 45 issues, the 10 very thing we talked about you guys have an objection to the 11 plaintiffs' expert doing a little of although he hardly did 12 any in the examination so far. So based on what I saw I 13 didn't see a reason to grant defendants' objection there 14 with Ms. Senior.</p> <p>15 So that's a lot but I'm trying to give you as 16 much as I can in what, it was only about ten minutes, so 17 that's pretty good, my initial view of the disputes to save 18 your time because I know time the time will be tight. With 19 all that said, let me ask you is there anything else either 20 side wishes to further press, Mr. Nemunaitis?</p> <p>21 MR. NEMUNAITIS: I believe we understand all 22 those rulings, Your Honor. There was also the issue of the 23 curative instruction, that's been briefed. I don't know if 24 Your Honor wants to take up argument on that now that the 25 briefing is done.</p>

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1 THE COURT: I saw it was filed last night. I
2 tried to focus this morning on the disputes that I knew
3 would be most relevant to our testimony immediately, so I
4 haven't reviewed it. Now today my hope is that during
5 breaks I can start to review it. But the issue is -- is
6 part of the issue, Mr. Nemunaitis, I'm just getting this
7 from the titles of what the parties said, is part of the
8 issue that surely we're going to talk about in the final
9 jury instructions there's going to be an added instruction that
10 makes clear look, this is the pole that matters with regard
11 to the elements of contributory infringement with the
12 exception of the defendants arguments as to no knowledge due
13 to mistaken understanding of the law, et cetera. And
14 there'll be maybe additional words added to make cleaner
15 what the deal is there, is the big deal in this motion you
16 want me to make that kind of instruction during the trial?
17 MR. NEMUNAITIS: I think that's the issue, Your
18 Honor, and particularly before Mr. Jeff Green takes the
19 stand I expect we'll have a break before that if you want to
20 review the briefing and we'll take it up at the break before
21 he takes the stand.
22 THE COURT: What do we think today we?
23 Mr. O'Keefe, we'll get through and probably Mr. Green, your
24 expert, we'll get through.
25 MR. NEMUNAITIS: We'll call Mr. Jeff Green

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1 adversely in the case.
2 THE COURT: There will be time between now and
3 then. I'll take a look and if we have the ability to deal
4 it with before then we'll try. Anything else?
5 MR. NEMUNAITIS: No, Your Honor.
6 THE COURT: Mr. Dyess.
7 MR. DYESS: Your Honor, I have one and
8 Mr. Dorsney has the rebuttal of one of their things. The
9 point on the indemnity agreement wasn't that he didn't speak
10 to indemnity at all in his report. The point was he changes
11 courses on what he's relying on. The only thing he cited in
12 his report is the basis for his indemnity opinion.
13 THE COURT: You can approach if you have a
14 report.
15 MR. DYESS: I do. I apologize, Your Honor. So
16 Your Honor, this is pages 124 and 125 from his opening
17 report and I assume that's what the court looked at.
18 THE COURT: Yes.
19 MR. DYESS: So paragraph 101, two sentences.
20 "Defendants provide refined coal with indemnity provisions
21 in place. This will allow power plants to engage in -- that
22 the power plant would face a diminished risk of
23 infringement." And they drop the footnote at 127, and it
24 runs over two pages.
25 THE COURT: And I assume this is relevant to the

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1 plaintiffs' arguments with regard to causation. I see
2 Mr. Nemunaitis maybe pausing for a second. I see you
3 nodding. Am I right, Mr. Nemunaitis?
4 MR. NEMUNAITIS: Yes, I believe it goes to a
5 number of factors related to the induced infringement.
6 THE COURT: Okay.
7 MR. DYESS: If you step through footnote 127,
8 this was a point in time there were a lot more defendants in
9 the case. So the first three pieces of evidence they cite
10 to don't deal with the CERT defendants at all. Those deal
11 with the Gallagher defendants, the DTE defendants. You get
12 to the last thing they cite too, this reference 223, it is
13 this Intergy presentation evaluate CERT offer to provide
14 refined coal. That's the only thing he cites to as the
15 basis for this opinion and that's the exhibit that we just
16 handed you. He does not say that he's relying on the
17 refined coal sales agreement as the basis for this part of
18 his opinion. So that was the basis for our objection that
19 it exceeds the scope of his report.
20 THE COURT: But, well, okay. Thank you. Let me
21 hear from the other side. I may ask you follow-up
22 questions. Mr. Nemunaitis.
23 MR. NEMUNAITIS: Mr. O'Keefe cites to that
24 contract in his report, and that's on page -- beginning on
25 page 57 is when he starts explaining how the contracts work

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1 for each of the defendants.
2 THE COURT: Does anybody have a full copy?
3 MR. NEMUNAITIS: I have my copy here.
4 THE COURT: Did you already hand me one in the
5 stuff you gave me?
6 MR. NEMUNAITIS: There should be one over here.
7 Yes, it should be in the collection of Mr. O'Keefe's
8 materials.
9 THE COURT: Whoever can get me it fastest.
10 MR. NEMUNAITIS: So this is the section here
11 defense is talking about, refined coal LLC power plant
12 contracts. It says: Each of the RC LLC defendants
13 assigns -- sorry.
14 THE COURT: I'll ask you to slow down. Let me
15 read it. Each of the RC LLC defendants has signed a set of
16 contracts with its associated power plant. Under these
17 contracts the RC LLC defendant purchases refined coal from
18 the power plant.
19 So those are relevant lines so far.
20 MR. NEMUNAITIS: If we go down a few pages
21 because there were a number of defendants mentioned, we get
22 to the listing of all of the CERT contracts. So we plan to
23 admit the - some of the CERT contracts through Mr. O'Keefe
24 including the one on that slide. So there's no objection to
25 that, so the document is coming in.

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1 The section continues to talk about what the
2 terms of these contracts are. So I understand that on that
3 particular sentence he gave the one example of power plant
4 presentation to back up the indemnity, but he's also citing
5 to the contracts which have the indemnity language so --
6 THE COURT: Your argument is -- look, in
7 paragraph 101, did Mr. O'Keefe make it clear that he
8 believed that indemnity agreements in these refined coal
9 contracts were going to be important to relevance in this
10 issue? He did.
11 Now, he had like 34 defendants he was talking
12 about in his report. So he was citing some exemplary
13 examples of this. But I think you're saying otherwise in
14 his report he speaks to the contracts at issue. The parties
15 have those contracts, and so the defendant should be fairly
16 aware that if there are indemnity provisions as it relates
17 to the CERT defendants in these contracts, Mr. O'Keefe is
18 citing them as relevant in paragraph 101, he may speak to
19 them; is that right?
20 MR. NEMUNAITIS: Yes, Your Honor.
21 THE COURT: Mr. Dyess, that sounds reasonable to
22 me. Anything more you want to say?
23 MR. DYESS: No, Your Honor. I apologize. I
24 should have said this is far afield beyond what they
25 qualified him in his expertise to talk about refined coal

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1 supply agreements. They're just not in his expertise.
2 THE COURT: Okay. Well, that's not the
3 objection you started with. You started beyond the scope.
4 Your objection was beyond the scope.
5 MR. DYESS: It was part of the objection that
6 was lodged I think brought to the Court the day before.
7 You're correct, it's not what we just mentioned from there.
8 I just want to make sure we got it all in.
9 THE COURT: So with regard to the objection
10 we're dealing with today which is whether discussion of this
11 indemnity agreement is beyond the scope of Mr. O'Keefe's
12 expert report, I overrule the objection. I find for the
13 reasons I just described. I think it is fairly within the
14 scope of the report and I think defendants should have
15 anticipated Mr. O'Keefe would be discussing that. I
16 overrule the objection.
17 All right, Mr. Dorsney.
18 MR. DORSNEY: Good morning, Your Honor.
19 THE COURT: Good morning.
20 MR. DORSNEY: Thank you for your time.
21 Just a few things to hopefully make the day go a
22 little easier. Slides with the red checkmarks that come up
23 with what we view as reaches the conclusion regarding what
24 we've labeled as the intent state of mind, motive type of
25 stuff, is it your decision today that when they get to that

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1 point the lawyer may be able to draw that conclusion but
2 that the expert could not testify that that's the
3 conclusion, that the defendants knew something or didn't
4 know something.
5 THE COURT: So my ruling is that Mr. O'Keefe
6 cannot say, you know, say for example, if Mr. Nemunaitis or
7 whoever is doing the direct can't say: Mr. O'Keefe, do you
8 have an opinion on whether the defendants knew that the coal
9 was especially made or adapted or do you have an opinion on
10 whether the defendants knew about the patent" and that
11 Mr. O'Keefe can't say: Yes, I believe -- my opinion is and
12 I believe that the defendants knew, blah-blah-blah, he
13 cannot do that.
14 MR. DORSNEY: So when they put the checkmark up,
15 that becomes his opinion or so that's what it says
16 defendants knew. I can read the exact language.
17 THE COURT: I think what you're saying is you
18 think that although the slides indicate that what
19 Mr. O'Keefe is going is to be counting on as evidence is
20 that he thinks related to these elements and you're arguing
21 that by putting the checkmark on the boxes --
22 MR. DORSNEY: He's adopting that as an opinion.
23 THE COURT: -- that it seems too close to
24 Mr. O'Keefe saying the words "I believe" or "I knew" that
25 coal. Is that the idea?

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1 MR. DORSNEY: Yes, Your Honor.
2 THE COURT: Let me hear from the other side.
3 MR. DORSNEY: I do have other points too.
4 THE COURT: Let's just deal with that issue.
5 Mr. Nemunaitis?
6 MR. NEMUNAITIS: I don't intend to ask
7 Mr. O'Keefe what he believes about those things. All I
8 intend to ask is did you see evidence related to this
9 element. If the jury finds intent or whatever, what does
10 that mean for induced infringement?
11 And I also intend to clarify with the witness
12 that he cannot speak to state of mind of intent. That is
13 solely for the jury.
14 THE COURT: Okay. All right. Thank you.
15 In light of that, in light of what's expected
16 and what I said earlier, I'm going to allow the plaintiffs
17 to use the slides including they can check those boxes off.
18 I think with the caveats that the slides themselves do make
19 clear that we're speaking only to evidence related in some
20 way to this element. And because Mr. Nemunaitis I
21 understand will make it clear that Mr. O'Keefe can't and
22 isn't speaking to the ultimate opinion only what's asked of
23 the jury. I think that sufficiently walks the line,
24 admittedly a close line. So that's my ruling.
25 MR. DORSNEY: And then I have a few more points

<p style="text-align: center;">588</p> <p>1 to hopefully keep the day going a little smoother.</p> <p>2 So we have in relation to this issue and to</p> <p>3 Mr. O'Keefe 702, 703, 402, and 403 objections. Do we need</p> <p>4 to pop up every time to preserve that or is this issue</p> <p>5 preserved? We made that objection. Do we have to preserve</p> <p>6 it during his actual testimony. So if a checkmark goes up,</p> <p>7 do I have to stand up and say objection, Your Honor, that's</p> <p>8 an opinion to the ultimate conclusion and that's the view of</p> <p>9 the expert here or is this already preserved? Because</p> <p>10 otherwise, we're going to be popping up a lot in the slides.</p> <p>11 THE COURT: Look, I think if you're asking me</p> <p>12 ultimately can I tell you what a court of appeals would</p> <p>13 decide about what is required to preserve an objection? Of</p> <p>14 course I can't. I can't say to you, Mr. Dorsney, well, look</p> <p>15 in my view, you're fine. Ultimately it's on each party to</p> <p>16 determine what they think is necessary and relevant to do to</p> <p>17 preserve whatever objections they have.</p> <p>18 I will say, though, to the extent it's helpful,</p> <p>19 I think you have raised the issues of whether Mr. O'Keefe</p> <p>20 speaking about certain evidence in his slides is permissible</p> <p>21 pursuant to Rules 402 and 403, and 702 and 703. I think I</p> <p>22 addressed it as to the slides, so at least for my purposes I</p> <p>23 don't see a need or a reason for you to stand up and object</p> <p>24 each and every time. And so I guess all I'm saying is</p> <p>25 unless I'm misunderstanding what the law is that the court</p>	<p style="text-align: center;">590</p> <p>1 referring to?</p> <p>2 MR. DORSNEY: Yes, Your Honor. It's day two</p> <p>3 trial transcript looks like page 533 at 25 to 534 at 4.</p> <p>4 THE COURT: I'm not sure where that document is.</p> <p>5 I don't have it in the front of me. Is there anything you</p> <p>6 want me to look at? I can look at it. I'm happy to follow</p> <p>7 up. I don't know what the parties have access to, but it's</p> <p>8 not like I have a trial transcript from day 2 in front of</p> <p>9 me. I don't know what you're referring to, but I think I</p> <p>10 might need it to get my understanding right.</p> <p>11 THE REPORTER: I can e-mail you. Do you want me</p> <p>12 to e-mail it to you?</p> <p>13 THE COURT: Our court reporter can send it?</p> <p>14 THE REPORTER: Yes. I can e-mail you Day 2.</p> <p>15 I'm sorry, I should have done that.</p> <p>16 THE COURT: While we're waiting, Mr. Dorsney,</p> <p>17 knowing that I'll get this at some point, what is it that</p> <p>18 you wanted to say with regard to this issue?</p> <p>19 MR. DORSNEY: Well, I'm trying to understand if</p> <p>20 you're ruling today as expanded the scope for which he's</p> <p>21 being offered as an expert in the case because he was</p> <p>22 offered as an expert in the case in the field of power plant</p> <p>23 operation, including operation and regulation of coal-fired</p> <p>24 power plant equipment and related equipment for emission</p> <p>25 control.</p>
<p style="text-align: center;">589</p> <p>1 of appeals might think is the case to be able to preserve</p> <p>2 objections, certainly I don't believe you need to do it</p> <p>3 based on what we've covered. But I can't speak for you-all.</p> <p>4 You make whatever decisions you think you have to make, et</p> <p>5 cetera. Does that make sense?</p> <p>6 MR. DORSNEY: Well, that's helpful, Your Honor.</p> <p>7 That's for sure.</p> <p>8 And then the next point is that Mr. O'Keefe was</p> <p>9 proffered as an expert in the field of power plant</p> <p>10 operations including operation and regulation.</p> <p>11 THE COURT: May I interrupt, Mr. Dorsney? I</p> <p>12 think you may be reading from a part of either Mr. O'Keefe's</p> <p>13 report or --</p> <p>14 MR. DORSNEY: His testimony --</p> <p>15 THE COURT: -- pretrial order.</p> <p>16 MR. DORSNEY: His testifying at trial.</p> <p>17 THE COURT: I'm speaking, please. We really</p> <p>18 both because it's frustrating frankly and because it's</p> <p>19 incredibly difficult for our court reporter to get this down</p> <p>20 and we're trying to pack a lot in. When I am speaking, you</p> <p>21 can't be speaking and you can't interrupt me. So please</p> <p>22 don't do it. Please don't do it. I'm asking for all those</p> <p>23 reasons.</p> <p>24 Is there a document that I could look at, was my</p> <p>25 question, that would help me understand what you're</p>	<p style="text-align: center;">591</p> <p>1 Yet he's going to offer testimony regarding</p> <p>2 license agreements looks like maybe Patent Office</p> <p>3 procedures, indemnity agreements conclusions to be drawn</p> <p>4 from lay fact witness testimony, a December 2018</p> <p>5 confidential report prepared by looks like to JPMorgan --</p> <p>6 let's see -- some internal e-mails, all of which are not</p> <p>7 related to the technical field for which he was admitted in</p> <p>8 this case, and I submit to the Court that no technical</p> <p>9 expert where testimony is required on this type of evidence</p> <p>10 nor is he qualified to offer such evidence nor would the</p> <p>11 basis of his testimony be supported by Rule 703, it's</p> <p>12 something experts in this field reasonably rely opinion.</p> <p>13 THE COURT: Mr. Dorsney, I don't see those</p> <p>14 objections. There were objections previously made to</p> <p>15 certain of the slides. I don't see the objections you're</p> <p>16 talking about now having been made previously or raised with</p> <p>17 the Court previously.</p> <p>18 MR. DORSNEY: They came in the day before.</p> <p>19 THE COURT: I went through both days objections</p> <p>20 worth of objections that were raised to the slides</p> <p>21 specifically so that I could come out and make rulings,</p> <p>22 yesterday and today, about all the issues I need to about</p> <p>23 the slides. I think none of the arguments you're making now</p> <p>24 about the relevance of those slides to the extent they're</p> <p>25 beyond the scope of his report were made in those</p>

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1 objections. Let me ask briefly, does the plaintiff have a
2 different view on that, Mr. Nemunaitis?
3 MR. NEMUNAITIS: No, Your Honor. I can't say I
4 fully understand the issue, but I don't have a different
5 view.
6 THE COURT: In any event, we're right at 8:59
7 and I don't want to keep the jury waiting. So to the extent
8 we haven't been able to resolve some issue that may be
9 brought up today, we may have to resolve it.
10 MR. DORSNEY: One minute, Your Honor, on that
11 point.
12 THE COURT: We can't. I don't want to keep the
13 jury waiting. Okay. Mr. Caldwell, for that purpose I need
14 to get started.
15 MR. CALDWELL: Can I note a response? You asked
16 counsel for defendants about this need to object and may I
17 note a response because I think it was just sort of a there
18 was colloquy for you. Our position is that we need to state
19 the objection. I mean we're intending the following
20 evidence for the court but the problem is for an appellate
21 court looking at what the issues of deference are and what
22 they preserved and then sort of clarity on the record as to
23 whether we had an opportunity to correct something that was
24 objected to, it is proper for them to lodge the objection.
25 This isn't a deposition where you can casually agree on a

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1 running objection. In our view we think it makes more sense
2 to do the objection and nobody wants to be theatrical and
3 instigate a problem there. That is our position.
4 THE COURT: I think that's helpful to have that
5 noted, and if they make an objection and I feel like we need
6 to discuss it in some further fashion to understand the
7 nature of it, I can always talk to them.
8 MR. SYKES: I'm going to discuss with the
9 defendants and we're going to renew our request that
10 Mr. MacPherson be released from the rule because at this
11 point they gave us the witness list, and he's not on it, and
12 he's not on ours either.
13 THE COURT: That's a separate issue. You can
14 discuss it with them. I want to make sure we get the jury
15 in.
16 (A recess was taken, after which the following
17 proceedings were had:)
18 THE COURT: Good morning, again. So you may be
19 wondering why we didn't start at 9:00. So at 9:00 I had
20 seven or our eight jurors were here, but not the eighth and
21 after ten minutes passed, the clerk reached out to the jury
22 who is not here. By the way, this is the juror who was
23 originally juror number four on the side list, he's the
24 second juror, juror number two, in the jury box. My court
25 deputy reached him by phone and he said that he had recently

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1 had a spinal fusion procedure on his back, that overnight he
2 became unable to move or hardly able to move, that he can't
3 get out of bed and made it clear he was not coming to court
4 today or my courtroom deputy believes ever again. And he
5 said that he didn't have a way to reach out to us to let us
6 know this although we had provided the jurors with my
7 courtroom deputy's cell phone. So understanding that and
8 understanding that there's no reasonable chance that juror
9 is going to participate today or in the future my plan would
10 be to excuse the juror, proceed forward with seven jurors to
11 complete the trial. Is there any objection to that from the
12 plaintiffs' side --
13 MR. CALDWELL: No, sir.
14 MR. NEMUNAITIS: Nor the defense.
15 MS. HALEY: No, Your Honor.
16 THE COURT: So what we plan to do is when we
17 -- I think the best thing when we bring the jury I'll simply
18 say that as you'll notice we're only seven, the remaining
19 juror is not with us, he's been excused from the trial and
20 we'll proceed with seven jurors and we'll go forward from
21 there. Okay. All right. With that said we'll take a brief
22 recess and get started. We'll have the jury brought in.
23 (The jury entered the courtroom.)
24 THE COURT: Ladies and gentlemen of the jury,
25 good morning. You'll notice there are only seven of you,

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1 not eight. One of our jurors has been excused from service.
2 He will not be here and not be participating for the rest of
3 the trial. We'll go forward with seven jurors. With that I
4 want to get started with our trial day so I'll to
5 plaintiffs' counsel to resume their examination. We'll
6 bring Mr. O'Keefe forward. And the witness remains sworn.
7 MR. CALDWELL: Your Honor, if I may so I don't
8 interrupt the presentation, we have conferred with opposing
9 counsel and I want to renew my request that Mr. MacPherson
10 be excused from the rule on sequestration. At this point my
11 understanding is there's no opposition from the defendants.
12 I just want to be able to alert him so he can make his way
13 over.
14 MR. DYESS: No objection.
15 THE COURT: So Mr. MacPherson may make his way
16 back to court, Mr. Nemunaitis.
17 EXAMINATION
18 BY MR. NEMUNAITIS:
19 Q. Good morning, Mr. O'Keefe.
20 A. **Good morning.**
21 Q. To remind everyone where we left off, we ended up
22 talking about the defendants' admission that you had
23 identified as the art?
24 A. **Yes.**
25 Q. And did defendants admit that at least during some of

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1 the damages period the power plants at issue in this case
2 were using activated carbon?
3 **A. Yes.**
4 **Q.** Because the defendants admission was only as to at
5 least some of the time period, did you review additional
6 evidence as to activated carbon use at the power plants?
7 **A. Yes.**
8 **Q.** Do you have a slide to help us organize that
9 information?
10 **A. Yes, I do.**
11 **Q.** Does this slide have all the power plants at issue
12 that you analyzed for this case?
13 **A. Yes.**
14 **Q.** And for the record, the power plants at issue in this
15 case are the Big Cajun II, W.A. Parish, Coletto Creek,
16 Labadie, Limestone, Laramie, Rush Island, and Antelope
17 Valley; is that right?
18 **A. Correct.**
19 **Q.** All right. And we already walked through the request
20 for permission. Can we put a checkmark to indicate that was
21 evidence of activated carbon use?
22 **A. Yes.**
23 **Q.** What type of coal did Mr. Pavlish identify as being
24 particularly useful for the technology at issue in this
25 case?

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1 **A. He said lower quality coals like sub-bituminous and**
2 **lignite.**
3 **Q.** Did that include PRB?
4 **A. Yes.**
5 **Q.** Did you look at what types of coals were burned at
6 the power plants at issue in this case?
7 **A. Yes.**
8 **Q.** What did they burn?
9 **A. All of them burned Powder River Basin coal except for**
10 **the last one in the slide which burned lignite.**
11 **Q.** If we put a checkmark to indicate that that's some
12 evidence supporting using activated carbon at these power
13 plants?
14 **A. Yes.**
15 **Q.** Did you review operating permits for each of the
16 power plants at issue in this case?
17 **A. Yes, I did.**
18 **Q.** And can you talk about that, what is the purpose of
19 an operating permit for a coal-fired power plant?
20 **A. Well the operating permit as its name implies, it's a**
21 **permit to operate, and in that document the power plant has**
22 **to specify what kind of equipment they're using for**
23 **pollution control, for example, and it has to be approved**
24 **and the permit is issued and the plant can begin operating.**
25 **Q.** Mr. O'Keefe, can you please take a look at tab 19

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1 through 26 in your binder, and that should be Volume 2?
2 **A. Okay.**
3 **Q.** Can you tell us what those documents are?
4 **A. I'm sorry it's 19 through what?**
5 **Q.** 26.
6 **A. They look like operating permits. Yes, they are**
7 **operating permits.**
8 **Q.** As part of your investigation in this case did you
9 identify operating permit documentation for each of the
10 power plants at issue in this case?
11 **A. Yes. Yes.**
12 **Q.** Did you rely on those operating permits to form your
13 opinions in this case?
14 **MR. DYESS:** Your Honor, we object. We don't
15 believe they've laid the foundation that this witness has
16 had any experience with working with permits for power
17 plants. So there's a Rule 703 objection there which leads
18 to a Rule 403 objection. That foundation hasn't been laid.
19 **THE COURT:** Let's address this issue and to some
20 degree related issues at sidebar.
21 (Thereupon, a discussion was held at sidebar.)
22 **THE COURT:** I should say, counsel, I think maybe
23 to try to talk in a little substance here now but to be able
24 to say to the extent I disagree and overrule the objection
25 we talk about it substantively now and that same premise

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1 relates to further objections, that way we don't have to
2 call parties over and lose time.
3 **I think, Mr. Dyess, the nature of your objection**
4 **is the witness is talking about power plant -- the power**
5 **plants at issue and the permits that are utilized with**
6 **regard to the work and it's beyond the scope of his**
7 **expertise pursuant to Rule 702 and 703 and that the**
8 **testimony should be excluded for 402 and 403.**
9 **MR. NEMUNAITIS:** The specific question is did
10 you review operating permits in connection with this case.
11 I don't believe that's an objectionable question. Also this
12 part of his report was not objected to or filed a Daubert
13 motion on. There's no objections to these exhibits coming
14 in and it's within the scope of his expertise.
15 **THE COURT:** Were these exhibits, the ones we're
16 talking about now, the parties have a process they agree to
17 in pretrial orders and we see they -- were these exhibits
18 part of your objections in the prior day or two?
19 **MR. DYESS:** No, Your Honor. But the objection
20 is testifying to the exhibits being beyond the scope of his
21 expertise.
22 **THE COURT:** You're certainly aware of the fact
23 that the witness is going to use the exhibits. I don't
24 understand why the basis for the objection wouldn't have
25 been ascertainable last night or two days ago.

<p style="text-align: center;">600</p> <p>1 MR. DYESS: Your Honor, we didn't know what he 2 was going to say about the exhibits. 3 THE COURT: So Mr. Nemunaitis, I guess the other 4 question to you would be if you are articulating why it is 5 that testimony from Mr. O'Keefe related to the documents 6 likely is related with regard to 402 and 702 objection with 7 regard to the matters he's going to be speaking at trial and 8 the scope of his expert witness testimony, what is your 9 response to that? 10 MR. NEMUNAITIS: That he reviewed the operating 11 permits in connection with this case, they're for the 12 operation of power plants, he has plenty of experience 13 dealing with that and he can opine on them and explain what 14 that they mean, that would be helpful to the jury. 15 THE COURT: Anything further, Mr. Dyess? 16 MR. DYESS: We're going to add he worked in 17 power plants 20 years ago and I don't believe in the 18 qualification testimony they had they have testimony he 19 worked in permitting or permitting at the power plants. 20 THE COURT: Let me say a few things here which I 21 hope will be helpful and may allow me to very briefly avoid 22 additional objections without having the parties come to 23 sidebar. It's not clear to me that these objections -- it 24 seems to me that these objections as to the testimony in 25 these slides might well have been anticipated prior to</p>	<p style="text-align: center;">602</p> <p>1 In fact, for example, if Mr. O'Keefe were to start talking 2 about the specific financial arrangement between one of 3 these defendants and JPMorgan Chase and about the complex 4 financial proposal that they entered into to provide 5 investment opportunities, that is, it could be and might be 6 some reason why that kind of testimony could be said in 7 closing because it some way related to plaintiffs' case, but 8 it is so far afield and clearly unrelated to the scope of 9 Mr. O'Keefe's testimony that I will shut it down. 10 Indeed, yesterday there was a slide from the 11 plaintiffs I thought traipsed way too far and they started 12 talking showing dollars flowing to JPMorgan Chase. 13 Mr. Dyess objected and I did sustain the objection because 14 it's beyond the scope of Mr. O'Keefe's testimony. 15 There are documents today like the indemnity 16 agreement and also I think exhibits relating to the use of 17 activated carbon and/or bromine at some power plants at 18 issue that are tied in some way to the defendants. My view 19 is that testimony is sufficiently linked within the scope of 20 Mr. O'Keefe' testimony. 21 Lastly, I would say I know that the defendants 22 did have prior objections broadly to Mr. O'Keefe's 23 qualifications that Mr. Dyess mentioned briefly. I resolved 24 that objection during the Daubert motion, and my decision 25 was made, the position is clear, that's my ruling on this</p>
<p style="text-align: center;">601</p> <p>1 Mr. O'Keefe's testimony right now. We have an agreed upon 2 process in place in which we identify those slides in 3 advance and defendants didn't do so. Even to the extent 4 that doesn't mean they waived the objection, I'll address it 5 substantively. Mr. O'Keefe has been offered as a technical 6 expert with expertise in the field of power plant operation 7 including operation and regulation of coal-fired power plant 8 equipment, and he's also going to be opining consistent with 9 his expert reports including on the issue of infringement. 10 And in his testimony today, yesterday and today 11 there are going to be exhibits or evidence that he reviewed 12 and that -- as part of his work as an expert that do in some 13 way bear on the operation of a coal-fired power plant, the 14 way the power plant operates and how it interacts with 15 the -- like the defendants, to the extent there is that kind 16 of, and I think with regard to this document, there is a 17 solution and Mr. O'Keefe will be able to testify about them. 18 They are evidence that he believes in some way relates to 19 his conclusions about the infringement questions in the case 20 on which he's going to opine. 21 Now, I will say that do I think that every 22 single piece of evidence or every single fact that the 23 plaintiffs might produce is in some way relevant to the 24 issues of direct or indirect infringement can be spoken to 25 in great length by Mr. O'Keefe? No, I won't go that far.</p>	<p style="text-align: center;">603</p> <p>1 issue. So I'll overrule the objection. I hope that will be 2 helpful to the context of further decisions I have to make. 3 MR. DORSNEY: One point, Your Honor. The issue 4 may have to come up again because I see it as divided 5 between technical facts, which he can testify to, and things 6 that are not technical that may be in those documents like 7 inferences to be drawn about what an indemnity meant to the 8 business people or why they would enter into a license or 9 those are not technical. So that's the line in my mind we 10 may have objections to. 11 THE COURT: I'll say something you mentioned 12 starts to sound like almost intent related or knowledge 13 related. What does that mean to the defendant? Obviously 14 the expert can't speak to what's in the head of one of our 15 defendants and if they start to do so and there's an 16 objection, I will shut it down. There may be nuances I 17 can't cover here. The parties can raise those objections. 18 If my discussion here covers it, I can refer to the 19 discussion. 20 (The discussion at sidebar ended.) 21 BY MR. NEMUNAITIS: 22 Q. Did review the operating permits at Tabs 19 through 23 26 to inform your opinions in this case, Mr. O'Keefe? 24 A. Yes. 25 Q. And did those operating permits tell you about</p>

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1 activated carbon use at the power plants at issue in this
2 case?
3 **A. Yes, they did.**
4 MR. NEMUNAITIS: Your Honor, we move to admit
5 Exhibits PTX 103, 525, 710, 711, 714, 715, 716 and 725.
6 THE COURT: Mr. Nemunaitis, just to make sure we
7 get it. Can you say the numbers one more time?
8 MR. NEMUNAITIS: Yes. PTX 103, 525, 710, 711,
9 714, 715, 716, and 725.
10 THE COURT: Is there any objection?
11 MR. DYESS: Your Honor, we would make a
12 foundation objection. If he's moving on from this point, we
13 don't think he's laid foundation of what is in the documents
14 or what he used from the documents.
15 THE COURT: Any response, Mr. Nemunaitis?
16 MR. NEMUNAITIS: I believe I laid the foundation
17 for him to admit the documents as supporting his opinions
18 and the next set of questions would be to have him explain
19 those documents.
20 THE COURT: I agree with plaintiffs and will
21 overrule the objections and those documents will be
22 admitted.
23 (Thereupon, Plaintiffs' Exhibit Numbers 103,
24 525, 710, 711, 714, 715, 716, and 725 were admitted.)
25 BY MR. NEMUNAITIS:

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1 Q. All right. Mr. O'Keefe, what's on the screen here?
2 **A. It's an example of an operating permit.**
3 Q. And this is PTX 716. What power plant does this
4 operating permit relate to?
5 **A. That is the Labadie Energy Center which is operated
6 by Ameren Missouri.**
7 Q. And what does the Ameren Labadie operating permit
8 tell you about activated carbon use?
9 **A. Well, I've highlighted in the boilers 1 through 4
10 they use activated carbon.**
11 Q. If a power plant's permit states that it uses
12 activated carbon to meet mercury regulations, is that what
13 it needs to do?
14 **A. Yes.**
15 Q. What would happen if a power plant decided to not
16 follow what's required in the operating permit?
17 **A. Well, their permit could be revoked and they could be
18 shut down.**
19 Q. Yesterday the jury saw some video clip of Mr. Whitney
20 who worked at Mid-American power plant, do you remember
21 that?
22 **A. Yes.**
23 Q. Was Mid-American listed at one of the power plants at
24 issue in this case?
25 **A. No, it was not.**

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1 Q. Okay. So did he work for a power plant that had
2 connections to a different refined coal supplier?
3 **A. Yea, he did.**
4 Q. Did he talk about how operating permits work?
5 **A. Yes.**
6 Q. And is your understanding of how operating permits
7 for coal-fired power plants work consistent with his
8 testimony?
9 **A. I think so, yes.**
10 Q. Did the operating permits for all of the power plants
11 at issue in this case indicate that they use activated
12 carbon injection equipment?
13 **A. Yes.**
14 Q. If we look back at our table, can we add the
15 operating permits to each of the power plants in the list?
16 **A. Yes, we can.**
17 Q. Can we put a checkmark to indicate that indicates use
18 of activated carbon?
19 **A. Yes.**
20 Q. Based on your investigation were each of the power
21 plants at issue in this case using activated carbon just
22 occasionally or were they using it pretty much all the time
23 during the damages period?
24 **A. Well, I think they were using it pretty much all the
25 time because they had to meet the MATS emission standards of**

607

1 **90 percent mercury reduction and flue gas admitted to the
2 atmosphere.**
3 Q. And yesterday we talked about some different
4 equipment that actually collects the mercury in the
5 flue gas. What was that equipment?
6 **A. Well, it's collected by a baghouse or electrostatic
7 precipitator.**
8 Q. And for each of the power plants at issue in this
9 case were they using their baghouse or electrostatic
10 precipitator consistently during the damages period?
11 **A. Yes.**
12 Q. All right. Can I check off that last element now?
13 **A. Yes.**
14 Q. All right. Mr. O'Keefe, we checked off all the
15 elements of Claim 1. What does that mean?
16 **A. Well, that means that each and every element of Claim
17 1 is being used and Claim 1 infringed the '517 patent.**
18 Q. Now, even though you walk through infringement of
19 Claim 1, do we still need to go through all of the claims to
20 prove infringement of each claim?
21 **A. No.**
22 Q. Well, do we need to walk through the claim language
23 of Claim 2 to prove infringement of Claim 2?
24 **A. Yes.**
25 Q. Claim 2 begins: The method of Claim 1 further

608

1 comprising.

2 What does that mean?

3 **A. Well, Claim 2 is called a dependent claim. It**

4 **depends on Claim 1. And it talks about the method of**

5 **Claim 1.**

6 **Q.** All right. Since we walked through the steps of

7 Claim 1, does that mean that part of the claim is met?

8 **A. Yes.**

9 **Q.** It goes on to say: Injecting an alkaline sorbent

10 into mercury-containing gas stream?

11 Did you find that the elements of that was met?

12 **A. Yes, I did.**

13 **Q.** Can you look at Tab 27 of the binder?

14 **A. Yes.**

15 **Q.** What is that document?

16 **A. It's a material data safety data sheet for S-Sorb,**

17 **which is one of the chemicals sprayed on the coal during the**

18 **refining process.**

19 **Q.** And did you rely on that document in forming your

20 opinions in this case?

21 **A. Oh, yes.**

22 **MR. NEMUNAITIS:** Your Honor, plaintiffs move to

23 admit PTX 249.

24 **THE COURT:** Any objection?

25 **MR. DYESS:** No, Your Honor.

609

1 **THE COURT:** It's admitted.

2 (Thereupon, Plaintiffs' Exhibit 249 was

3 admitted.)

4 **BY MR. NEMUNAITIS:**

5 **Q.** What does PTX 249 say about S-Sorb?

6 **A. Well, it says S-Sorb 3 which is S-Sorb for short is**

7 **an alkaline compound. So it's sprayed on the coal.**

8 **Q.** Did the defendants in this case use S-Sorb for all of

9 the refined coal that's accused in this case?

10 **A. Yes.**

11 **Q.** Can we check off Claim 2?

12 **A. Yes.**

13 **Q.** And what does that mean that we've checked off Claim

14 2 now?

15 **A. Claim 2 is infringed of the '517 patent.**

16 **Q.** All right. And is that all of the claims of the '517

17 patent?

18 **A. Yes, in this lawsuit.**

19 **Q.** Can we move on to the '114 patent?

20 **A. Yes.**

21 **Q.** Claim 25 of the '114 patent begins with: A method of

22 separating mercury from a mercury-containing gas.

23 Is that met for the same reasons as the preamble

24 in the '517 patent?

25 **A. Yes, it is.**

610

1 **Q.** Can I check that off?

2 **A. You certainly can.**

3 **Q.** The next limitation is a bit long but it says:

4 Combusting coal in the combustion chamber to provide

5 mercury-containing gas.

6 And did you explain that that was met with

7 regard to the '517 patent?

8 **A. Yes.**

9 **Q.** And so it's met for the same reasons here?

10 **A. Yes.**

11 **Q.** And it goes on: Wherein --

12 **THE COURT:** Mr. Nemunaitis, just ask you to slow

13 down.

14 **BY MR. NEMUNAITIS:**

15 **Q.** Wherein, the coal comprises added Br2 HBr, a bromide

16 compound or a combination thereof added to the coal upstream

17 of the combustion chamber or the combustion chamber

18 comprises added Br2, HBr, a bromide compound or a

19 combination thereof or a combination.

20 Did you find evidence to support this limitation

21 is met?

22 **A. Yes, I did.**

23 **Q.** And what is that?

24 **A. Well, MerSorb is a bromide compound discussed in the**

25 **material data safety sheet for MerSorb.**

611

1 **Q.** Can I check this one off?

2 **A. Yes.**

3 **Q.** Next limitation is: Injecting a sorbent material

4 apprising activated carbon into mercury-containing gas

5 downstream of and from outside the combustion chamber.

6 Is that right?

7 **A. Yes.**

8 **Q.** And now there's some language here in brackets. Can

9 you explain what that is?

10 **A. Well, that's the Court's claim construction.**

11 **Q.** And so even if that language wasn't written in the

12 patent document, because that language comes from the Court,

13 do we need to add it into the claim to decide infringement?

14 **A. Yes, we do.**

15 **Q.** Is this injecting a sorbent material limitation met?

16 **A. Yes, it is.**

17 **Q.** Did you explain that or why is that?

18 **A. The power plants inject activated carbon downstream**

19 **of the combustion chamber.**

20 **Q.** Can I check this one off?

21 **A. Yes.**

22 **Q.** And just to confirm, is the activated carbon injected

23 from outside the combustion chamber?

24 **A. Yes.**

25 **Q.** The next limitation is contacting mercury and the

612

1 mercury-containing gas with the sorbent to form a mercury
2 sorbent combination. Did you find that limitation was met?
3 A. **Yes, I did.**
4 Q. Why is that?
5 A. **Because the mercury is bonded to the carbon particles**
6 **injected into the flue gas.**
7 Q. Can I check this one off?
8 A. **Yes.**
9 Q. Now the last limitation is separating the mercury
10 sorbent composition from the mercury-containing gas to form
11 a clean gas. Did you find evidence that that limitation is
12 met?
13 A. **Yes.**
14 Q. Why is that?
15 A. **Because the power plants have a baghouse and/or an**
16 **electrostatic precipitator and I explained how that works.**
17 Q. Can we check this one off?
18 A. **Yes.**
19 Q. What does that mean for Claim 25?
20 A. **Well that means Claim 25 is infringed of the '114**
21 **patent.**
22 Q. Now the final claim asserted in this case is 26 and
23 it says, "The method of Claim 25, wherein the coal comprises
24 the added Br₂ HBr, the bromide compound or combination
25 thereof, added to the coal upstream of the combustion

613

1 chamber." Did you find evidence to support that this
2 limitation is met?
3 A. **Yes, I did.**
4 Q. Why is that?
5 A. **Well, the refined coal is injected upstream of the**
6 **combustion chamber.**
7 Q. That means it's injected before the combustion
8 chamber?
9 A. **Yes.**
10 Q. Can I check this one off?
11 A. **Yes. And incidentally, Claim 26 is what I call a**
12 **dependent claim, so it depends on Claim 1 or Claim 25, I'm**
13 **sorry.**
14 Q. We checked off all the boxes of Claims 25 and 26 of
15 the '114 patent. What does that mean?
16 A. **In this case, the '114 patent is infringed.**
17 MR. NEMUNAITIS: Can I get slide 40, Mr. Diaz.
18 BY MR. NEMUNAITIS:
19 Q. Mr. O'Keefe, did you prepare a chart summarizing your
20 infringement opinions in this case?
21 A. **Yes.**
22 Q. Can you just walk us through the first row of this
23 chart to explain what it's telling us?
24 A. **Well, the column of the -- well, the first column**
25 **starting on the very left is CERT operating defendants and I**

614

1 **list all of the CERT operations companies, the LLCs, in this**
2 **column. And for example, in the first row, we have CERT**
3 **Operations IV LLC. And then the second column I have the**
4 **CERT contracting defendants listed for all the -- for this**
5 **case. And in the first row for example, I have Springhill**
6 **Resources LLC. And then in the next column I have power**
7 **plant customers listed. These are the directly infringing**
8 **power plants. And for example, in row one I have Big Cajun**
9 **II of NRG. And in the next column I list the coal type**
10 **burned at those the power plants and as I stated previously**
11 **all of the plants except for one burnt Powder River Basin**
12 **coal, PRB coal, and the last one burns lignite. And in the**
13 **next column I have refined coal additive, which is calcium**
14 **bromide, we discussed that they add MerSorb to the coal**
15 **which is a bromide compound. The type of boiler is listed**
16 **in the next column boiler type it's pulverized coal where**
17 **the coal is ground to talcum powder consistency and it's**
18 **blown into the combustion chamber to be burned. Downstream**
19 **of the combustion chamber in the next column I have**
20 **activated carbon injection. Yes, for all plants in this**
21 **case. And the next column they use ESP or a baghouse to**
22 **collect the mercury and I have that listed, for example, in**
23 **the first row as electrostatic precipitator, ESP.**
24 **So as discussed on the '517 patent we have**
25 **infringement of Claim 1 and Claim 2, and the '114 patent we**

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1 **have infringement of Claim 25 and 26.**
2 MR. NEMUNAITIS: Your Honor, pursuant to Rule
3 1006, plaintiffs move to admit PDX slide 40 of Mr. O'Keefe's
4 presentation as an exhibit.
5 THE COURT: Any objection?
6 MR. DYESS: There is an objection. Rule 1006
7 requires that a summary exhibit be provided to us on a
8 timely basis, this was not provided to us on a timely basis.
9 It was provided to us two days ago.
10 MR. NEMUNAITIS: I mean if a witness can
11 summarize his opinions on a flip chart it would seem
12 appropriate if I gave them the slide two days ago we can use
13 it here to save everyone some time. Hold on a second.
14 THE COURT: Mr. Dyess, the rule has a line that
15 says, "the proponent must make the originals or duplicates
16 available for examination or copying, or both, by other
17 parties at a reasonable time or place." Is that if portion
18 of the rule you're referring to?
19 MR. DYESS: I believe so, Your Honor. And I
20 have additional reasons on the objection.
21 THE COURT: All right, what is it?
22 MR. DYESS: Your Honor, we don't object to this
23 being used as a demonstrative in this case. This exhibit is
24 not on their exhibit list anywhere.
25 THE COURT: Is that correct, Mr. Nemunaitis?

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1 MR. NEMUNAITIS: Yes, we prepared it in
2 connection with his testimony. I thought if a witness could
3 summarize their opinions in court we could use Rule 1006.
4 THE COURT: With regard to the portion of the
5 objection relating to the Rule 1006 requirement that a Rule
6 1006 summary has to be provided at a reasonable time, on
7 that basis I would overrule the objection. I don't see a
8 reason why two days prior would be unreasonable. But with
9 regard to the second part of the objection I'll sustain the
10 objection which is that if the document is not on an exhibit
11 list and it's a demonstrative exhibit and there's not
12 agreement that it otherwise be admitted, then the objection
13 should be sustained. So I'll sustain the objection.
14 BY MR. NEMUNAITIS:
15 Q. All right. Mr. O'Keefe, can I read just a few bits
16 of this on the record to make sure it's clear?
17 A. **Sure.**
18 Q. Did CERT Operations RCB LLC operate the sprayers for
19 Senescence Energy Products, Bascobert Holdings, Larkwood
20 Energy, Rutledge Products, and Cottbus Associates?
21 A. **Yes.**
22 Q. Did CERT Operations V operate the --
23 THE COURT: Mr. Nemunaitis, I'll ask you to
24 speak a little more slowly.
25 BY MR. NEMUNAITIS:

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1 Q. Did CERT Operations V LLC operate the sprayer
2 equipment for Buffington Partners LLC?
3 A. **Yes.**
4 Q. Did CERT Operations II operate the sprayer equipment
5 for Marquis Industrial Company LLC?
6 A. **Yes.**
7 Q. All right. Mr. O'Keefe, can we move on to the next
8 topic in your presentation?
9 A. **Yes. I'd like to talk about defendant infringement**
10 **analysis that I used.**
11 Q. Does this slide show the test that you applied in
12 determining contributory infringement?
13 A. **Yes, it does.**
14 Q. All right. The first element says, "A power plant
15 has directly infringed one or more claims of an asserted
16 ME2C patent." Did we just explain all that?
17 A. **Yes, we did.**
18 Q. Can we check that off?
19 A. **Yes.**
20 Q. The next element says, "The defendant sold that power
21 plant refined coal made with calcium bromide." Did you
22 confirm that each of the contracting defendants sold refined
23 coal to power plants at issue in this case?
24 A. **Yes, I did.**
25 Q. Did you identify refined coal sales contracts to the

618

1 power plant?
2 A. **Yes.**
3 Q. Can you take a look at tabs 28 through 35.
4 A. **Okay.**
5 Q. Can you tell me what those documents are?
6 A. **Those are refined coal sales agreements.**
7 Q. And did you rely on those documents to form your
8 opinions?
9 A. **Yes.**
10 MR. DYESS: Your Honor, objection.
11 THE COURT: Let's let Mr. Nemunaitis finish.
12 Make your motion, Mr. Nemunaitis.
13 MR. NEMUNAITIS: Plaintiffs move to admit PTX
14 193, 196, 199, 202, 205, 208, 211, and 214.
15 THE COURT: And now what's the objection?
16 MR. DYESS: Your Honor, this is the Rule 702,
17 703 and 402, 403 objection.
18 THE COURT: These are refined coal sales
19 agreements relating to the operation of the refined coal
20 companies at certain power plants. I'll overrule the
21 objection on a similar basis to what was discussed earlier.
22 Please proceed.
23 MR. NEMUNAITIS: Are those exhibits admitted,
24 Your Honor?
25 THE COURT: Yes, they are admitted.

619

1 (Thereupon, Plaintiffs' Exhibit 193, 196, 199,
2 202, 205, 208, 211, and 214 were admitted.)
3 BY MR. NEMUNAITIS:
4 Q. Mr. O'Keefe, did you identify a refined coal sales
5 contract for each power plant at issue in this case?
6 A. **Yes.**
7 Q. All right. Can we check off element two?
8 A. **Yes.**
9 Q. Element three requires that, "the refined coal
10 supplied to that power plant as sold and delivered during
11 the damages period is not a staple article or commodity of
12 commerce capable of substantial non-infringing use." Did
13 you find evidence this requirement is met?
14 A. **Yes.**
15 Q. Starting off, did the defendants sell refined coal
16 during the damages period?
17 A. **Yes, they did.**
18 Q. Now this requirement also requires that the refined
19 coal, "is not a staple article or commodity of commerce
20 capable of substantial non-infringing use." If we look back
21 at your diagram for how the refined coal operations work,
22 where in this process do we need to focus on to decide
23 whether or not there's a substantial non-infringing use?
24 A. **We have to look at the conveyer belt going from the**
25 **coal pile to the pulverizer and leading to the refined coal**

620

1 **plant.**

2 Q. Why is that?

3 A. **Well, the coal after it's refined it has no place to**

4 **go except on the conveyor belt to the power plant to be**

5 **pulverized and burned in the combustion chamber.**

6 Q. If refined coal sold to different companies that are

7 not at issue in this case sold refined coal to a different

8 power plant, does that matter at all to this requirement?

9 A. **Yes, it would.**

10 Q. And I may not have asked my question correctly. When

11 looking at this requirement are we looking at the refined

12 coal sold by each defendant to the power plant or are we

13 looking at refined coal sold to power plants that are not

14 accused in this case?

15 A. **Only the power plants in this case directly infringe.**

16 Q. Once the refined coal is provided to the power plant

17 what options does the power plant have to do with it?

18 A. **They have no choice but to burn it in their**

19 **combustion chamber.**

20 Q. And after that refined coal was burned do the power

21 plants use activated carbon injection?

22 A. **Yes.**

23 Q. Can we check off requirement 3?

24 A. **Yes, you can.**

25 Q. Next requirement is that the refined coal constituted

621

1 a material part of the claimed invention.

2 Did you find evidence to support that this

3 requirement is met?

4 A. **Yes, it's one of the elements of the claims.**

5 Q. And is burning coal with bromine an important part of

6 the claims?

7 A. **Yes.**

8 Q. Can we check off this one?

9 A. **Yes.**

10 Q. And finally the last element is that the defendant

11 knew that the refined coal was specially made or adapted for

12 use in an infringing method; is that right?

13 A. **Yes.**

14 Q. Now, Mr. O'Keefe, I know you're not a mind reader, I

15 can't ask you as to what any defendant knew or what was in

16 someone else's state of mind, that's solely for the jury to

17 decide; right?

18 A. **Yes, right.**

19 Q. Despite that did you find evidence to support that

20 the defendants received information about ME2C's patents at

21 issue in this case?

22 A. **Yes, I did.**

23 MR. DYESS: Your Honor, we object. This is the

24 knowledge and intent issue.

25 THE COURT: The objection is overruled pursuant

622

1 to our prior discussion.

2 BY MR. NEMUNAITIS:

3 Q. How did the defendants in this case receive

4 information about Midwest patents?

5 A. **Well, one way they learned about the technology in**

6 **the patents is when the lawsuit was filed in July of 2019.**

7 Q. And was a copy of the '517 patent also provided to

8 defendants in connection with the lawsuit once it was added

9 to the case?

10 A. **Yes.**

11 Q. Turning back to the test for contributory

12 infringement, it also requires -- I'm sorry. Let me start

13 over.

14 Did you also find evidence that the defendants

15 received information that the power plants at issue were

16 using activated carbon?

17 A. **Yes.**

18 Q. And we walked through that evidence table. Can we

19 bring that up again?

20 A. **Sure.**

21 Q. Now, the defendants were they aware of their request

22 for admissions in this case?

23 MR. DYESS: Objection, Your Honor.

24 MR. NEMUNAITIS: I'm sorry. I'll rephrase.

25 THE COURT: Objection is sustained. Question

623

1 will be stricken and we'll ask Mr. Nemunaitis to ask a new

2 question.

3 BY MR. NEMUNAITIS:

4 Q. Did the defendants in this case provide their

5 response to the request for admission?

6 A. **Yes, they did.**

7 Q. Did the defendants in this case receive information

8 about the coal type at each of the power plants in this

9 case?

10 A. **Yes, they did.**

11 Q. Are the operating permits for power plants publicly

12 available?

13 A. **Yes, they are.**

14 Q. Were operating permits provided to defendants in

15 connection with their refined coal operations?

16 A. **Yes.**

17 Q. Can we add the defendant names to the slide for the

18 contracting defendants?

19 A. **Sure.**

20 Q. Did you also review testimony from the defendants

21 regarding activated carbon use?

22 A. **Yes.**

23 Q. Did you review this testimony from Mr. Jeff Green?

24 A. **Yes, I did.**

25 Q. And what did he say about activated carbon use at the

624

1 power plants?

2 **A. Well, he said that I was told that they used all of**

3 **the named defendants' power plants used activated carbon**

4 **during the time period mentioned, and it's 2019 to 2021.**

5 Q. Now, when he said that, does he say when he was told?

6 **A. No.**

7 Q. Looking back at the table, can we add that testimony

8 as some evidence of activated carbon use?

9 **A. Yes.**

10 Q. Did you look at additional documents to see when the

11 defendants received information about activated carbon use?

12 **A. Yes.**

13 Q. Could you take a look at Tabs 36 through 41 in your

14 binder?

15 **A. It's in volume 3? Is that volume 3?**

16 Q. I believe it's Volume 2 still.

17 **A. 26 through...?**

18 Q. 36.

19 **A. And that's in volume 3. Okay.**

20 Q. What are those documents indicate?

21 **A. Well, they're reports filed by Sargent & Lundy which**

22 **is an engineering firm based out of Chicago, and the reports**

23 **talk about refined fuel facilities in the -- some of the**

24 **power plants in this case.**

25 Q. Did you rely on them to form your opinions in this

625

1 case?

2 **A. Yes, I did.**

3 MR. NEMUNAITIS: Your Honor, plaintiffs move to

4 admit PTX 77, 102, 232, 545, 689 and 690.

5 THE COURT: Is there any objection?

6 MR. DYESS: There's an objection to 232. It's

7 not a Sargent & Lundy report.

8 THE COURT: I'm sorry. I can't quite hear you.

9 MR. DYESS: The objection is to Exhibit 232.

10 It's not a Sargent & Lundy report.

11 THE COURT: That seems correct. Mr. Nemunaitis,

12 do you possibly have the wrong one?

13 MR. NEMUNAITIS: I'm sorry, Your Honor. Let me

14 start over. Plaintiffs move to admit PTX 77, 102, 545, 689

15 and 690.

16 THE COURT: Mr. Dyess, any objection to those?

17 MR. DYESS: No, Your Honor.

18 THE COURT: They're admitted.

19 (Thereupon, Plaintiffs' Exhibit Numbers 77, 102,

20 545, 689 and 690 were admitted.)

21 BY MR. NEMUNAITIS:

22 Q. Mr. O'Keefe, is this an example of one of the reports

23 in your binder?

24 **A. Yes.**

25 Q. And this is PTX 545. What's the date of this

626

1 document?

2 **A. The date is December 2018.**

3 Q. And this table on the screen, is that taken from the

4 report?

5 **A. Yes.**

6 Q. Does it identify the coal type for the power plant?

7 **A. Yes.**

8 Q. I see there's a column identified as relating to

9 S-Sorb. Was that the alkaline component you talked about

10 earlier?

11 **A. Yes, it's used to reduce NOx emissions.**

12 Q. And I see there's a column related to MerSorb. Is

13 that the bromine component?

14 **A. Yes.**

15 Q. And it looks like the emissions reduction from using

16 MerSorb were around 45 to 50 percent most of the time; is

17 that correct?

18 **A. Yes.**

19 Q. Is that enough for this power plant to meet the MATS

20 requirements?

21 **A. No, it's not.**

22 Q. And what's the requirement there?

23 **A. 40 percent on mercury emissions reduction and at**

24 **least 20 percent NOx emissions reductions.**

25 Q. And I'm sorry for the EPA rule it's performing?

627

1 **A. The EPA rule is 90 percent of mercury emissions**

2 **reduced.**

3 Q. And does this report identify what the power plant

4 does to hit that 90 percent rule?

5 **A. No. Or yeah, I'm sorry, it does. It talks about**

6 **activated carbon injection systems.**

7 Q. And is this a document that was provided to the

8 defendant in this case, Senescence Energy?

9 **A. Yes.**

10 Q. All right. Can we add the Sargent & Lundy reports to

11 your table?

12 **A. Yes.**

13 Q. All right. Mr. O'Keefe, can you take a look at the

14 document identified as PTX 232 in your binder?

15 **A. What tab is that?**

16 Q. It's in the 36 to 41 range.

17 **A. Okay.**

18 Q. Did you find it?

19 **A. Well, I didn't find the report you mentioned, but I'm**

20 **in that range.**

21 THE COURT: I believe -- Mr. Nemunaitis, I

22 believe it's Tab 38.

23 BY MR. NEMUNAITIS:

24 Q. Could you turn to Tab 38, Mr. O'Keefe?

25 **A. I'll try, but I'm having a binder malfunction right**

628

1 **now.**
2 THE COURT: Counsel may approach if they wish to
3 help.
4 MR. NEMUNAITIS: Thank you, Your Honor.
5 THE COURT: I've had a couple of those too.
6 BY MR. NEMUNAITIS:
7 Q. What is PTX 232?
8 A. **It's an e-mail from Barr Linton to Daniel Murray and**
9 **let's see who else.**
10 Q. Did you rely on that document in forming your
11 opinions?
12 A. **Yes, I did.**
13 MR. NEMUNAITIS: Your Honor, plaintiffs move to
14 admit PTX 232.
15 THE COURT: Any objection?
16 MR. DYESS: No objection.
17 THE COURT: It's admitted.
18 (Thereupon, Plaintiffs' Exhibit Number 232 was
19 admitted.)
20 BY MR. NEMUNAITIS:
21 Q. Was PTX 232 sent to Jeff Green?
22 A. **Yes, it was. He's on the cc list for the e-mail.**
23 Q. And what power plant operators are mentioned in this
24 e-mail?
25 A. **Basin and Ameren power plants.**

629

1 Q. And what's highlighted here on the slide?
2 A. **Well, at the very last sentence it says: The reason**
3 **behind these requests is that the power plant is relying on**
4 **calcium bromide together with activated carbon to meet their**
5 **MATS compliance standards.**
6 Q. What's the date on PTX 232?
7 A. **That's May 19th, 2015.**
8 Q. Could we put this document on our evidence table and
9 check it off?
10 A. **Yes.**
11 Q. All right. Mr. O'Keefe, did you identify documents
12 indicating that the defendants received information about
13 activated carbon use at all of the power plants at issue in
14 this case?
15 A. **Yes, I did.**
16 Q. Turning back to the elements for contributory
17 infringement, did you find that there is evidence associated
18 with this fifth requirement here that the jury will have to
19 evaluate when determining defendants' knowledge?
20 A. **Yes.**
21 Q. Can I check that one off?
22 A. **Yes, you can.**
23 Q. If the jury finds that the contracting defendants
24 knew about ME2C's patents and about the power plants using
25 activated carbon, what would that mean for contributory

630

1 infringement?
2 A. **It looks like they did contributory infringement**
3 **according to this test.**
4 Q. All right. Can we move on to inducement?
5 A. **Sure.**
6 Q. The first requirement is that the defendants took
7 some affirmative action intending to cause the power plant
8 to directly infringe more and more asserted claims of the
9 ME2C's patents.
10 Did you find evidence to support that that
11 requirement was met?
12 A. **Yes.**
13 Q. And did you identify a list of actions that
14 defendants took to support that?
15 A. **Yes.**
16 Q. And what's the first one here?
17 A. **Well, they sold the refined coal for less than they**
18 **paid for it. So that was a big incentive.**
19 MR. DYESS: Your Honor?
20 THE COURT: I'm sorry, there's an objection?
21 MR. DYESS: Your Honor, the objection this is
22 the 702, 703, 402, 403. This is presented as financial
23 incentives to power plants and we think that's beyond the
24 scope.
25 THE COURT: Because the testimony relates to

631

1 refined coal at sale at the power plants, for the reasons
2 stated earlier, I'll overrule the objection.
3 BY MR. NEMUNAITIS:
4 Q. What's the next item we have listed here?
5 A. **The defendants optimize the Br rates in the refining**
6 **process, and they optimized it with the ACI rates by the**
7 **power plant, the activated carbon injection rates.**
8 Q. Could you take a look at Tab 42.
9 A. **Okay.**
10 Q. What is that document?
11 A. **It's an e-mail from Barr Linton to a group of**
12 **individuals, but Jeff Green was on the cc list.**
13 Q. Did you rely on that to form your opinions?
14 A. **Yes.**
15 MR. NEMUNAITIS: Your Honor, plaintiffs move to
16 admit PTX 693.
17 THE COURT: Any objection?
18 MR. DYESS: No objection.
19 THE COURT: It's admitted.
20 (Thereupon, Plaintiffs' Exhibit 693 was
21 admitted.)
22 BY MR. NEMUNAITIS:
23 Q. What does that document say, Mr. O'Keefe?
24 A. **It says that basis has asked us to help with testing**
25 **varying amounts of MerSorb, that's the chemical sprayed on**

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1 in the refining process, with activated carbon in
2 preparation for MATS regulation.
3 Q. What's the last item you have listed here?
4 A. Fly ash benefits/reduced activated carbon field. The
5 power plants typically sell the fly ash, which is the
6 products of combustion removed from the combustion gases by
7 the baghouse and electrostatic precipitator. They sell that
8 fly ash to cement manufacturers. It's very useful in making
9 cement and cinder blocks and that sort of thing. And if
10 there's carbon particles in that fly ash it's not as
11 attractive to the cement companies. So one of the benefits
12 of using refined coal is the power plants don't have to use
13 as much activated carbon injection so there's not that much
14 carbon particles injected into the flue gas and that makes
15 the fly ash more attractive for sale after it's removed.
16 MR. DYESS: Your Honor, objection.
17 THE COURT: Okay. Mr. Dyess, the objection came
18 after the testimony concluded. What's the nature of it?
19 MR. DYESS: Mr. O'Keefe just testified as to
20 what other companies beyond power plants would find
21 beneficial of the sale of these products, that's beyond the
22 scope of his expertise. We move to strike the testimony.
23 THE COURT: Hold on a second, let me review the
24 question and answer. Mr. Nemunaitis, your response.
25 MR. NEMUNAITIS: I certainly was not intending

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1 to elicit testimony as to the state of mind. I don't have
2 the testimony in front of me to see that. If he was
3 speaking to state of mind accidentally perhaps he used the
4 wrong words.
5 THE COURT: He was not. I reviewed the answer I
6 don't think that's the objection. There wasn't any state of
7 mind related testimony. Mr. Dyess, that wasn't your
8 objection.
9 MR. DYESS: That wasn't the objection. The
10 objection was what other companies beyond power plants, what
11 they would find beneficial. That's beyond his expertise.
12 THE COURT: You're saying what other companies
13 beyond power plants would find beneficial?
14 MR. DYESS: Yes.
15 THE COURT: I'll overrule the objection because
16 I believe the answer can be understood also to be speaking
17 to what is helpful or beneficial to the power plants at
18 issue as well. So on that basis I'll overrule it.
19 BY MR. NEMUNAITIS:
20 Q. In addition to financial incentives did the
21 defendants provide or at least some of the defendants
22 provide indemnity to the power plants?
23 MR. DYESS: Objection.
24 THE COURT: This is on the previously stated
25 basis you discussed?

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1 MR. DYESS: Yes, Your Honor.
2 THE COURT: For those reasons I mentioned
3 earlier I'll overrule the objection.
4 THE WITNESS: Yes, they did.
5 BY MR. NEMUNAITIS:
6 Q. What does that mean?
7 A. That means they were holding infringers of the
8 patents-in-suit not responsible so they didn't have to deal
9 with lawsuits or being sued or anything like that. So it
10 gave them a license to infringe.
11 MR. NEMUNAITIS: Can I get slide 74 Mr. Diaz.
12 BY MR. NEMUNAITIS:
13 Q. This is a slide with PTX 202. Is this one of the
14 refined coal sales contracts mentioned earlier?
15 A. Yes, it is.
16 Q. And it says here, "SP agrees to indemnify." Who is
17 SP?
18 A. That's Senescence Energy Products LLC.
19 Q. It goes on to say -- is that one of the defendants in
20 this case?
21 A. Yes, it is.
22 Q. So one of the defendants agrees to indemnify
23 defendants and hold harmless NRG. Who's that?
24 A. That's the electric utility that operates the power
25 plant.

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1 Q. So, "defendant agrees to indemnify, defend, save, and
2 hold harmless the power plant from against any adverse
3 consequences arising out of the infringement or claim of
4 infringement of any patent." Is that what that says?
5 A. Yes.
6 Q. Why is that something that could lead to -- I'm sorry
7 never mind -- strike that.
8 THE COURT: Question stricken.
9 BY MR. NEMUNAITIS:
10 Q. Moving back to element one, is there evidence the
11 jury can rely on to check out element one?
12 A. Yes.
13 Q. Next element is that, "the defendant knew of the
14 asserted ME2C patent or showed willful blindness to the
15 existence of the asserted patent." Did you provide evidence
16 before that the defendants received information about ME2C's
17 patents?
18 A. Yes.
19 Q. And can the jury rely on that to check off this
20 element?
21 A. Absolutely.
22 Q. Next element is that, "the defendant knew or showed
23 willful blindness that the actions of the power plant would
24 infringe the asserted claim"?
25 A. Yes.

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1 Q. And did you walk through evidence that the jury can
2 rely on for that element?
3 A. **Yes, I did.**
4 Q. And finally element four requires that, "the
5 defendants actions actually caused the power plant to
6 perform each and every step of the asserted claim." Did you
7 walk through that in the claim charts?
8 A. **Yes, I did.**
9 MR. DYESS: Objection, Your Honor. There's no
10 foundation.
11 THE COURT: I'm sorry, the objection is a lack
12 of foundation?
13 MR. DYESS: Yes, Your Honor. He didn't lay the
14 foundation for the statement he just made.
15 THE COURT: Mr. Nemunaitis, let's have you ask
16 some additional questions of the witness to establish what's
17 the foundation.
18 BY MR. NEMUNAITIS:
19 Q. "This requirement requires that the defendants'
20 actions actually caused the power plant to perform each and
21 every step of the asserted claim"; is that right?
22 A. **Yes.**
23 Q. When the defendants provided their refined coal to
24 the power plants, what options did the power plant have to
25 do with the coal?

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1 A. **They had no choice but to burn it.**
2 Q. Once they burn that refined coal, did they use
3 activated carbon?
4 A. **Yes, to meet the MATS standards of 90 percent mercury
5 removal from the emissions.**
6 Q. Did the -- because of that did the defendants actions
7 actually cause the power plants to perform each and every
8 step of the asserted claim?
9 MR. DYESS: Same objection.
10 THE COURT: I'll overrule the objection.
11 THE WITNESS: They supply the refined coal to
12 help the power plants infringe the patents.
13 MR. NEMUNAITIS: Can I have slide 82, Mr. Diaz.
14 BY MR. NEMUNAITIS:
15 Q. All right. Mr. O'Keefe, we'll move on to the last
16 topic for today.
17 A. **Sure. I'd like to talk about additional information
18 for damages.**
19 Q. Are you a damages expert?
20 A. **No, I'm not.**
21 Q. What are you going to talk about today?
22 A. **Just the engineering technical aspects of additional
23 information for damages.**
24 Q. As to the first topic, did the defendants propose a
25 hypothetical non-infringing alternative in this case?

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1 A. **Yes. They said the power plants could meet the MATS
2 requirements for mercury removal by installing a selective
3 catalytic reduction system, that's SCR for short. And that
4 they wouldn't have to use refined coal or activated carbon
5 injection.**
6 Q. And did you investigate how practical that would be?
7 A. **No, I did not. But the federal environmental
8 protection agency did estimate of SCR installation.**
9 Q. What was their conclusion?
10 A. **They said the installation cost would be \$80 per
11 kilowatt which equates to about 40 million to \$120 million
12 to install. So these are quite expensive pieces of
13 equipment.**
14 Q. Can we move on to the next topic?
15 A. **Sure.**
16 Q. Were you asked to review some patents other than the
17 ME2C patents at issue in this case?
18 A. **Yes.**
19 Q. And could you open your binder to tabs 44 to 47?
20 A. **Okay.**
21 Q. Are those the patents that you were asked to review
22 in connection with this case?
23 A. **Yes.**
24 MR. NEMUNAITIS: Your Honor, plaintiffs move to
25 admit PTX 241, 242, 244, and 345.

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1 THE COURT: Any objection?
2 MR. DYESS: No objection.
3 THE COURT: They're admitted.
4 (Thereupon, Plaintiffs' Exhibit 241, 242, 244,
5 and 345 were admitted.)
6 BY MR. NEMUNAITIS:
7 Q. What field of technology do Exhibits 241, 242, 244,
8 and 345 relate to?
9 A. **They're all related to mercury removal from power
10 plant emissions.**
11 Q. And the first one is PTX 241. What does that patent
12 talk about?
13 A. **It talks about using a bromine or iodine additive to
14 the fuel and talks about injecting the additives to the coal
15 and unfortunately has to be adjusted frequently.**
16 Q. What does PTX 242 talk about?
17 A. **Well, it talks about adding a nitrogen component to
18 the fuel to reduce a lot of mercury, and this involves
19 injecting the mercury compound into the flue gas downstream
20 of the combustion chamber.**
21 Q. What does PTX 244 talk about?
22 A. **Pretty much the same thing, nitrogen compound
23 injection.**
24 Q. What does PTX 345 talk about?
25 A. **Using calcium hypochlorite to at flue gas**

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1 **temperature.**
2 Q. Can we move on to the last topic here?
3 A. **Yes.**
4 Q. Now today and yesterday did you walk through your
5 infringement analysis related to the CERT defendants?
6 A. **Yes, in this case.**
7 Q. Did you also investigate and prepare a report related
8 to other refined coal suppliers?
9 A. **Yes, Alistar, Arthur J. Gallagher and DTE.**
10 Q. Did all of the CERT, Alistar, Arthur J. Gallagher and
11 DTE refined coal suppliers provide refined PRB lignite?
12 A. **Yes.**
13 Q. Did they all spray calcium bromide on the coal?
14 A. **Yes.**
15 Q. And did they sell refined coal to power plants that
16 use activated carbon?
17 A. **Yes.**
18 Q. And did you explain all that in your report?
19 A. **Yes, I did.**
20 Q. Is your understanding that report was provided to
21 Alistar, Arthur J. Gallagher, and the DTE LLCs?
22 A. **Yes, it was.**
23 MR. NEMUNAITIS: Your Honor, plaintiffs pass the
24 witness.
25 THE COURT: Okay. Thank you, Mr. Nemunaitis.

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1 THE WITNESS: Your Honor, can we take a short
2 break before that?
3 THE COURT: The witness has asked for a short
4 break before cross-examination. It's early but we'll take
5 our morning break and we will have the jury let out.
6 (The jury exited the courtroom.)
7 THE COURT: It's 10:35 now. Let's be in the
8 courtroom at 10:50 to begin. Thank you.
9 (A recess was taken, after which the following
10 proceedings were had:)
11 THE COURT: We'll have the jury brought in.
12 (The jury entered the courtroom.)
13 THE COURT: Mr. Dyess?
14 MR. DYESS: Thank you, Your Honor.
15 CROSS-EXAMINATION
16 BY MR. DYESS:
17 Q. Good morning, Mr. O'Keefe.
18 A. **Good morning.**
19 Q. I was just talking to Justin and it was almost a year
20 ago to the date that we met you in Minnesota and took your
21 deposition. It's kind of funny how that works out.
22 I wanted to talk to you a few minutes about your
23 credentials. Now, for the last 20 years you've worked as a
24 professional expert witness; is that right?
25 A. **Correct.**

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1 Q. Now, I want to talk to you about your work for
2 Commonwealth Edison, if I could. You worked for
3 Commonwealth Edison Power Company, and you started in 1981,
4 and that work ended in 1995; correct?
5 A. **Correct.**
6 Q. And you haven't worked at a power plant since you
7 left Commonwealth Edison; correct?
8 A. **That's correct.**
9 Q. Now, Commonwealth Edison is the only power company
10 you worked for in your career; correct?
11 A. **That's not correct.**
12 Q. How is that not correct?
13 A. **I did put on a seminar for a power plant in Maryland.**
14 Q. Sure. Let me clarify the question.
15 The only place you were employed to work for a
16 power plant was with Commonwealth Edison; correct?
17 A. **Correct.**
18 Q. You never worked a coal-fired power plant except for
19 your work with Commonwealth Edison from 1981 through 1995?
20 A. **Correct.**
21 Q. And the rest of your jobs -- you're actual full-time
22 employment has been outside the field of coal-fired power
23 plants; correct?
24 A. **Correct.**
25 Q. Now, let's talk about your work at Commonwealth

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1 Edison from 1981 to 1995.
2 It is correct that no aspect of your work for
3 Commonwealth Edison involved mercury emission control;
4 correct?
5 A. **Correct.**
6 Q. And none of the power plants you worked for at
7 Commonwealth Edison had any equipment for mercury emission
8 control; correct?
9 A. **That's not correct.**
10 Q. How is that incorrect?
11 A. **Well, the plants I worked at had electrostatic
12 precipitators, which can be used for mercury control.**
13 Q. Okay. Do you remember when we took your deposition
14 we were just talking about back in March last year?
15 A. **Yes.**
16 Q. Do you recall me asking you if any of the plants you
17 worked at in your career with Commonwealth Edison had any
18 mercury control systems?
19 A. **Yes.**
20 Q. And didn't you answer in that deposition that, no,
21 they didn't have any mercury control systems?
22 A. **That's correct.**
23 Q. So your correct testimony is the one you gave back in
24 March?
25 A. **Well, if we're talking about mercury control systems,**

<p style="text-align: right;">644</p> <p>1 no, they did not, but an electrostatic precipitator is part</p> <p>2 of a mercury control system, and they had that.</p> <p>3 Q. But you didn't say that back in March of last year?</p> <p>4 A. No.</p> <p>5 Q. Now, none of the power plants you worked at for</p> <p>6 Commonwealth Edison had any activated carbon injection</p> <p>7 systems, did they?</p> <p>8 A. That's correct.</p> <p>9 Q. Now, the U.S. government didn't start implementing</p> <p>10 mercury control regulations until 2015; correct?</p> <p>11 A. 2015/2016.</p> <p>12 Q. And that's the MATS rule we've been talking about?</p> <p>13 A. Correct.</p> <p>14 Q. Now, we just talked about Commonwealth Edison is the</p> <p>15 only power -- the only company you worked for where you</p> <p>16 worked at a power plant; right?</p> <p>17 A. Correct.</p> <p>18 Q. And you didn't have any management position at</p> <p>19 Commonwealth Edison, did you?</p> <p>20 A. Yes, I did.</p> <p>21 Q. What was that position?</p> <p>22 A. In the engineering and training department and also</p> <p>23 the engineering department.</p> <p>24 Q. Did any of those job include making financial</p> <p>25 decisions regarding the supply of coal to the power plant?</p>	<p style="text-align: right;">646</p> <p>1 Q. If I told you it was October 22, 2022, would that</p> <p>2 sound right?</p> <p>3 A. That sounds about right.</p> <p>4 Q. You understood when you gave that report it had to</p> <p>5 include all of your opinions on infringement in this case,</p> <p>6 didn't it?</p> <p>7 A. I believe so.</p> <p>8 Q. And everything you relied on in coming to those</p> <p>9 conclusions or opinions had to be set out in that report.</p> <p>10 You understood that; right?</p> <p>11 A. Yes.</p> <p>12 Q. Now, you would agree that on the date you gave that</p> <p>13 report in October of 2022, it contained all of your opinions</p> <p>14 on infringement in this case; correct?</p> <p>15 A. Well, I did a total of I think three reports.</p> <p>16 Q. I'm asking about your infringement.</p> <p>17 A. The first one?</p> <p>18 Q. Yes.</p> <p>19 A. Can you rephrase that question?</p> <p>20 Q. Sure. On the date that you gave that opening report,</p> <p>21 that was your infringement report; correct?</p> <p>22 A. Yes.</p> <p>23 Q. You understood that that report had to include all of</p> <p>24 your opinions on infringement that you were going to give in</p> <p>25 this case; correct?</p>
<p style="text-align: right;">645</p> <p>1 A. Can you rephrase that again?</p> <p>2 Q. Sure. Did any of those jobs you just described that</p> <p>3 you did have at Commonwealth Edison -- none of them involve</p> <p>4 you being involved in the contracts for the supply of coal</p> <p>5 at the power plant?</p> <p>6 A. Yes, I was involved.</p> <p>7 Q. How is that?</p> <p>8 A. I had to run tests on coal samples to make sure that</p> <p>9 they complied with what -- the contracts at the coal mines I</p> <p>10 had with the company, with the plant.</p> <p>11 Q. I didn't mean to talk over you. I apologize.</p> <p>12 But none of that involved you negotiating the</p> <p>13 supply agreement for the coal; correct?</p> <p>14 A. Oh, no. No.</p> <p>15 Q. Now, you never -- on behalf of Commonwealth Edison</p> <p>16 you never negotiated any kind of indemnity agreement on</p> <p>17 behalf of Commonwealth Edison, did you?</p> <p>18 A. No.</p> <p>19 Q. Now, Mr. O'Keefe, we've talked a little bit about you</p> <p>20 giving report in this case, and you recall doing that, don't</p> <p>21 you?</p> <p>22 A. Yes.</p> <p>23 Q. Do you recall when you gave your opening or your</p> <p>24 first report as an expert in this case?</p> <p>25 A. I don't remember the date.</p>	<p style="text-align: right;">647</p> <p>1 A. Yes.</p> <p>2 Q. Now, you didn't start -- we're talking about your</p> <p>3 opening report. That's what we're talking about, the one</p> <p>4 you signed on October 22nd. I'm sorry. I gave the wrong</p> <p>5 date. It's October 25, 2022; does that sound right?</p> <p>6 A. If you say so.</p> <p>7 Q. Do I need to show you the report? You don't disagree</p> <p>8 with that?</p> <p>9 A. I really don't care. I submitted a report. That's</p> <p>10 all I remember.</p> <p>11 Q. Okay.</p> <p>12 MR. DYESS: Well, if you could, can we pull up</p> <p>13 Mr. O'Keefe's report, Plaintiffs' Exhibit 637, and go to the</p> <p>14 signature page.</p> <p>15 BY MR. DYESS:</p> <p>16 Q. That's your opening report, isn't it?</p> <p>17 A. Yes.</p> <p>18 Q. And that's your signature?</p> <p>19 A. Sure.</p> <p>20 MR. DYESS: If you could expand the box a little</p> <p>21 bit.</p> <p>22 BY MR. DYESS:</p> <p>23 Q. And that's October 25, 2022; correct?</p> <p>24 A. Correct.</p> <p>25 Q. So there's no question about that date?</p>

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1 **A. I guess not.**

2 **Q.** Okay. You started your work on this case when you

3 got hired by ME2C's lawyers; correct?

4 **A. Correct.**

5 **Q.** You wouldn't have known what to start your work on in

6 this case before they hired you; right?

7 **A. No.**

8 **Q.** Okay. And I think you testified -- well, when did --

9 you started your work on this case in the summer of 2022;

10 correct?

11 **A. Correct.**

12 **Q.** Can you be more specific about when in the summer of

13 2022 you started that work?

14 **A. I don't remember.**

15 **Q.** Can you be more specific about when they hired you in

16 this case?

17 **A. I don't remember.**

18 **Q.** Was it after the 4th of July in 2022?

19 **A. I honestly don't remember.**

20 **Q.** I want to make sure I understand. You can't remember

21 that from the summer of 2022, but you're calling on your

22 experience from a power plant that ended in 1995?

23 **A. Yes.**

24 **Q.** Okay. So you would agree with me that all of your

25 knowledge you have about activated carbon injection systems

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1 has come after the summer of 2022; correct?

2 **A. Yes.**

3 **Q.** Okay. Outside of the work you've done for this case,

4 you don't have any -- you've never studied activated carbon

5 injection systems at power plants; right?

6 **A. Right.**

7 **Q.** All of your understanding of activated carbon

8 injection systems comes entirely as your work for the

9 bailiff in this case?

10 **A. Correct.**

11 **Q.** And that's from the summer of 2022 up until

12 October 25th of 2022; correct?

13 **A. Yes.**

14 **Q.** That's three months, four months?

15 **A. Okay.**

16 **Q.** You agree with that?

17 **A. Yes.**

18 **Q.** All of your understanding -- let me back up.

19 You would agree that all of your knowledge about

20 mercury control systems at power plants has come since the

21 summer of 2022; correct?

22 **A. Mercury -- I'm sorry, can you repeat that?**

23 **Q.** Sure. You would agree with me that all of our

24 knowledge about mercury control systems at power plants has

25 come since the summer of 2022 when you got hired in this

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1 case?

2 **A. Yes.**

3 **Q.** Okay. That's because all of your understanding of

4 mercury control systems comes entirely as a result of your

5 work with plaintiffs in this case?

6 **A. Correct.**

7 **Q.** So all of that knowledge you have of mercury control

8 systems you learned in about four months?

9 **A. Yes.**

10 **Q.** All of what you learned about mercury control systems

11 is self-taught; isn't that true?

12 **A. Well, I relied on the documentation in this case.**

13 **Q.** Was that documentation given to you? Did you have to

14 go find it?

15 **A. I think it was given to me, yes.**

16 **Q.** It was given to you by the plaintiffs' lawyers?

17 **A. Yes.**

18 **Q.** Now, you've never taught any seminars on mercury

19 control; correct?

20 **A. Correct.**

21 **Q.** And you've never attended any conferences on mercury

22 control; correct?

23 **A. Correct.**

24 **Q.** And you haven't visited any coal-fired -- well, again

25 let me back up on that question.

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1 You would agree you're entirely self-taught

2 about mercury control systems?

3 **A. Yes, I think that's a fair assessment, yes.**

4 **Q.** Now, you didn't visit any coal-fired power plants in

5 connection with your work in this case, did you?

6 **A. That's correct.**

7 **Q.** You never visited a coal-fired power plant with an

8 activated carbon injection system, did you?

9 **A. No, I did not.**

10 **Q.** In the context of your work on this case, you never

11 spoke with the employees of any power plant that were the

12 subject of this lawsuit, did you?

13 **A. No.**

14 **Q.** You didn't visit any of the power plants that are

15 subject to the infringement claims in this case, did you?

16 **A. No.**

17 **Q.** So I want to make sure I got that right. You never

18 talked with anyone or visited with anyone from the Rush

19 Island power plant; correct?

20 **A. Correct.**

21 **Q.** You never talked with anyone or visited the Big Cajun

22 II power plant?

23 **A. Correct.**

24 **Q.** You never talked with anyone or visited the Limestone

25 power plant; correct?

<p style="text-align: right;">652</p> <p>1 A. Correct.</p> <p>2 Q. You never talked with anyone or visited the W.A.</p> <p>3 Parish power plant?</p> <p>4 A. Correct.</p> <p>5 Q. You never talked with anyone or visited the Antelope</p> <p>6 Valley power plant?</p> <p>7 A. Correct.</p> <p>8 Q. You never talked with anyone or visited the Laramie</p> <p>9 River power plant?</p> <p>10 A. Correct.</p> <p>11 Q. You never talked with anyone or visited the Labadie</p> <p>12 power plant?</p> <p>13 A. Correct.</p> <p>14 Q. And you never talked with anyone or visited the</p> <p>15 Colecto Creek power plant?</p> <p>16 A. That's correct.</p> <p>17 Q. You've never visited a refined coal facility, have</p> <p>18 you?</p> <p>19 A. No.</p> <p>20 Q. You're never visited a power plant that uses refined</p> <p>21 coal, have you?</p> <p>22 A. No, I have not.</p> <p>23 Q. And you've never observed a refined coal facility in</p> <p>24 operation providing refined coal to a power plant?</p> <p>25 A. No.</p>	<p style="text-align: right;">654</p> <p>1 Q. Other than the work you've done on this case, you</p> <p>2 don't have any teaching experience on MATS compliance, do</p> <p>3 you?</p> <p>4 A. Correct.</p> <p>5 Q. Again, Mr. O'Keefe, you gave your opening report on</p> <p>6 October 25, 2022; correct?</p> <p>7 A. Correct.</p> <p>8 Q. And it had to contain all of your opinions on</p> <p>9 infringement of these patents in that report; correct?</p> <p>10 A. Correct.</p> <p>11 Q. So you would agree that everything you've learned</p> <p>12 about MATS compliance, you've learned in the three to four</p> <p>13 months between the summer 2022 and October 25th, 2022?</p> <p>14 A. Yes.</p> <p>15 Q. Now, when you were talking with Mr. Nemunaitis you</p> <p>16 gave several -- you walked through some evidence and you</p> <p>17 gave opinions in this case. I want to talk about a few of</p> <p>18 those with you if you could.</p> <p>19 MR. DYESS: The first one I want you to go to is</p> <p>20 their slide 14.</p> <p>21 BY MR. DYESS:</p> <p>22 Q. Now, I believe you testified this was an accurate</p> <p>23 representation of how the power plants work in connection</p> <p>24 with what the CERT companies did; correct?</p> <p>25 A. Correct.</p>
<p style="text-align: right;">653</p> <p>1 Q. Now, you've given some opinions on this case about</p> <p>2 MATS compliance; isn't that right?</p> <p>3 A. Correct.</p> <p>4 Q. But you're not really an expert on MATS compliance,</p> <p>5 are you?</p> <p>6 A. I know as much as I need to render my opinions in</p> <p>7 this case.</p> <p>8 Q. Okay. Now, power plants had to comply with MATS</p> <p>9 starting in 2015; that's your testimony; right?</p> <p>10 A. 2015, 2016.</p> <p>11 Q. Right. So by the time power plants had to comply</p> <p>12 with MATS, you'd been out of the power plant business for 20</p> <p>13 years; is that correct?</p> <p>14 A. I think so, yes.</p> <p>15 Q. You don't have any professional experience working</p> <p>16 with power plants on MATS compliance, do you?</p> <p>17 A. No.</p> <p>18 Q. Outside of your work you've done in this case, you've</p> <p>19 never done any research or published anything on MATS</p> <p>20 compliance; correct?</p> <p>21 A. Correct.</p> <p>22 Q. And other than the work you've done for the</p> <p>23 plaintiffs in this case, you don't have any training or</p> <p>24 education on MATS compliance, do you?</p> <p>25 A. Correct.</p>	<p style="text-align: right;">655</p> <p>1 Q. Okay. And what we've got here...</p> <p>2 Okay. All right. So right here, this is where</p> <p>3 the CERT companies apply the MerSorb and the S-Sorb;</p> <p>4 correct?</p> <p>5 A. Correct.</p> <p>6 Q. Over here is where you say the power plants are</p> <p>7 injecting the activated carbon; correct?</p> <p>8 A. Correct.</p> <p>9 Q. Now, over here this is where the power plant either</p> <p>10 has a baghouse or ESP; correct?</p> <p>11 A. Correct.</p> <p>12 Q. Now, this is the flue gas; right?</p> <p>13 A. Right.</p> <p>14 Q. I mean, that's what's represented her?</p> <p>15 A. The products of combustion.</p> <p>16 Q. So in other words, this is where the coal treated</p> <p>17 with the bromine gets combusted; right?</p> <p>18 A. Correct.</p> <p>19 Q. And this is where the gas is that contains the</p> <p>20 mercury as a result of the combustion; correct?</p> <p>21 A. Correct.</p> <p>22 Q. Okay. So in order to infringe the patent, this is</p> <p>23 where the sorbents have to be injected in order to infringe;</p> <p>24 correct?</p> <p>25 A. The activated carbon.</p>

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1 Q. Just the activated carbon?

2 A. **Yes.**

3 Q. The S-Sorb isn't injected over here?

4 A. **Well, the S-Sorb is injected in the refined coal**

5 **plant.**

6 Q. Right. It's injected way back here?

7 A. **Yes.**

8 Q. Okay. It's not injected here?

9 A. **Right.**

10 Q. It's not injected into this mercury-containing gas?

11 A. **No.**

12 Q. Now, this is the baghouse or ESP. This is -- I think

13 you testified that this is where the separation step occurs

14 where the mercury is separated from the flue gas; correct?

15 A. **Correct.**

16 Q. Okay. Now, the flue gas at a power plant, the

17 ductwork for it, it can't bypass this EP -- I mean this

18 baghouse, can it?

19 A. **No.**

20 Q. No matter what's going on, that flue gas has got to

21 come through the baghouse?

22 A. **It sure does, yes.**

23 Q. And same thing for ESP, if they're using ESP, that

24 flue gas has got to come through that ESP; right?

25 A. **Right.**

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1 Q. Otherwise, the power company would be dumping all

2 kind of stuff through this stack; right?

3 A. **Oh, yes.**

4 Q. Now, these ESPs, you worked on ESPs when you were at

5 Con Edison back in the '90s?

6 A. **Yes.**

7 Q. ESPs have been around a long time in power plants?

8 A. **Yes, since the 1920s.**

9 Q. All of the power plants that are accused of

10 infringement in this case, they've had ESPs and baghouses

11 for a while; right?

12 A. **Yes.**

13 Q. They weren't installed in connection with the use of

14 refined coal, were they?

15 A. **No.**

16 Q. They weren't installed for the use of activated

17 carbon, were they?

18 A. **No.**

19 Q. Okay. There's nothing the CERT defendants did that

20 talked power plants into using baghouses, was there?

21 A. **No.**

22 Q. There's nothing the CERT defendants did to talk power

23 plants into using ESPs; correct?

24 A. **No.**

25 Q. The power plants had to use a baghouse or ESP

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1 regardless of whether they were burning refined coal or not;

2 right?

3 A. **By "talk" what do you mean by that?**

4 Q. Sure. Let me ask it this way: Before power plants

5 starting burning refined coal -- let's make it specific.

6 For these eight power plants before they were burning

7 refined coal, they were using baghouses; right?

8 A. **Correct.**

9 Q. Before these power plants were using activated

10 carbon, they were using ESP; right?

11 A. **Yes.**

12 Q. So there's nothing these CERT defendants did that

13 caused the power plants to use a baghouse?

14 A. **That's correct.**

15 Q. And there's nothing the CERT defendants did that

16 caused the power plant to use ESP; right?

17 A. **Correct.**

18 Q. Mr. O'Keefe, I want to ask you a little bit about

19 your testimony yesterday towards the end of the day.

20 MR. DYESS: If you go to Slide 18, Mr. Brown.

21 BY MR. DYESS:

22 Q. When you were talking about this slide, you said:

23 Who are the CERT investors, and I believe your -- you were

24 asked that question, and your answer was: They were the

25 people who upfronted the money to build refined coal

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1 facilities where they assumed ownership like a certain

2 percentage and they received the tax credits.

3 Do you recall that testimony?

4 A. **Yes.**

5 Q. Now, you were talking about these investors up here;

6 correct?

7 A. **JPMorgan, Kiewit and Mylan.**

8 Q. What did you look at in this case that told you that

9 those investors upfronted the money that to build the

10 refined coal facilities?

11 A. **I believe I was in error. I'm not sure that they**

12 **upfronted the money, but they certainly purchased refined**

13 **coal, CERT refined coal operations to get the tax credits.**

14 Q. So when you gave that testimony it just wasn't

15 correct; right?

16 A. **Well, now that I think about it --**

17 Q. It wasn't correct, was it?

18 A. **I don't think it was.**

19 Q. We talked a little bit about this yesterday. You

20 were here for the video testimony of Mr. Whitney; correct?

21 A. **Yes.**

22 Q. Now, the power plants he was discussing, the

23 Mid-American power plants, they're not connected with the

24 CERT defendants at all, are they?

25 A. **Oh, no, they're not.**

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1 Q. And have you seen any testimony in this case from any
 2 power plants that worked with the CERT companies?
 3 A. **I'm sorry. Can you say that again?**
 4 Q. Sure.
 5 As a part of your work on this case, did you see
 6 any deposition testimony from any power plant operators that
 7 actually did work for the CERT companies?
 8 A. **I can't recall.**
 9 Q. You didn't review any testimony from the
 10 Intermountain Power Agency?
 11 A. **I can't recall.**
 12 Q. You didn't see any testimony from somebody from
 13 Virginia Power & Electric or the Chesterfield or Mount Storm
 14 power plants?
 15 A. **I don't recall.**
 16 Q. Okay. For the other eight power plants, W.A. Parish,
 17 Limestone, those power plants, you didn't see any deposition
 18 testimony from those power plant operators, did you?
 19 A. **I can't recall. It was over a year since I wrote my**
 20 **reports.**
 21 Q. Sitting here today, you don't recall seeing any
 22 testimony from the power plant operators that are actually
 23 involved in this case; right?
 24 A. **I don't know.**
 25 Q. Now, again on Mr. Whitney's testimony, you heard that

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1 testimony; right?
 2 A. **Yes.**
 3 Q. Mr. Whitney said he could go to the plant historian
 4 to get information on exactly when a power plant's activated
 5 carbon systems were in use, you heard that; correct?
 6 A. **Yes.**
 7 Q. Every power plant has a plant historian; correct?
 8 A. **It's a data logger. It tells when one piece of**
 9 **equipment is energized or de-energized.**
 10 Q. I can't hear you?
 11 A. **It's a data logger. It logs data of what equipment**
 12 **was energized or de-energized.**
 13 Q. And that includes activated carbon injection systems;
 14 right?
 15 A. **I would assume so, yes.**
 16 Q. Well, that's what Mr. Whitney said; right?
 17 A. **Yes.**
 18 Q. And you didn't get any information on the power
 19 plants at issue in the case from the plant historians at
 20 each one of those plants, did you?
 21 A. **No.**
 22 Q. Did you ask for that information?
 23 A. **I didn't need to.**
 24 Q. Why didn't you need to?
 25 A. **Because the information was in the operating permit,**

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1 **it was in an e-mail, a lot of different things it was in.**
 2 Q. Now, Mr. Whitney testified yesterday, didn't he, that
 3 activated carbon injection systems aren't working 24/7 every
 4 day of the week, every day of the year; correct?
 5 A. **Correct.**
 6 Q. So it's not true that these plants operate
 7 continuously; is it?
 8 A. **They have to maintain and clean the activated carbon**
 9 **system and he said that it can take up to a few hours.**
 10 Q. I think he said he guessed it could take up to a few
 11 hours; right?
 12 A. **Yeah.**
 13 Q. He didn't actually know, did he?
 14 A. **I don't know what he knew or didn't know.**
 15 Q. He didn't say he actually knew?
 16 A. **All I can go by is what he said.**
 17 Q. But you agree that power -- that activated carbon
 18 injection systems aren't working a hundred percent of the
 19 time?
 20 A. **Well, nothing works a hundred percent of the time.**
 21 **Even generating units and power plants themselves come**
 22 **offline, they spring leaks, equipment fails, and they come**
 23 **offline. When they're offline they don't need any activated**
 24 **carbon to comply with MATS. They don't have to comply with**
 25 **MATS when they're not generating electricity or emitting**

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1 **mercury.**
 2 Q. But it's not in your opinion testimony in this case
 3 that when power plants are burning refined coal the
 4 activated carbon injection systems are working all the time;
 5 correct?
 6 A. **Most of the time to comply with MATS and I think**
 7 **that's what Mr. Whitney was trying to say.**
 8 Q. Right, but most of the time is not all the time;
 9 right?
 10 A. **A good percentage of time.**
 11 Q. But most of the time is not all the time, is it,
 12 Mr. O'Keefe?
 13 A. **As required to comply with MATS emission standards.**
 14 **So Mr. Whitney said that in the video.**
 15 Q. It doesn't work all the time?
 16 A. **It has to come down for maintenance.**
 17 Q. The activated carbon injection system?
 18 A. **And cleanings, yes.**
 19 Q. But the power plants are still burning coal while
 20 that's happening with the activated coal injection system;
 21 right?
 22 A. **That could be.**
 23 Q. But you didn't get any records from any of these
 24 power plants, from the plant historians, about when
 25 activated carbon injection systems might not have been in

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1 use when the power plant was burning coal?

2 **A. I didn't have to.**

3 **Q.** But you didn't, did you?

4 **A. No.**

5 **Q.** You used a couple of terms here and I just wanted to

6 make sure I understood, we were talking about upstream of

7 the combustion chamber and downstream of the combustion

8 chamber. Upstream means what you're talking about in this

9 case, upstream means before the coal goes into the

10 combustion chamber; right?

11 **A. Correct.**

12 **Q.** Downstream from the combustion chamber means when the

13 gas is leaving the combustion chamber headed towards the

14 baghouse or ESP; right?

15 **A. Right.**

16 **Q.** Mr. O'Keefe, I wanted to ask you just a minute, if I

17 could, about some of the plaintiffs' exhibits you looked

18 through, and this is going to get a little complicated. I

19 think the ones I want to talk to you about are the refined

20 coal sales agreements. They're in Volume 2 of your report.

21 They're on the floor, and I apologize, it's just crowded

22 over there. Can I help you get those? Can you get those?

23 **THE COURT:** Mr. Dyess, you're welcome to assist

24 the witness. You may approach.

25 **BY MR. DYESS:**

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1 **Q.** I believe the first one that was admitted into the

2 record is behind tab 28. Can you go to tab 28?

3 **A. Okay.**

4 **Q.** You said you studied each one of these refined coal

5 sales agreements; correct?

6 **A. Yes.**

7 **Q.** Now the refined coal sales agreement between tab 28,

8 that's the refined coal sales agreement between Marquis

9 Industrial and Basin Electric; correct?

10 **A. Yes.**

11 **Q.** Now, the date on this contract is February 13, 2013;

12 correct? It's on about the fifth page. It's the first

13 numbered page of the document.

14 **A. I'm sorry, which page?**

15 **MR. DYESS:** May I assist the witness?

16 **THE COURT:** You may.

17 **BY MR. DYESS:**

18 **Q.** If you could give me date of that agreement,

19 Mr. O'Keefe?

20 **A. It's February 23, 2013.**

21 **Q.** All right. So the next one behind tab 29, that's one

22 of the refined coal sales agreements you looked at; correct?

23 **A. Correct.**

24 **Q.** And this is the one for Springhill Resources and I

25 think it's Big Cajun II; is that right?

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1 **A. Correct.**

2 **Q.** Now looking at the same place in that contract, can

3 you tell me what the date of this refined coal sales

4 agreement is?

5 **A. September 21, 2011.**

6 **Q.** The next one is behind tab 30. And that's the

7 refined coal sales agreement between Buffington Partners for

8 the Rush Island plant; correct?

9 **A. Yes.**

10 **Q.** If you could tell me what the date of this agreement

11 is?

12 **A. November 4, 2011.**

13 **Q.** Okay. So the next one is behind tab 31. That's for

14 the Senescence refined coal plant that was at W.A. Parish;

15 correct?

16 **A. Yes.**

17 **Q.** And what's the date on that one?

18 **A. December 20, 2013.**

19 **Q.** Okay. The next one is behind tab 32. That's the

20 refined coal sales agreement for Bascobert at the Coletto

21 Creek power station; correct?

22 **A. Correct.**

23 **Q.** And the date on this one is May 10, 2019; correct?

24 **A. Correct.**

25 **Q.** And I apologize, I know this is slow to go through,

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1 but this is important to look at. The next one is behind

2 tab 33. And that's the refined coal agreement between

3 Rutledge for the Limestone power plant; correct?

4 **A. Correct.**

5 **Q.** And the date on that contract is September 20, 2013.

6 **A. Correct.**

7 **Q.** I think we've got two more of these. If you would

8 look behind tab 34.

9 **A. Okay.**

10 **Q.** And that's the refined coal sales agreement between

11 Larkwood Energy for the Labadie power plant; correct?

12 **A. Correct.**

13 **Q.** And the date on this one is March 11, 2014; correct?

14 **A. Correct.**

15 **Q.** And I believe this is the last one. This is for the

16 refined coal sales agreement, another one, for Cottbus

17 Associates for the Laramie River station; correct?

18 **A. Correct.**

19 **Q.** And this one is dated December 20, 2013; correct?

20 **A. Correct.**

21 **Q.** Did you look at any refined coal sales agreement that

22 was dated after July 2019 in this case?

23 **A. I can't remember.**

24 **Q.** Okay. Now Mr. O'Keefe, we can put that notebook

25 aside. I'm sorry.

<p style="text-align: right;">668</p> <p>1 MR. DYESS: May I approach, Your Honor?</p> <p>2 THE COURT: You may approach.</p> <p>3 BY MR. DYESS:</p> <p>4 Q. I'm handing you back volume three.</p> <p>5 A. Okay.</p> <p>6 Q. Now, this also has exhibits that were moved to be</p> <p>7 admitted when plaintiff was taking you through their case;</p> <p>8 correct?</p> <p>9 A. Okay, yeah.</p> <p>10 Q. You agree with me?</p> <p>11 A. I think so, yes.</p> <p>12 Q. Let's look behind these tabs. Tab 36, that's one of</p> <p>13 the Sargent and Lundy reports; correct?</p> <p>14 A. Correct.</p> <p>15 Q. Now, it's dated December 2018; is that correct?</p> <p>16 A. Yes.</p> <p>17 Q. The next one behind tab 37, I'm sorry. The one</p> <p>18 behind tab 39, plaintiffs' Exhibit 545.</p> <p>19 A. Well, I hate to say it but --</p> <p>20 Q. I think it's on the floor right next to you, it looks</p> <p>21 like one was pulled out.</p> <p>22 THE COURT: You may approach, Mr. Dyess.</p> <p>23 BY MR. DYESS:</p> <p>24 Q. Is that Exhibit 545, plaintiffs' Exhibit 545?</p> <p>25 A. Yes.</p>	<p style="text-align: right;">670</p> <p>1 BY MR. DYESS:</p> <p>2 Q. This is that Exhibit 232; correct?</p> <p>3 A. Yes.</p> <p>4 Q. What's the date of that e-mail?</p> <p>5 A. May 19, 2015.</p> <p>6 Q. 2015. Do you have tab 42 in that notebook in front</p> <p>7 of you?</p> <p>8 A. Yes.</p> <p>9 Q. And that's plaintiffs' Exhibit 693; correct?</p> <p>10 A. Correct.</p> <p>11 Q. That's one of the exhibits you testified about</p> <p>12 earlier today; correct?</p> <p>13 A. Yes.</p> <p>14 Q. And the date on that exhibit is March 10, 2015;</p> <p>15 correct?</p> <p>16 A. Correct.</p> <p>17 Q. Now if you could turn to the next tab, tab 43.</p> <p>18 A. Okay.</p> <p>19 Q. And this is plaintiffs' Exhibit 215?</p> <p>20 A. Correct.</p> <p>21 Q. Now that e-mail is dated December 7, 2018; correct?</p> <p>22 A. Correct.</p> <p>23 Q. Do you know who Cris Crissy is, the person who that</p> <p>24 e-mail was addressed to?</p> <p>25 A. No.</p>
<p style="text-align: right;">669</p> <p>1 Q. I'm sorry. I took one of your tabs.</p> <p>2 That Sargent and Lundy report is dated</p> <p>3 December 2018 as well; correct?</p> <p>4 A. 545?</p> <p>5 Q. Yes, the one I just handed you.</p> <p>6 A. December 2018.</p> <p>7 Q. Right. If you would turn to tab 41.</p> <p>8 A. Okay.</p> <p>9 Q. That's plaintiffs' Exhibit 69; correct?</p> <p>10 A. Yes.</p> <p>11 Q. You testified about that correct?</p> <p>12 A. Yes.</p> <p>13 Q. And that report is also dated December 2018?</p> <p>14 A. Correct.</p> <p>15 Q. Couple more of these I want to go through with you,</p> <p>16 Mr. O'Keefe. If you could turn back to tab 38.</p> <p>17 A. Which exhibit is it?</p> <p>18 Q. It's plaintiffs' Exhibit 232. It's not a Sargent and</p> <p>19 Lundy report.</p> <p>20 A. I don't see anything that has that. You said 38?</p> <p>21 Q. It's behind tab 38 in the notebook I was given.</p> <p>22 A. Some of the pages have been out of sequence. I go to</p> <p>23 tab 38 and I don't have anything in there.</p> <p>24 MR. DYESS: Can I approach, Your Honor?</p> <p>25 THE COURT: You may approach.</p>	<p style="text-align: right;">671</p> <p>1 Q. Does he work at a power plant?</p> <p>2 A. It appears that he works for JPMorgan.</p> <p>3 Q. Do you have any indication in this e-mail at all that</p> <p>4 this information was sent to a power plant?</p> <p>5 A. I really don't know for sure.</p> <p>6 Q. Mr. O'Keefe, you had to familiarize yourself with the</p> <p>7 patents that the plaintiffs claim my clients infringed;</p> <p>8 correct?</p> <p>9 A. Correct.</p> <p>10 Q. The '114 patent is one of them; correct?</p> <p>11 A. Correct.</p> <p>12 Q. And that patent issued on July 9, 2019; correct?</p> <p>13 A. Correct.</p> <p>14 Q. You're being put forward by the plaintiffs as an</p> <p>15 expert on patent infringement; that's correct?</p> <p>16 A. Correct.</p> <p>17 Q. It's your understanding, isn't it, that a patent</p> <p>18 can't be infringed until it's issued; isn't that correct?</p> <p>19 A. That's right.</p> <p>20 Q. So the '114 patent couldn't have been infringed prior</p> <p>21 to July 9, 2019, isn't that correct?</p> <p>22 A. Correct.</p> <p>23 Q. Mr. O'Keefe, you talked about four patents that I</p> <p>24 believe you gave the opinion were comparable to the</p> <p>25 plaintiffs' patent in this case.</p>

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1 Do you remember that testimony just now?

2 **A. No, they're not comparable. They're in the same --**

3 **they achieve the same result.**

4 **Q.** It's not your opinion those are technically

5 comparable patents?

6 **A. No, they're not.**

7 **Q.** They aren't in one way that none of them talk about

8 the removal of nitrous oxide, do they, none of the patents?

9 **A. I don't believe any of them do.**

10 **Q.** And none of the patents talk about the removal of

11 sulfur dioxide, do they?

12 **A. No, I don't believe so.**

13 **Q.** Mr. O'Keefe, you talked with the plaintiffs' damages

14 expert, Mr. Philip Green, in this case, didn't you?

15 **A. If I did, I can't recall what was said. It was a**

16 **long time ago. It was about a year ago.**

17 **Q.** It was about a year ago?

18 **A. Maybe a little over a year ago.**

19 **Q.** But you do recall talking to him?

20 **A. Yeah, I talked to him.**

21 **Q.** Sure and you can't remember that conversation?

22 **A. No.**

23 **Q.** But your testimony is drawing on what you remember

24 from experience at power plants 20 years ago?

25 **A. Yeah.**

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1 **Q.** You didn't give Mr. Philip Green -- you didn't

2 provide him any information that the ME2C patents result in

3 any reduction in nitrous oxide, did you?

4 **A. No.**

5 **Q.** You didn't give Mr. Green your opinion that the ME2C

6 patents resulted in any reduction of sulfur dioxide, did

7 you?

8 **A. I can't remember.**

9 **Q.** Sitting here today, did you give Mr. Green the

10 opinion that the ME2C patents reduced sulfur dioxide?

11 **A. I can't remember what we talked about.**

12 **MR. DYESS:** If you could pull up plaintiffs or

13 have Plaintiffs' Exhibit 637.

14 **BY MR. DYESS:**

15 **Q.** And you -- when you were talking to Mr. Nemunaitis,

16 you gave some opinions on Schwartz about contributory

17 infringement and induced infringement; correct?

18 **A. You mean in this trial? Yes.**

19 **Q.** In this trial.

20 **A. Yes.**

21 **Q.** I want to talk about the contributory infringement

22 piece of this case.

23 **A. Okay.**

24 **Q.** Based on the reports you gave in this case, isn't it

25 correct that the products you were accusing the defendants

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1 of selling for the purposes of contributory infringement is

2 refined coal made with calcium bromide?

3 **A. Calcium bromide and alkaline compound.**

4 **MR. DYESS:** If you could, Mr. Brown, go to page

5 137 and pull up paragraph 110 of his report.

6 **BY MR. DYESS:**

7 **Q.** This is the contributory infringement section of your

8 report; correct?

9 **A. I believe so.**

10 **MR. DYESS:** If you could highlight also

11 paragraph 111, Mr. Brown.

12 **BY MR. DYESS:**

13 **Q.** You say right here in paragraph 11: "Each of the

14 RC LLC defendants --" you're talking about my clients;

15 correct?

16 **A. Yes.**

17 **Q.** "-- sold refined coal with added calcium bromide

18 within the United States to the power plant." Correct?

19 **A. Correct.**

20 **Q.** This coal with added bromide is a component of ME2C's

21 patented methods; correct?

22 **A. Yes.**

23 **Q.** That's what you said in your report?

24 **A. Yes.**

25 **Q.** You looked earlier with Mr. Nemunaitis about the

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1 patent claims at issue in this case. None of those patents

2 included what we call a limitation as to the rank of the

3 coal, did it?

4 **A. I don't believe so.**

5 **Q.** The rank of the coal, that's the lignite,

6 sub-bituminous; correct?

7 **A. Correct.**

8 **Q.** And you'd agree the location where the supplier of

9 the coal transfers the coal to the power plant is not in any

10 of the limitations; correct?

11 **A. You mean after the refined coal?**

12 **Q.** No. Let me repeat.

13 **You would agree that the location where the**

14 **refined coal supplier transfers the coal to the power plant,**

15 **that's not a limitation in any of the claims, is it?**

16 **A. No, as long as the refined coal is burned in the**

17 **combustion chamber.**

18 **Q.** But the location of where that supply leaves the

19 refined coal facility isn't a part of any claim; correct?

20 **A. No.**

21 **Q.** Now, Mr. O'Keefe, as a part of your work on this

22 case, you studied how the refined coal companies qualify

23 their coal for the tax credit; correct?

24 **A. Correct.**

25 **Q.** That work's done at the EERC; correct?

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1 A. **Right.**

2 Q. And you heard Mr. Pavlish's testimony. He used to

3 work at the EERC; correct?

4 A. **Correct.**

5 Q. And this testing -- this refined coal certification

6 testing is done on what's called a pilots -- pilot scale

7 combustion facility at the EERC?

8 A. **Right.**

9 Q. And you've educated yourself about how each one of

10 the CERT companies qualified the refined coal at the EERC;

11 isn't that true?

12 A. **Right. I think they had to test twice a year.**

13 Q. Right. Every six months?

14 A. **Yes.**

15 Q. And every six months, what the EERC had to do was

16 they had to -- the power -- my defendants would send them a

17 sample of the feedstock -- feedstock coal from the power

18 plants; right?

19 A. **Well, they would send us -- actually I don't know who**

20 **would send the sample, but the sample was taken on the coal**

21 **pile, so it was not refined in any way.**

22 Q. Right. It was just a sample of the coal from that

23 coal yard?

24 A. **Right. It was like 400 pounds of coal off the coal**

25 **file.**

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1 Q. The EERC would take that 400 pounds of coal and then

2 split it into two piles; right?

3 A. **I'm not really sure about that.**

4 Q. Well, let me ask it this way. I'm not trying to be

5 cut e.

6 What the EERC did is it tested some of that

7 refined -- some of that feedstock coal that hadn't been

8 treated with any chemicals first; right?

9 A. **I can't remember.**

10 Q. Okay. Let me just really cut to the chase. You

11 would agree with me that none of the EERC qualification

12 testing was done using activated carbon; correct?

13 A. **Yes.**

14 Q. You agree with me?

15 A. **Some of it was that I know of.**

16 Q. What did you look at that tells you some of the

17 refined coal was tested at the EERC using activated carbon?

18 A. **I can't recall.**

19 Q. Is it that one of the opinions you give in this case

20 is knowledgeable about the infringement that you accuse my

21 clients of -- is it one of their documents that you saw that

22 said EERC testing is done using activated carbon?

23 A. **I can't recall.**

24 Q. Was the basis of the EERC testing to qualify refined

25 coal for Section 45 tax credits part of the opinions you

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1 gave in this case?

2 A. **Well, getting the Section 45 tax credits does not**

3 **require the use of activated carbon.**

4 Q. Right. But did you ever see any evidence that the

5 EERC actually used activated carbon when it was testing my

6 client's refined coal for qualification?

7 A. **I don't think they did, no.**

8 Q. Okay. Now, it's your understanding, isn't it,

9 Mr. O'Keefe, from the report and the opinions you gave in

10 this case, that when the EERC performs this qualification

11 testing, it sends a report to each one of my clients when it

12 certifies their coal; right?

13 A. **I believe so.**

14 Q. And it has to do that every six months; right?

15 A. **Right.**

16 Q. And in that report, it's your understanding, correct,

17 that the EERC provides the formula for MerSorb and S-Sorb

18 that the refined coal facility can use, and if they put that

19 on the coal, it would qualify for the Section 45 tax

20 credits; correct?

21 A. **I'm not really sure. I know that the percentages of**

22 **MerSorb and S-Sorb are considered in the testing, but I**

23 **don't think they tell how much of a percentage of refined**

24 **coal suppliers are spraying on the coal.**

25 Q. That wasn't my question. My question was: These

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1 reports tell the EERC what the percentages of MerSorb and

2 S-Sorb that would apply to qualify for the tax credits;

3 correct?

4 A. **I'm not sure. I don't recall.**

5 MR. DYESS: If you could put up the plaintiffs'

6 presentation of Mr. O'Keefe and go to slide 30.

7 BY MR. DYESS:

8 Q. Now, this is from the presentation that was given

9 just a minute ago; correct?

10 A. **I believe so.**

11 Q. Now, it's based on the defendants' exhibit,

12 Defendants' Exhibit 1968; correct?

13 A. **Looking at it, I -- I can't really remember.**

14 Q. Do you remember looking at this defendants'

15 exhibit -- it's pretty distinctive. It's got these green

16 columns in it.

17 Do you remember looking at this exhibit when you

18 were preparing the opinions you've given here today?

19 A. **I might have, yes.**

20 Q. Do you recall what you looked at from that exhibit?

21 A. **I don't recall specifically.**

22 Q. You don't recall what you looked at in this exhibit?

23 A. **Well, to begin with -- no, I -- honestly I don't**

24 **recall.**

25 Q. Okay.

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1 **A. Can you ask a further question, please.**
2 **Q.** Sure. Let me just kind of cut to the chase.
3 **MR. NEMUNAITIS:** Your Honor, may we approach?
4 **THE COURT:** Okay. We'll have a sidebar.
5 (Thereupon, a discussion was held at sidebar.)
6 **THE COURT:** Okay. Mr. Nemunaitis?
7 **MR. NEMUNAITIS:** We had prepared that slide but
8 didn't present it in his direct. I think that's where the
9 confusion is here. I don't think it would be appropriate to
10 question him on a slide we didn't show in his direct.
11 **MR. DYESS:** I'll withdraw the question.
12 **THE COURT:** Okay.
13 (The discussion at sidebar ended.)
14 **THE COURT:** Defendant has withdrawn the
15 question. I'll turn it to you to ask the next question.
16 **BY MR. DYESS:**
17 **Q.** Mr. O'Keefe, were you aware of any instance where one
18 of the defendants in this case changed either the MerSorb
19 additive right or the S-Sorb additive rate because a power
20 plant asked them to do so?
21 **A. I don't recall any specifics.**
22 **Q.** Do you recall looking at that is that evidence part
23 of any of the opinions you've given in this case at trial
24 today?
25 **A. Well, I think I discussed about some of the**

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1 **incentives. You know, they worked with the power plants to**
2 **optimize MerSorb injection with respect to activated carbon**
3 **injection to optimize, you know, the amount of MerSorb**
4 **applied to the amount of ACI to optimize mercury capture**
5 **from the emissions to meet the MATS standard.**
6 **Q.** And what was that evidence? Was that the Sargent &
7 Lundy report?
8 **A. Well, I think I had a slide. I can't remember**
9 **offhand.**
10 **MR. DYESS:** Could you put up plaintiffs' slide?
11 **BY MR. DYESS:**
12 **Q.** Is this the slide you're talking about?
13 **A. No.**
14 **MR. DYESS:** Could you put up Slide 62?
15 **BY MR. DYESS:**
16 **Q.** Is this the slide you're talking about?
17 **A. No, it's not the S & L report.**
18 **Q.** And I'm asking. Can you give me some description
19 which slide?
20 **A. It was the one I was talking about contributory and**
21 **induced infringement.**
22 **MR. DYESS:** Your Honor, can I approach the
23 witness?
24 **THE COURT:** You may approach.
25 **BY MR. DYESS:**

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1 **Q.** Can you identify which slide you're referring to?
2 And I'm not trying to suggest that's the one.
3 **A. It started here where I was talking about induced**
4 **infringement.**
5 **Q.** You're going to need to speak up for the court
6 reporter.
7 **A. It was PDX -- starting with PDX 4.75 where I was**
8 **talking about induced infringement.**
9 **Q.** Thank you, Mr. O'Keefe.
10 **MR. DYESS:** If you could go to that slide
11 Mr. Brown. It's number 75.
12 **BY MR. DYESS:**
13 **Q.** Is that with regard to one of the e-mails depicted on
14 Slide 75, is that what you're referring to? I know it's
15 really small.
16 **MR. DYESS:** Can you blow that up? I don't know
17 that it will actually show.
18 **BY MR. DYESS:**
19 **Q.** That wasn't very helpful, was it?
20 **A. Well, those are way too small. It's the second**
21 **bullet point optimizing Br rates and ACI rates.**
22 **MR. DYESS:** Could you go to Slide 79, please.
23 **BY MR. DYESS:**
24 **Q.** Is this the one you're talking about?
25 **A. No, no. Go back.**

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1 **Q.** Sure.
2 **MR. DYESS:** Go back to 75, please.
3 **A. You see the second bullet point on the left?**
4 **BY MR. DYESS:**
5 **Q.** Right.
6 **A. Optimizing Br rates and ACI rates. What I said was**
7 **the refined coal defendants worked with the power plants so**
8 **that they could set the Br, the bromine rates, the MerSorb**
9 **rates and the ACI rates so that they still met the MATS**
10 **standards of 90 percent mercury removal but they didn't have**
11 **to use any more activated carbon injection than necessary.**
12 **Q.** And you referenced some documents there, and that's
13 what I'm trying to get to. Which of the plaintiffs'
14 documents are you referring to?
15 **A. I can't recall offhand.**
16 **Q.** But you said it wasn't the Sargent & Lundy report?
17 **A. It doesn't, no.**
18 **Q.** And I apologize for the time it's taking to flip
19 through these slides, Mr. O'Keefe.
20 **MR. DYESS:** If you could go to Slide 64.
21 **BY MR. DYESS:**
22 **Q.** Is this the one we're talking about?
23 **A. Yes, I believe it is. Yes, it's an e-mail from Barr**
24 **Linton.**
25 **Q.** And this is one of the e-mails we looked at a minute

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1 ago, Exhibit 232; correct?

2 **A. Yes.**

3 **Q.** And this e-mail is dated May 19, 2015; correct?

4 **A. Yes.**

5 **Q.** And that's the only evidence you discussed today

6 where it's your testimony that the refined coal facilities

7 optimized refined coal percentages to work with activated

8 carbon; correct?

9 **A. Correct, yes.**

10 **Q.** And you're not relying on any other document for that

11 testimony; correct?

12 **A. No.**

13 **Q.** I'm going to do something that's probably a little

14 unusual here. I want to talk about some things I think we

15 can actually agree on. You agree that if a power plant is

16 burning refined coal but is not burning activated carbon,

17 that power plant isn't infringing any of the claims of this

18 patent; isn't that's correct?

19 **A. That's correct.**

20 **Q.** Power plant has to have specialized equipment

21 installed to inject activated carbon; correct?

22 **A. Yes.**

23 **Q.** And if a power plant doesn't have that specialized

24 equipment installed, it can't burn, it can't spray activated

25 carbon and it can't infringe the patents; correct?

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1 **A. Correct.**

2 **Q.** Now, you didn't do any research in this case to

3 determine when any of the subject power plants installed

4 activated carbon injection systems; correct?

5 **A. Correct.**

6 **Q.** As a matter of fact, when we took your deposition in

7 this case, it was your understanding as the plaintiffs'

8 expert witness on power plant operations that activated

9 carbon injection systems were installed at the same time

10 that a power plant had a refined coal facility installed;

11 correct?

12 **A. I'm sorry, can you ask that again?**

13 **Q.** Sure.

14 You're the plaintiffs' expert on power plant

15 operations; right?

16 **A. Right.**

17 **Q.** And it was your -- when we took your testimony in

18 this case at your deposition, it was your understanding at

19 that time that activated carbon injection systems were

20 installed at the same time that a power plant had a refined

21 coal facility system installed; isn't that right?

22 **A. Well, they were installed when the refined coal plant**

23 **was there, yes.**

24 **Q.** That wasn't my question.

25 **A. They had to meet the MATS standards for 90 percent**

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1 **mercury removal, so they used refined coal as part of the**

2 **equation.**

3 **Q.** Do you recall me asking you questions at your

4 deposition about your understanding of when activated carbon

5 injection systems were installed?

6 **A. No, I don't remember. It was a year ago.**

7 **Q.** Do you recall that you testified that activated

8 carbon injection systems were installed in conjunction with

9 a refined coal facility?

10 **A. I don't remember.**

11 **Q.** Do you recall an answer to my question that you

12 testified that at the same time a power plant had a refined

13 coal facility installed, it had an activated carbon

14 injection system installed?

15 **A. I'm sorry, can you ask it again?**

16 **Q.** Sure.

17 Do you recall that you gave testimony that at

18 the same time a power plant had a refined coal facility

19 installed, it had an activated carbon injection system

20 installed? Do you recall that testimony?

21 **A. No.**

22 **Q.** Okay. Mr. O'Keefe, you should have in front of you a

23 couple of spiral binders and two of them are your

24 depositions in this case.

25 **MR. DYESS:** I may have to assist the witness on

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1 this one, Your Honor.

2 **THE COURT:** You may assist the witness.

3 **BY MR. DYESS:**

4 **Q.** Mr. O'Keefe, I'm handing you Volume 2 of your

5 deposition transcript. And it's Volume 2 because that

6 deposition was two days; right?

7 **A. Yeah.**

8 **Q.** I want you to turn with me if you could to page 349

9 of that deposition.

10 **A. Okay.**

11 **Q.** And start at line 11. I want you to read with me if

12 you could.

13 **A. Okay.**

14 **Q.** "Have you done any work in this case to determine

15 when an activated carbon injection system was installed at

16 any power plant that's the subject of this case?"

17 "Answer: When it was installed?"

18 "Question: Yes."

19 "Answer: It was installed in conjunction with

20 the refined coal facility."

21 Did I read that correctly?

22 **A. Yes.**

23 **Q.** Okay. And then it goes on.

24 "Question: Let me unpack that statement. Are

25 you saying at the same time that a power plant had a refined

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1 coal facility installed, it had an activated carbon
2 injection system installed?
3 "Answer: That's my understanding."
4 That was your testimony?
5 **A. That's what it says.**
6 **Q.** And it was your testimony in that same deposition
7 that there were no power plants that were the subject of
8 this case that used refined coal before the power plant
9 installed an activated carbon injection system? That was
10 your testimony; correct?
11 **A. I'm sorry. My blood sugar is getting a little low.**
12 **It's close to lunchtime. I must ask you to repeat the**
13 **question.**
14 **MR. DYESS:** Your Honor, he's requesting a break
15 for lunch. I don't have a problem breaking here and coming
16 back.
17 **THE COURT:** The time that we normally take --
18 Mr. O'Keefe, can you continue for a short additional period
19 of time?
20 **THE WITNESS:** If he repeats the question.
21 **THE COURT:** Let's just try to get more testimony
22 in. I understand at some point if it's difficult we'll
23 consider breaking.
24 **MR. DYESS:** Sure.
25 **BY MR. DYESS:**

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1 **Q.** And it was your understanding, you gave your opinions
2 that were in that initial report when you gave your
3 deposition testimony in this case that there were no power
4 plants that are the subject of this case that had -- that
5 used refined coal before the power plant installed an
6 activated carbon injection system; isn't that right?
7 **A. I don't think so. That wasn't my intent.**
8 **Q.** Sure. You still got Volume 2 of your deposition in
9 front of you?
10 **A. Yes.**
11 **Q.** If you could turn to page 50 and go to line 9. Are
12 you there?
13 **A. Yes.**
14 **Q.** Okay. So if you could read from line 9 to line 13?
15 **A. Do you want me to read it?**
16 **Q.** Yes.
17 **A. "Okay. So it's your understanding that there are no**
18 **power plants that are the subject of this case that used**
19 **act -- that used refined coal before it installed an**
20 **activated carbon injection system?**
21 **"Answer: I don't think so, no."**
22 **Do you want me to read further?**
23 **Q.** I don't.
24 If you could -- well, let me ask you this,
25 **Mr. O'Keefe:** It's part of your opinions in this case that

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1 in order for a company to induce infringement -- induced
2 infringement is what we're talking about here -- that the
3 company, the infringer has to take action during the time
4 the patent was in force that intended to cause and led to
5 infringing acts by someone else. That sounds familiar to
6 you; right?
7 **A. Yes.**
8 **Q.** That's your opinion; correct?
9 **A. Yes.**
10 **Q.** Okay. And by "in force," that's what we talked about
11 earlier. That's while the patent has been issued; correct?
12 **A. Correct.**
13 **Q.** So it can't be an action that took place before the
14 patent issued; right?
15 **A. Right.**
16 **Q.** The only actual inducing act that occurred, in your
17 opinion, after July 9, 2019, is power plant -- is my client
18 selling refined coal to power plants; isn't that right?
19 **A. For the '114 patent, yes.**
20 **Q.** And let me make sure. I want to make sure what you
21 said -- I understand what you said.
22 The only inducing act that took place after the
23 '114 patent issued on July 9, 2019, is my clients selling
24 refined coal to the power plants?
25 **A. Yes.**

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1 **Q.** Now, Mr. O'Keefe, my clients don't use activated
2 carbon at the power plants; right?
3 **A. Currently?**
4 **Q.** Let me back up. That's a fine point. Thank you for
5 that.
6 At no time have my clients ever used activated
7 carbon at a power plant; correct?
8 **A. Correct.**
9 **Q.** The power plants do that?
10 **A. Right.**
11 **Q.** And the power plants do that because they have to
12 comply with MATS; correct?
13 **A. Correct.**
14 **Q.** And somebody else is selling that activated carbon to
15 the power plants; correct?
16 **A. I believe so, yes.**
17 **Q.** And the only reason you're aware of that power plants
18 use activated carbon is so they have to comply with MATS;
19 correct?
20 **A. Yes.**
21 **Q.** The only reason that the power plants that are
22 accused in this case installed activated carbon injection
23 systems is so they could comply with MATS; correct?
24 **A. Correct.**
25 **Q.** And the only reason they continued to use those

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1 activated carbon injection systems in 2019, 2020, and 2021
2 is because they still had to comply with MATS; correct?
3 **A. Correct.**
4 **Q.** And that's the only reason; correct?
5 **A. It's true, yes.**
6 MR. DYESS: Your Honor, I offer again it's a
7 good break point. I don't know if you want to stop.
8 THE COURT: Give me an idea.
9 MR. DYESS: Probably about 15 to 20 minutes.
10 THE COURT: I was hoping to break at 12:30. You
11 can finish your cross and break for lunch.
12 BY MR. DYESS:
13 **Q.** Now, Mr. O'Keefe, we were talking a few minutes ago
14 about when power plants installed activated carbon systems
15 versus when power plants were using refined coal. Do you
16 remember that testimony?
17 **A. Yes.**
18 **Q.** Okay. It's correct, isn't it, that most of the power
19 plants that are at issue in this case actually were using
20 refined coal for years before they used activated carbon;
21 correct?
22 **A. Yes, to get Title 45 tax credits.**
23 **Q.** And they that use occurred for several years at these
24 power plants before the activated carbon injection system
25 was installed; correct?

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1 **A. I think the Title 45 credits became available in 2011**
2 **and the MATS standards were implemented in 2015, 2016.**
3 **Q.** You actually agree that when power plants were
4 burning refined coal without activated -- let me back up.
5 You agree that the power plants in this case, when they were
6 burning refined coal before they used activated carbon,
7 those were non-infringing uses of that refined coal;
8 correct?
9 **A. Yes, correct.**
10 **Q.** And you actually agreed that because there were a
11 number of plants that used activated carbon -- used refined
12 coal before they used activated carbon, it was your opinion
13 that that would be a substantial non-infringing use of
14 refined coal; correct?
15 **A. Well, they didn't infringe the patents-in-suit.**
16 **Q.** Right. And therefore that use of refined coal
17 without activated carbon was a substantial non-infringing
18 use. You gave that opinion?
19 MR. NEMUNAITIS: Objection, Your Honor. May we
20 approach?
21 THE COURT: I'll see counsel at sidebar.
22 (Thereupon, a discussion was held at sidebar.)
23 THE COURT: All right Mr. Nemunaitis you have an
24 objection.
25 MR. NEMUNAITIS: The objection is that he just

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1 asked him to opine that sales of the non-accused refined
2 coal would constitute a substantial non-infringing use. We
3 agree that's wrong on the law and extremely prejudicial to
4 elicit testimony mis-educating the jury. I think it would
5 be extremely prejudicial to have him go down this line of
6 questioning based on an erroneous understanding of the law
7 in front of jury.
8 THE COURT: Just to be precise, Mr. Dyess,
9 you're saying he was asking Mr. O'Keefe about power plants'
10 actions of burning refined coal without the use of activated
11 carbon before the time period at issue relating to our
12 patents-in-suit, and asking questions or saying about
13 whether that kind of conduct would amount to a substantial
14 non-infringing use, and your position is, your argument is,
15 the elements of contributory infringement with regard to
16 what can constitute a substantial non-infringing use are
17 going to be solely focused on the coal produced after 2019.
18 Is that the gist?
19 MR. NEMUNAITIS: Correct, Your Honor.
20 THE COURT: So the questions you're arguing are
21 improper because they're suggesting an inaccurate statement
22 of the law.
23 MR. NEMUNAITIS: Yes, Your Honor. And we said
24 they could get into this issue as their clients' objective
25 intent but that absolutely cannot be the case with

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1 Mr. O'Keefe on the stand.
2 THE COURT: Mr. Dyess, what's your response to
3 that?
4 MR. DYESS: Your Honor, the exact wording --
5 going to start where they ended. You have said we are
6 allowed to put on our clients' state of mind. They have a
7 substantive good faith belief in this error of the law. I'm
8 not asking Mr. O'Keefe whether that's his opinion now. His
9 testimony in his deposition is that is his opinion and if
10 their expert is giving that opinion that validates the good
11 faith belief of my clients.
12 THE COURT: I think just to be clear, though, I
13 think the objection is that it's asserted that your
14 questions were along the lines of wouldn't you agree,
15 Mr. O'Keefe, that if a power plant burned refined coal
16 without using activated carbon before 2019 that that amounts
17 to a substantial non-infringing use. I guess if that's the
18 substance of the question and the gist of it what he is
19 saying I clearly ruled that with regard to what is a
20 substantial non-infringing use separate and apart from what
21 your client may have known or thought or believed that would
22 be irrelevant. Are you saying you weren't asking that kind
23 of question?
24 MR. DYESS: I was asking if he gave that opinion
25 and he did and I'm merely saying if this jury has the good

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1 faith or subjective belief of my clients they have to say is
2 that really truthful, would anybody hold that opinion.
3 Their expert held that opinion.
4 THE COURT: You're saying that the first that
5 Mr. O'Keefe opined to in the case that it was his view that
6 prior to 2019 if a power plant burned refined coal without
7 activated carbon that would amount to a substantial
8 non-infringing use and you're using Mr. O'Keefe's view to
9 speak to the reasonableness of your client's assertedly
10 mistaken view about that. Is that what you're saying?
11 MR. DYESS: If they're going, and we believe
12 they are going to question the good faith or reasonableness
13 of that belief, the jury needs the context of what others
14 would have that good faith and reasonable belief and I can
15 show you his testimony. I can show you the question that
16 I'm trying to ask him about.
17 THE COURT: Let me see. I think part of the
18 basis is it hinges on your assertion that Mr. O'Keefe
19 testified that he believed at one point in something that's
20 a mistaken view of the law.
21 MR. DYESS: Correct. It's this block right
22 here, Your Honor. That's his actual testimony.
23 THE COURT: So just for the record, I'm reading
24 this is page 363 of Mr. O'Keefe's deposition testimony. The
25 question is:

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1 "QUESTION: If there are other plants that
2 burned refined coal before they installed an activated
3 carbon system, would you agree that those would also be
4 non-infringing uses of refined coal?"
5 Mr. Dyess, that question is not about
6 substantial non-infringing use, it's about whether the use
7 of refined coal with activated carbon amounts to
8 infringement, or at least just on its face that question
9 appears to be.
10 MR. DYESS: It's the second question that
11 follows, Your Honor.
12 THE COURT: Next question -- Mr. O'Keefe replied
13 "yes" to that. Next question:
14 "For those plants that used refined coal before
15 they installed activated carbon would you agree that those
16 would be substantial non-infringing uses of coal?"
17 "ANSWER: Yes."
18 That's the question?
19 MR. DYESS: Yes, Your Honor.
20 THE COURT: Mr. Nemunaitis, if it's the case now
21 maybe Mr. O'Keefe misspoke or something we can clean up if
22 you think it's true on redirect, but if at some point he did
23 believe or thought that the answer to this question was yes,
24 why wouldn't that speak to what a reasonable person might
25 think?

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1 MR. NEMUNAITIS: This line of questioning,
2 they're doing the same thing they've done at trial, talking
3 about hundreds of thousands of pounds of burned coal. They
4 burn I believe a hundred million tons of coal. He wasn't
5 opining on the --
6 THE COURT: Counsel, I think before when we have
7 sidebar -- well, we'd expect -- okay. We'll expect that to
8 be the case. Okay.
9 All right. I'm sorry, Mr. Nemunaitis, do you
10 want to finish your point on this?
11 MR. NEMUNAITIS: All he was saying is there's a
12 substantial amount of coal that was burned in a
13 non-infringing way. There's nothing here connecting it to
14 the test or contributory infringement, and allowing him to
15 get into this here is going to create this confusing issue.
16 This is far more likely to confuse the jury than it is to
17 elucidate them, and at the end of the day it's their
18 subjective intent that matters, and this hardly goes to the
19 issue.
20 THE COURT: Okay. I understand the issues. I
21 think as it relates to the question before the first
22 question here, I do not believe, for the reasons I suggest,
23 that this question should be utilized or has any bearing on
24 the issue of substantial non-infringing use or the
25 defendants' clients' reasonable belief as to what coal

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1 counted for that purpose.
2 But I agree that at least facially it appears
3 with regard to the second question, the one that begins at
4 line 8, Mr. Dyess asked the witness what he thought counted
5 as a substantial non-infringing use and it looks like the
6 answer given was that the witness stated at least facially
7 that if a coal plant used refined coal before it installed
8 activated carbon, that would count as a substantial
9 non-infringing use. Facially he said yes.
10 So I agree with the defendants' argument that if
11 at one point it's really true that the witness held that
12 belief about the law that they could speak to the
13 reasonableness of his clients' belief, so I'll allow him to
14 cross-examine on the question.
15 Now, it could be that this is -- that's not
16 exactly what the witness said. Maybe the witness was
17 confused or the witness thought the context was different.
18 That's the kind of thing the plaintiff can clean up if they
19 think they can in redirect.
20 As to the overarching issue Mr. Nemunaitis was
21 talking about at the end about what to do about these areas
22 in which certain coal counts and doesn't, that's a broader
23 issue we still have to resolve with regard to any
24 supplemental instruction now, today, or at final jury
25 instructions. Okay.

<p style="text-align: right;">700</p> <p>1 So I'm going to overrule the objection and allow</p> <p>2 the question to be permitted with regard to this question</p> <p>3 being allowed in. Thank you.</p> <p>4 (The discussion at sidebar ended.)</p> <p>5 THE COURT: You may continue.</p> <p>6 BY MR. DYESS:</p> <p>7 Q. Mr. O'Keefe, you agree, don't you, that for those</p> <p>8 plants that used refined coal before they installed</p> <p>9 activated carbon, you agree that those would be substantial</p> <p>10 non-infringing uses of refined coal, wouldn't you?</p> <p>11 A. Well, I think the thing that we have to clarify is</p> <p>12 that the patents were in force after 2019. So my indirect</p> <p>13 infringement analysis pertains to that date when the patent</p> <p>14 was in force, the '114 patent, and a year later when the</p> <p>15 '517 patent was in force up until 2021.</p> <p>16 Q. But you would agree with me that it was your opinion</p> <p>17 on March 3, 2022, that for those plants that used refined</p> <p>18 coal before they installed activated carbon that those would</p> <p>19 be substantial non-infringing uses of refined coal?</p> <p>20 A. Well, I might have said that, but I changed my</p> <p>21 opinion. I would like to clarify it right now.</p> <p>22 Q. Well, your lawyer will have the chance to clarify</p> <p>23 with you, but you agree you gave that testimony in March of</p> <p>24 2022; correct?</p> <p>25 A. Yes, I agree.</p>	<p style="text-align: right;">702</p> <p>1 allegations of infringement, they're still using activated</p> <p>2 carbon today; correct?</p> <p>3 A. Correct.</p> <p>4 Q. And they're still using activated carbon today</p> <p>5 because of MATS; correct?</p> <p>6 A. Correct.</p> <p>7 Q. And those power plants if they have a baghouse,</p> <p>8 they're still using that baghouse today; correct?</p> <p>9 A. Correct.</p> <p>10 Q. And if they have an SCR, that's the other piece of</p> <p>11 filtration equipment, they're still using that today;</p> <p>12 correct?</p> <p>13 A. Well, they have to meet the MATS standards of</p> <p>14 90 percent mercury reduction of emissions.</p> <p>15 Q. And the refined coal program, you understand it ended</p> <p>16 in 2021; right?</p> <p>17 A. Correct.</p> <p>18 Q. But these power plants kept using ACI after the</p> <p>19 refined coal program ended?</p> <p>20 A. Yes.</p> <p>21 Q. And they kept using baghouses after the refined coal</p> <p>22 program ended?</p> <p>23 A. Yes.</p> <p>24 Q. And they kept using their SCRs after the refined coal</p> <p>25 program ended?</p>
<p style="text-align: right;">701</p> <p>1 Q. Now, Mr. O'Keefe, you're not giving any opinion in</p> <p>2 this case that my clients intended the power plants to</p> <p>3 infringe these patents, are you?</p> <p>4 A. I don't know what they intended.</p> <p>5 Q. I'm just asking you if that's your opinion or not?</p> <p>6 A. No, I don't know what their intent was. I don't know</p> <p>7 what was on their mind.</p> <p>8 Q. You can't give that opinion because you don't know</p> <p>9 what's on their mind?</p> <p>10 A. No. Right. I don't know what they knew.</p> <p>11 Q. And you're not giving the opinion in this case that</p> <p>12 my clients knew that refined coal was especially made or</p> <p>13 especially adapted for use with activated carbon, you're not</p> <p>14 giving that opinion?</p> <p>15 A. I don't know what they knew. I leave that up to the</p> <p>16 jury based on the evidence I presented.</p> <p>17 Q. And just based on the evidence you presented;</p> <p>18 correct?</p> <p>19 A. Correct yes.</p> <p>20 MR. DYESS: If I could confer just a minute.</p> <p>21 THE COURT: You may.</p> <p>22 BY MR. DYESS:</p> <p>23 Q. Couple more questions, Mr. O'Keefe. All the lawyers</p> <p>24 will laugh at that joke.</p> <p>25 The power plants that are the subject of your</p>	<p style="text-align: right;">703</p> <p>1 A. Yes.</p> <p>2 Q. Now, I believe it was your testimony some version of</p> <p>3 it, you said the power plants in -- let me back up the</p> <p>4 question. I think said SCR and meant ESP so let me ask you</p> <p>5 this question: The power plants that use ESPs while my</p> <p>6 clients were selling the refined coal, they're still using</p> <p>7 the ESPs today; correct?</p> <p>8 A. Yes. I was wondering why you were saying SCR.</p> <p>9 Q. You should have corrected me, Mr. O'Keefe.</p> <p>10 A. Well, I didn't know. They weren't using an SCR.</p> <p>11 Your question was valid but it was confusing.</p> <p>12 Q. That's probably not the only one I asked today. Let</p> <p>13 me just make sure I understand, and all kidding aside.</p> <p>14 The power plants that were using the ESP to</p> <p>15 perform this step of filtering out the mercury, they're</p> <p>16 still using those ESPs today after the refined coal program</p> <p>17 ended in 2021; correct?</p> <p>18 A. Oh, yes.</p> <p>19 Q. Now, you said that it was your belief that the power</p> <p>20 plants and the refined coal companies worked together to</p> <p>21 maximize the -- I don't recall what you said. What was it</p> <p>22 you said they worked together?</p> <p>23 A. Optimize.</p> <p>24 Q. Right. To optimize the amount of activated carbon</p> <p>25 versus refined coal; correct?</p>

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1 **A. Right.**
2 **Q.** Now, you didn't talk to anyone at any of these power
3 plants ever, did you?
4 **A. No.**
5 **Q.** So you didn't talk to the power plants about whether
6 they would agree with that opinion that they worked with the
7 refined coal companies to maximize the use of activated
8 carbon for MATS compliance; correct?
9 **A. No.**
10 **MR. DYESS:** We turn the witness over,
11 Your Honor.
12 **THE COURT:** Okay. With that, I think it's a
13 good time to break for lunch. Why don't we do that, take at
14 least a half hour break for lunch. And we'll have the jury
15 led out.
16 (The jury exited the courtroom.)
17 **THE COURT:** Please be seated, everybody.
18 Let me just -- Mr. O'Keefe, you may step down.
19 Let me just put on the record with regard to
20 this morning's excusal of our juror, I just want to put on
21 the record that the juror was you excused pursuant to
22 Federal Rule of Civil Procedure 47(c) in that there was good
23 cause for the excusal, as I highlighted previously, in light
24 of the juror's physical ailment that prevented him from
25 continuing.

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1 With that said, unless there's anything further.
2 We'll break for lunch. It's 12:21. I'll just ask counsel
3 to be back and ready to go by 12:51. Okay. The Court will
4 stand in recess. Thank you.
5 (A luncheon recess was taken, after which the
6 following proceedings were had:)
7 (The jury entered the courtroom.)
8 **THE COURT:** We'll call on plaintiff for redirect
9 examination, Mr. Nemunaitis.
10 **REDIRECT EXAMINATION**
11 **BY MR. NEMUNAITIS:**
12 **Q.** Good afternoon, Mr. O'Keefe.
13 **A. Good afternoon.**
14 **Q.** Did you have a chance to get some lunch?
15 **A. Yes.**
16 **Q.** Do you remember Mr. Dyess asking you some questions
17 about your background and your time with power plants?
18 **A. Yes.**
19 **Q.** And I think he made the point that you were
20 self-taught and relying on your experience in this case. Do
21 you remember that?
22 **A. Yes.**
23 **Q.** Is that a bad thing?
24 **A. Well, it doesn't give the complete picture.**
25 **Q.** Did you explain all that in your direct?

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1 **A. I tried to.**
2 **Q.** Did Mr. Dyess identify anything you got wrong about
3 mercury control at any of the plants we discussed?
4 **A. I'm sorry, can you speak up?**
5 **Q.** Yeah. Sorry about that.
6 In your direct, you walked through the power
7 plant permit -- or did you show the jury a power plant
8 permit?
9 **A. Yes.**
10 **Q.** And did Mr. Dyess explain anything you got wrong
11 about how you explained the permit?
12 **A. No, I don't think so.**
13 **Q.** Did he identify anything you got wrong about any of
14 the operating permits we discussed?
15 **A. No.**
16 **Q.** Did he identify any way in which you made a mistake
17 and were wrong about how mercury control systems were used
18 in power plants at issue in this case?
19 **A. No.**
20 **Q.** Did he show you anything that led you to believe that
21 you were wrong about MerSorb or bromine being applied to the
22 coal in this case?
23 **A. No.**
24 **Q.** Did he show hoe you anything that indicated you were
25 wrong about how anything thinking that?

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1 **A. No.**
2 **Q.** Do you agree, Mr. O'Keefe, that the defendants in
3 this case were not the ones that caused the power plants to
4 install ESPs or baghouses?
5 **A. Correct, yes.**
6 **Q.** But did you see evidence that the CERT defendants
7 added bromine to the coal at these power plants?
8 **A. Sure.**
9 **Q.** And they sold that brominated coal to the power
10 plants?
11 **A. Yes.**
12 **Q.** And did defendants actions cause the baghouse or the
13 ESP at those power plants to capture the mercury there?
14 **A. Yes.**
15 **Q.** Did defendants' actions cause the power plants to
16 perform each and every step of each of the claims that are
17 asserted in this case?
18 **A. Yes.**
19 **MR. NEMUNAITIS:** Can I have slide 86, Mr. Diaz?
20 **BY MR. NEMUNAITIS:**
21 **Q.** Do you remember you were asked some questions about
22 some other licenses that you looked at in this case?
23 **A. Yes.**
24 **Q.** Was it your understanding that you were asked about
25 the licenses on the screen here?

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1 A. **Yes.**

2 Q. Did you explain what the field of technology was for

3 these license?

4 A. **Yes, it was mercury capture from the emission, and**

5 **they're not licenses, they're actually patents.**

6 Q. And as you explained each of these patents, did you

7 note some ways in which they might be not as good as ME2C's

8 patents in this case?

9 A. **Yes, I did.**

10 MR. NEMUNAITIS: And, Mr. Diaz, could you go to

11 the next slide please.

12 BY MR. NEMUNAITIS:

13 Q. One of the patents you talked about, was it PTX 241?

14 A. **Yes.**

15 Q. And what was the issue with this one?

16 A. **Well, it included the addition of bromine to the**

17 **fuel, the coal, but it required the flue gases after burning**

18 **of the coal and combustion be constantly -- continuously**

19 **monitored and the level of sorbent adjusted up and down as**

20 **necessary.**

21 Q. And even if some of the other non-Midwest patents

22 that you discussed are not as good or as impressive

23 technically as Midwest patents? Are they comparable in

24 terms of the field of technology?

25 A. **Well, they all claim to reduce mercury emissions in**

709

1 **coal-fired power plants.**

2 Q. Is that the same field of technology as the Midwest

3 patents?

4 A. **Yes.**

5 Q. Do you remember in opening when Mr. Sykes showed the

6 big spreadsheet of all the hundreds of million of tons of

7 coal they've sold over the years?

8 A. **Yes.**

9 Q. Now, if some of that coal was sold before the patents

10 issued in this case, would it infringe?

11 A. **No, not really.**

12 Q. And if it was even a substantial amount of coal that

13 was sold before the patents at issue in this case, does coal

14 sold before the patents infringe?

15 A. **No, the patents have been issued.**

16 MR. NEMUNAITIS: Could you bring up slide 67,

17 Mr. Diaz?

18 BY MR. NEMUNAITIS:

19 Q. Do you remember Mr. Dyess asking you some questions

20 about the phrase "substantial non-infringing use"?

21 A. **Yes.**

22 Q. Now, if we look at element three of contributory

23 infringement, it says here, "The refined coal supplied to

24 that power plant as sold and delivered during the damages

25 phase is not a statewide commodity, article, or commodity of

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1 commerce capable of substantial non-infringing use."

2 Is that the test for contributory infringement?

3 A. **One of the tests, yes.**

4 Q. One of them, yes.

5 What is the damages period that you focus on

6 when evaluating that part of the test for contributory

7 infringement?

8 A. **2019 to 2021.**

9 Q. So if the defendants in this case sold tons and tons

10 of coal before the patents issued, does that matter at all

11 to deciding contributory infringement in this dais?

12 A. **No.**

13 MR. NEMUNAITIS: Nothing further, Your Honor.

14 THE COURT: Thank you, Mr. O'Keefe. You may

15 step down. Thank you, sir.

16 I'll ask counsel to remove the binders on the

17 witness stand.

18 We'll ask plaintiffs to call their next witness.

19 MR. PEARSON: Thank you, Your Honor. Plaintiffs

20 call their next witness Mr. Philip Green.

21 THE COURT: Mr. Green may come forward and be

22 sworn.

23 THE CLERK: Please state and spell your name for

24 the record.

25 THE WITNESS: My null name is James Philip

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1 Green, J-A-M-E-S, P-H-I-L-I-P, G-R-E-E-N.

2 JAMES PHILIP GREEN,

3 called as a witness on behalf of the

4 Plaintiff, was sworn, and testified

5 as follows:

6 DIRECT EXAMINATION

7 BY MR. PEARSON:

8 Q. Good afternoon, Mr. Green.

9 A. **Good afternoon.**

10 Q. Could you please introduce yourself to the jury?

11 A. **Sure. My name is Philip Green. I'm here to speak**

12 **about the damages that would be due to Midwest.**

13 Q. What do you do for a living, Mr. Green?

14 A. **I'm a principal in a firm called Archway Research**

15 **Group, which is based in Boston, Massachusetts. And what I**

16 **do is I analyze finance, accounting, valuation and licensing**

17 **issues related to intellectual properties like patents and**

18 **copyrights and trademarks.**

19 **So this means that I actually help people do**

20 **license negotiations for patents and those kinds of things.**

21 **I help people value them if they want to buy and sell them.**

22 **I help people when they get into situations where they want**

23 **to do accounting work relating to intellectual properties of**

24 **one sort or another. And I work on situations like this**

25 **where I'm asked to evaluate damages for infringement.**

712

1 Q. Have you ever testified in court before?

2 A. **Yes, I have.**

3 Q. Have you ever been qualified as an expert in patent

4 damages by another Court?

5 A. **Yes, I have.**

6 Q. What is your work experience?

7 A. **So prior to forming my current firm which in 1996, I**

8 **was the senior manager at Pricewaterhouse which is now**

9 **called PricewaterhouseCoopers. It's one of the largest**

10 **accounting firms in the world.**

11 **Before that I was an executive consultant at a**

12 **place called Peterson Consulting which was doing valuation**

13 **work as well as investigative accounting work, and I was**

14 **also doing patent damages back at Peterson. And before that**

15 **I started off my career working at a place called Ernst &**

16 **Whinney which is now called Ernst & Young. It was also one**

17 **of the biggest accounting firms in the United States, and I**

18 **was basically going from tall building to tall building in**

19 **New York doing audits and financial statements.**

20 Q. Could you please describe your educational background

21 to the jury?

22 A. **Sure.**

23 **I have an undergraduate degree from Rutgers**

24 **College and Rutgers University. I got that in 1984, so I'm**

25 **coming up on my 40th college reunion.**

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1 **I also have an MBA in accounting which I got**

2 **from the Rutgers graduate school of management. I'm a**

3 **certified public accountant. I'm also a certified**

4 **management accountant which means I've taken a bunch of**

5 **courses and a bunch of tests relating to how companies**

6 **report internally, so how they figure out their profits and**

7 **things like that which show up the public financial**

8 **statements.**

9 **I'm also accredited in business valuation by the**

10 **American Institute of Certified Public Accountants, and I'm**

11 **also accredited in business valuation by the American**

12 **Society of Appraisers, and both of those designations relate**

13 **to business valuations, patents and copyrights.**

14 Q. Have you ever worked on matters in the energy

15 industry before?

16 A. **Yes, I have. These are some of the clients I worked**

17 **with over the years: Cooper Cameron is a company that makes**

18 **oil field equipment, so Christmas trees that kind of getting**

19 **put underneath the water if you have sub sea oil drilling**

20 **operations. Halliburton is an oil field services company.**

21 **They do all kinds of things, but the cases I've been**

22 **involved with had to do with drilling mud.**

23 **GTA, General Technology Applications, actually**

24 **has patents on how to make oil flow through pipelines more**

25 **efficiently.**

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1 **So a lot of different things in the energy**

2 **industry.**

3 Q. When you work on litigation matters, do you always

4 only work on behalf of plaintiffs?

5 A. **No, I work on behalf of plaintiffs and defendants,**

6 **about 50/50.**

7 Q. How are you being compensated for the work you've

8 been doing on this matter?

9 A. **So my firm, Archway Research, is being compensated**

10 **based on an hourly rate.**

11 Q. Do you or your firm have any financial interest in

12 the outcome of this matter?

13 A. **No, we don't.**

14 MR. PEARSON: Your Honor, I offer Mr. Philip

15 Green as an expert on the issue of patent damages.

16 THE WITNESS: So noted.

17 BY MR. PEARSON:

18 Q. What was your assignment on this matter, Mr. Green?

19 A. **So I was asked to analyze Midwest's damages assuming**

20 **the ladies and gentlemen find one or more of their patents**

21 **in this case is valid.**

22 Q. What materials did you consider in conducting your

23 analysis?

24 A. **So I looked at lots of things. I looked at the**

25 **patents at that in suit here, the '114 and '517 patents. I**

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1 **look at Midwest's internal documents, their employees'**

2 **testimony and the depositions, those kinds of things.**

3 **I looked at the defendants internal documents**

4 **and their employees' testimony and the depositions. I did**

5 **my own independent research. This is not something that**

6 **most people talk about every day, so I had to get an**

7 **understanding independently what the technology is, what**

8 **does it do, how does it fit into how businesses operate.**

9 **I had to get an understanding of the relevant**

10 **case law. So I'm sort of like a tax accountant in that the**

11 **work I do is related to statutes and cases, so I needed to**

12 **do that. Then I also reviewed the reports of other expert**

13 **witnesses including Mr. O'Keefe as well as the defendants'**

14 **technical experts.**

15 Q. Mr. Green, what are the rules that you follow

16 surrounding how you determine patent damages?

17 A. **So there's two parts of it. First off, Judge Burke**

18 **is going to instruct you on the law. Like I said, like a**

19 **tax accountant, I have to follow the rules that are**

20 **established by the case law. I started with is this part,**

21 **which is the patent damages statute.**

22 THE COURT: Can I ask Mr. Pearson and our

23 witness, it can be little bit hard to hear for the court

24 reporter the further away you are from the mic. So speak up

25 as best you can. Thank you.

716

1 BY MR. PEARSON:
2 Q. What is the first part of the statute that you
3 focused on, Mr. Green?
4 A. **So the first part of the statute, as we can see,
5 talks about damages adequate to compensate for the
6 infringement, but in no event less than a reasonable
7 royalty. So the issue is what would be a reasonable royalty
8 to pay for the use of the technology.**
9 Q. What is the second part of the statute that you
10 focused on?
11 A. **What it really focuses on is for the use made of the
12 invention by the infringer. So what we're really focusing
13 on is, well, in this case how many tons of coal were
14 actually infringing, how many tons of coal were used in an
15 infringing matter.**
16 Q. Just so we're clear, let's back up one step. What is
17 a royalty?
18 A. **So a royalty, ladies and gentlemen, is like rent.
19 When you rent an apartment, essentially what we're doing is
20 we're getting the opportunity to live in the apartment
21 without owning it. Before being able to live in the
22 apartment, we pay the rent, we get the keys, we can move
23 into the apartment.**
24 Q. What's a royalty in the patent context?
25 A. **So a royalty winds up being a payment for the use of**

717

1 **a patented technology. What that means is that somebody
2 like the defendants here wouldn't necessarily own the
3 technology but they'd have the right to use it just like
4 when you rent an apartment, you have the right to live in
5 it. And a royalty is the payment instead of what -- we call
6 it a royalty instead of rent, and instead of a lease like we
7 get when we rent an apartment, we get a license to use the
8 technology. It's called a license when we're talking about
9 royalties and patents.**
10 Q. Now, before you can determine a fair amount for the
11 patent royalty, do you have to understand the patents?
12 A. **Yes, you do.**
13 Q. Why is that important?
14 A. **Well, that's because the patents -- what we're really
15 thinking about when we're licensing a technology is we're
16 thinking about what the claims are. You saw it in the
17 movie, the claims are really what the boundaries are of the
18 invention, what's the patent.**
19 **So I need to understand that if we're going to
20 do anything with an understanding of how to value them, what
21 the royalties might be and so forth.**
22 Q. Where did you learn about the patents-in-suit in this
23 case when doing your analysis?
24 A. **So I did a number of things. First off, I read the
25 patents carefully. I read the claims, but I'm not a**

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1 **technical expert, so I also spoke with Mr. O'Keefe about
2 them. I read his report. I read the defendants' expert
3 reports as well.**
4 Q. Now, I know we've already discussed it a lot at this
5 trial, but so the jury can understand your understanding,
6 can you please briefly describe the benefits of the patented
7 technology?
8 A. **Sure.**
9 **Simply what I understand the patents to be
10 related to is a two-part process to reduce mercury emissions
11 and it really requires two things: A front end halogen to
12 be put on to the coal and a back end sorbent carbon in this
13 case to work with that with the coal after it's been burned
14 to remove mercury from the flue gases. And essentially the
15 benefit of doing it this way is you don't wind up having to
16 install heavy duty equipment, all these heavier strippers
17 and things. I think Mr. O'Keefe showed us this morning it's
18 more efficient and it's less expensive.**
19 Q. Now, after you gained an understanding of patents,
20 what's next for figuring out a fair amount of royalty?
21 A. **Well, so what we have to think about when we're doing
22 patent damages is then thinking about royalties. So we're
23 thinking about a thing called a hypothetical negotiation.
24 And what we're trying to do is put ourselves back to the
25 time when the infringement first began, which would be in**

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1 **this case 2019, and figure out what CERT on the one hand and
2 Midwest on the other would have negotiated for a license for
3 a royalty.**
4 Q. Since it's hypothetical, what are the negotiation
5 principles governing a hypothetical negotiation?
6 A. **Well, the first one is the parties in this
7 negotiation have to reach an agreement. If we go and try to
8 rent an apartment and we don't like the deal, we can walk
9 away. Can't do that here. The parties have to reach some
10 form of agreement.**
11 **Also, we have to assume that the patents are
12 found to be valid and infringed. In my experience licensing
13 patents, this is the thing that most people fight about when
14 they're doing a patent. Most of the time you're going to
15 see that the parties in the patent license don't agree that
16 the patents are valid or infringed, and so that tends to
17 affect what people are willing to pay. In this case we have
18 to assume that in coming up with what the royalty rate is
19 going to be.**
20 **The parties also in a hypothetical negotiation
21 know each other's relevant information. You go and try and
22 rent an apartment, you don't know the terms the landlord has
23 with its mortgage company whatever it might be. In this
24 instance everybody knows everybody else's information.
25 Last thing. It takes place when you think about**

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1 **it in terms of, like I said, in this case, 2019.**
2 Q. So in this specific case, when would the hypothetical
3 negotiation have taken place?
4 **A. In July 2019 when the '114 patent issued is a good**
5 **way of thinking about the time.**
6 Q. In your understanding, who were the parties at the
7 hypothetical negotiation?
8 **A. Well, in this instance it would be CERT and Midwest.**
9 Q. What CERT entity in particular do you have in mind
10 when you said "CERT"?
11 **A. Well, CERT is actually a complicated group of**
12 **entities. And so I'm thinking that essentially**
13 **representatives or people who are the representatives of the**
14 **CERT operating companies as well as the entities who are the**
15 **refined coal entities, the RCs as I might say.**
16 Q. In doing your analysis in this case did you see any
17 evidence that suggested that CERT had this business
18 structure?
19 **A. Yes, I did.**
20 Q. Would you please turn to tab 1 in your binder which
21 is Plaintiffs' Exhibit Number 762. Have you seen this
22 document before?
23 **A. Yes, I have.**
24 Q. And did you rely on it in forming your opinion in
25 this case?

721

1 **A. I did.**
2 Q. What is this document?
3 **A. This document is a sequence of organization charts**
4 **related to the CERT entities.**
5 MR. PEARSON: Your Honor, I move to admit
6 Plaintiffs' Exhibit Number 762.
7 THE COURT: Any objection?
8 MR. SYKES: We object based on the points raised
9 this morning, Your Honor.
10 MR. PEARSON: Thank you, Your Honor.
11 Mr. Diaz, can we please see the first page of
12 PX762?
13 BY MR. PEARSON:
14 Q. What do we see here, Mr. Green?
15 **A. So what we can see is this document titled the Four**
16 **CERT Principals' Companies, and the very top row shows the**
17 **four CERT principals, individuals. You can see it's**
18 **Mr. Green on one side, Ms. Schaatt, Mr. Green who's here, and**
19 **then you can see that each of them held LLCs, and**
20 **Mr. Green's was called Springhill Management, that's in the**
21 **middle up there, and Ms. Schaatt's was WAS Holdings, and**
22 **then you can see that those entities wind up having**
23 **ownership interests in other LLCs down below that.**
24 MR. PEARSON: Mr. Diaz, may we please see
25 page 12 of this exhibit?

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1 BY MR. PEARSON:
2 Q. Now, having discussed the four principals -- the four
3 CERT principals' companies, Mr. Green, can you please
4 describe what we see on this chart?
5 **A. Sure. What we can see on this organization chart is**
6 **the four CERT principals' companies all have ownership**
7 **interests in certain LLCs that are CERT Operations**
8 **Companies.**
9 **And so you can see CERT Operations II in the**
10 **middle, CERT Operations IV. There's a company called CERT**
11 **Operations RCB down in the lower right.**
12 **These are all the companies that are operating**
13 **the refined coal entities that are actually at the power**
14 **plants.**
15 Q. Mr. Green, did you prepare a demonstrative that shows
16 the jury where the specific defendants in this case fall on
17 the chart?
18 **A. I did.**
19 MR. PEARSON: Mr. Diaz, can we please have
20 Slide 16?
21 BY MR. PEARSON:
22 Q. What do we see here?
23 **A. So what you see here is -- on the bottom row are the**
24 **power plants, so this is where all of the refined coal LLCs**
25 **are operating, and I think we've seen this before.**

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1 **And then you can see up above that on the far**
2 **left it says Refined Coal Defendants. That is the LLC that**
3 **is essentially contracting with the power plant and doing**
4 **the -- and selling the refined coal to the power plant.**
5 **And up above that, you can see which of the**
6 **CERT Operations defendants are the owners of -- excuse me,**
7 **the operators of these refined coal LLCs.**
8 **So CERT Operations IV is operating Springhill**
9 **Resources, LLC. That's on the far left there, and they're**
10 **operating at NRG's Big Cajun II plant.**
11 Q. What does the color coding mean, Mr. Green?
12 **A. Well, the color coding was an attempt that I made to**
13 **be able to relate the CERT Operations defendant with the**
14 **various refined coal defendants.**
15 **You can see there's a number of them that are**
16 **being operated by RCB, LLC sitting in the middle, and those**
17 **are all blue, and the others are yellow, red, and green.**
18 **But it was an attempt to make it so it was easy to see.**
19 Q. Now that we've seen the evidence supporting your
20 opinion that it would be a single negotiation between ME2C
21 and CERT, what would they have talked about or information
22 they would have considered about the hypothetical
23 negotiation?
24 **A. So remember I said there was the statute and then**
25 **there's some case law? Well, this is one of the pieces of**

1 the case law, and this is a list of factors that comes from
 2 an old case involving a company called Georgia-Pacific.
 3 They make plywood and paper and stuff.
 4 But essentially what -- these factors are
 5 essentially are the things that people would talk about at
 6 one of these hypothetical negotiations. It's a list of
 7 facts or evidence that you might consider.
 8 Q. How many of these factors did you consider when you
 9 conducted your analysis in this case?
 10 A. Well, I considered all 15 of them.
 11 Q. What is the most efficient way to get through this
 12 long list of factors for today's purposes?
 13 A. Well, what I did is I cut them up into sort of
 14 they're -- what they really relate to. There's really four
 15 categories of those factors. There's licenses and royalty
 16 rates. There's how the patents have actually been used.
 17 There's some competition and other
 18 business-related factors, and then there's some questions
 19 about the importance of the patented technology.
 20 That's really how these factors break down.
 21 Q. Before we go through all the evidence showing why you
 22 came to the conclusion you came to, can we cut to the chase
 23 and just let you have the opportunity to tell the jury your
 24 final conclusion.
 25 MR. PEARSON: Mr. Diaz, can we please have

1 Slide 50?
 2 THE WITNESS: So my final conclusion is that the
 3 parties would've negotiated a reasonable royalty rate of
 4 \$.65 to a dollar, and we're going to go through the
 5 documents and other things that I considered to get me to
 6 that conclusion.
 7 MR. PEARSON: Mr. Diaz, can we please go back to
 8 Slide 19. Let's start with the first group of
 9 Georgia-Pacific factors related to licenses.
 10 BY MR. PEARSON:
 11 Q. What was your methodology in trying to determine
 12 whether a license you reviewed was similar enough to be
 13 useful for the purposes of a hypothetical negotiation?
 14 A. So there's -- I looked at it from the point of view
 15 of whether or not the technology that was in a license was
 16 similar, whether the parties were similar; in other words,
 17 are we looking at parties that are the same as Midwest
 18 negotiating with the defendant RC LLCs, or was it some other
 19 relationship or some other entity which wasn't the same.
 20 And that makes a big difference from an economic point of
 21 view.
 22 And then I looked at whether the licenses have
 23 similar economic terms. And a lot of times in licenses what
 24 you can see is that there may be other terms, maybe supply
 25 terms. There may be other things that go on between the

1 parties.
 2 So they're not really comparable to what we're
 3 trying to here which is to figure out what a reasonable
 4 royalty would be for the use of patents in this case.
 5 Q. How many of these three types of similarities do you
 6 need to find in order to find a license similar to one that
 7 would come from a hypothetical negotiation?
 8 A. In this instance you need to find all three.
 9 Q. What do we see here, Mr. Green?
 10 A. Well, what you can see here are nine groups of
 11 licenses that I looked at in order to be able to analyze
 12 what would be a reasonable royalty from this hypothetical
 13 negotiation in this case.
 14 MR. PEARSON: Mr. Diaz, could we please have
 15 Slide 30?
 16 BY MR. PEARSON:
 17 Q. I believe this is a summary of your conclusions
 18 regarding all of these licenses; is that fair?
 19 A. Yes, it is.
 20 Q. Let's do our best to go through this as quickly as
 21 possible. It's a lot of information.
 22 Let's start with the three on the bottom. Those
 23 look different. What do the Xs mean?
 24 A. So the three on the bottom are all situations where
 25 the parties are not similar or they're not similar economic

1 terms.
 2 So we've heard about a couple of these licenses
 3 already, the ERC, RLP license, Mr. MacPherson talked about
 4 that as -- so did Mr. Pavlish, and that was the agreement
 5 that was between EERC and Midwest to be able to first
 6 license and then buy the patent.
 7 And that really has nothing to do with the
 8 circumstance we find ourselves in for the hypothetical
 9 negotiation. EERC is a not for profit -- not for profit
 10 entity.
 11 And that exact wording is signing a purchase
 12 transaction. It's not a licensing transaction.
 13 Similarly, we saw some testimony yesterday about
 14 the power plant licenses. Midwest has some licenses with
 15 some power plants, but each one of these has a supply term
 16 in it.
 17 Essentially those licenses were done, as we
 18 heard Mr. MacPherson say, in order to be able to encourage
 19 those companies to buy things from Midwest.
 20 And so those terms are different because of that
 21 in comparison so just taking a license for the use of
 22 patented technology and never having to buy something
 23 because essentially Midwest was thinking they're going to
 24 get some money back from the sales instead of only
 25 technologies.

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1 **And then the bottom one is a license that I**
2 **found by doing my research, and it's for similar types of**
3 **technology for sure, but the parties are related.**
4 **In other words, ADA owned the entity that it was**
5 **licensing to this clinical solution business, so it didn't**
6 **look to me to be arm's length.**
7 Q. Now, since there's some Xs on the bottom three rows,
8 are those licenses comparable or not comparable?
9 A. **They're not comparable. I excluded those from my**
10 **analysis.**
11 Q. Since they're not comparable, do we need to delve
12 into the royalty structure?
13 A. **No.**
14 Q. Let's go back to the first row of your analysis here,
15 the ME2C Alistar agreement. It's in tab 2 of your binder,
16 Mr. Green, if you don't mind flipping there.
17 MR. PEARSON: And, Mr. Diaz, can we please see
18 Plaintiffs' Exhibit Number 763.
19 BY MR. PEARSON:
20 Q. What is this document, Mr. Green?
21 A. **This is a license agreement between Alistar**
22 **Enterprises and Midwest Energy.**
23 Q. This is the same Midwest Energy that's the plaintiff
24 in case?
25 A. **Yes, it is.**

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1 Q. Who is Alistar?
2 A. **Alistar, we talked about this yesterday, was one of**
3 **the CERT RC LLCs. It was an entity that separately settled**
4 **with Midwest related to these patents.**
5 Q. In your opinion, would the parties consider this
6 agreement comparable to the license that would have resulted
7 from the hypothetical negotiation?
8 A. **Yes they would.**
9 MR. PEARSON: Let's turn to section 4.2 of the
10 agreement, Mr. Diaz.
11 BY MR. PEARSON:
12 Q. What were the payment terms of the ME2C Alistar
13 agreement, Mr. Green?
14 A. **The payment terms were \$1 per ton of accused coal**
15 **sold through the applicable damages period for Alistar in**
16 **the lawsuit.**
17 Q. Now, I see it says "in the lawsuit." How does it
18 generally affect payment terms when patent license
19 agreements result from litigation?
20 A. **So patent license terms from a litigation often have**
21 **the effect of what that litigation is. Also you'll notice**
22 **through this agreement, there's no indication that the**
23 **parties concluded the patents were valid and infringed.**
24 Q. And you see the total amount of payment right there
25 is \$107,776. Do you see that?

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1 A. **I do.**
2 Q. And then the highlighted portion, it says \$1 per ton
3 of accused coal sold during the applicable damages period.
4 Do you see that?
5 A. **I do.**
6 Q. Do you know what that means?
7 A. **Yes. It was a very short damages period, I believe**
8 **from September 2020 to January 2021, which was the damages**
9 **period related to Alistar, which is -- which is being**
10 **settled by this agreement.**
11 Q. Yesterday during questioning of Mr. MacPherson, I
12 believe counsel for CERT asked some questions about this
13 agreement and put up a document that showed a \$1.4 million
14 statement in damages.
15 Do you recall that?
16 A. **I think it was 1.4 million tons --**
17 Q. Okay.
18 A. **-- I think in that statement.**
19 Q. Sure. Was that 1.4 million tons -- was that
20 calculated -- you've seen the sales data for Alistar in this
21 lawsuit; right?
22 A. **Yes, I have.**
23 Q. Was the \$1.4 million tons calculated in that
24 statement we showed -- was that the same for the same amount
25 of time period as what is reflected in the applicable damage

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1 damages period in the final Alistar agreement?
2 A. **No. To my understanding, no.**
3 Q. What was different in the final Alistar agreement?
4 A. **The final Alistar agreement is that just for a short**
5 **four-month period of time that I understand was the basis**
6 **for the 107,000 tons that became this \$107,000.**
7 Q. And you see above the \$107,000 it makes reference to
8 an IOLTA account?
9 A. **I do.**
10 Q. What is the purpose of an IOLTA account?
11 A. **That is an account that lawyers keep money in when**
12 **they get it on behalf of their clients.**
13 Q. It's held there temporarily until it can be fairly
14 dispersed to their clients or any other interested parties;
15 right?
16 A. **That's right.**
17 Q. Did you go back with the real --
18 MR. PEARSON: You can take this down, Mr. Diaz.
19 BY MR. PEARSON:
20 Q. Did you go back and check the actual underlying sales
21 data to make sure the \$107,000 reflected in the agreement
22 matched the tonnage for the applicable damages period that
23 was in the agreement?
24 A. **Yes, I did.**
25 Q. What do you think is more important for the jury's

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1 analysis? Should they trust the words of the agreement to
2 say \$1 per ton or should they, you know, focus on
3 calculations done in court about what those numbers might
4 mean?
5 **A. So I think it makes sense to look at what's in the
6 agreement and what the parties said. In other words, we can
7 see in the agreements we're going to talk about, there are
8 specific amounts per ton that have been repeatedly through
9 these licenses, and you can see exactly what the parties
10 intended on a per ton basis and I would use those as a basis
11 for thinking about what a reasonable royalty would be in
12 this case. Otherwise as we can see looking over this one
13 agreement, there's lots of different ways of calculating
14 this and none of them because the agreement doesn't say
15 exactly what the time period is or what exactly the tons
16 were other than in the way that it's done here we would be
17 speculating. So if we look at what's in the agreements,
18 we'll know what the parties were thinking.**
19 Q. Did the ME2C Alistar license cover other patents as
20 well?
21 **A. It did.**
22 Q. Is it your opinion some portion of the royalty paid
23 in the license related to those other patents?
24 **A. Well, no, I think that the royalty is being paid for
25 the use of these patents-in-suit as well as other things,**

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1 **but it doesn't set right out what the price is for the
2 patent for any one patent.**
3 MR. PEARSON: Let's turn back to Slide 30,
4 Mr. Diaz.
5 BY MR. PEARSON:
6 Q. So how did you fill in the row for ME2C and Alistar?
7 **A. You can see it's a running royalty, \$1 per ton and
8 the per ton rate is told us in the agreement a dollar.**
9 Q. And it was similar technology and parties and
10 economic terms?
11 **A. Yes, it was.**
12 Q. All right. Mr. Green, let's move on to the next row.
13 If you could please turn to tab 4 in your binder which is
14 PTX 353. Have you seen this document before?
15 **A. Yes, I have.**
16 Q. Did you rely on it in forming your opinion in this
17 case?
18 **A. Yes, I did.**
19 MR. PEARSON: Your Honor, I move to admit
20 Plaintiffs' Exhibit Number 353.
21 THE COURT: Is there any objection?
22 MR. SYKES: No objection, Your Honor.
23 THE COURT: All right. It's admitted.
24 (Thereupon, Plaintiffs' Exhibit 353 was
25 admitted.)

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1 BY MR. PEARSON:
2 Q. What is this agreement, Mr. Green?
3 **A. This is a license agreement between Chem-Mod and the
4 same Alistar Enterprises we were that just talking about.**
5 Q. Who is Chem-Mod?
6 **A. Chem-Mod is an entity who was providing technology to
7 refined coal entities like the defendants in this case, and
8 the technology they were providing related to what was
9 called the Chem-Mod solution, and what that was a way of
10 being able to modify coal by adding various types of
11 chemicals to it and so to be able to essentially have that
12 coal burn more efficiently.**
13 Q. What did this patent license agreement accomplish?
14 **A. What this did is it licensed Alistar Enterprises to
15 use the Chem-Mod coal modification technology.**
16 Q. Are the Chem-Mod patents and technologies similar to
17 ME2C's patents in this case?
18 **A. The Chem-Mod patents and technology are similar in
19 that they relate to modifying coal in order to have it burn
20 more cleanly.**
21 Q. So would the parties have considered this a
22 comparable license at the hypothetical negotiation?
23 **A. Yes, they would have.**
24 MR. PEARSON: Mr. Diaz, may we please see
25 Section 3.1 of this agreement?

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1 BY MR. PEARSON:
2 Q. What are the payment terms of this agreement,
3 Mr. Green?
4 **A. So the payment terms of this agreement provide that
5 during the first three years of the term of the agreement
6 you might have noticed that the agreement was signed in
7 November of 2009, the royalty for the use of the Chem-Mod
8 coal modification technology was \$0.45 per ton, and then
9 after three years that royalty rate increased to \$0.65 per
10 ton of coal that was actually treated using the Chem-Mod
11 coal modification technology.**
12 Q. So at the time of the hypothetical negotiation in
13 2019, how much was Alistar paying Chem-Mod?
14 **A. They were paying \$0.65 a ton.**
15 Q. Did other CERT-related entities have patent license
16 agreements with Chem-Mod?
17 **A. Yes, they did. They all did.**
18 Q. And you heard the parties talk about an entity called
19 DTE this week. Does that sound familiar?
20 **A. Yes.**
21 Q. Did other DTE refining coal entities have patent
22 license agreements with Chem-Mod?
23 **A. Yes, they did.**
24 Q. And did you recall some discussion of a company
25 called AJG?

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1 A. **Yes.**

2 Q. Did other AJG-related refined coal entities have

3 patent license agreements with Chem-Mod?

4 A. **Yes, they did.**

5 Q. Mr. Green, if you could please turn to Tabs 5 through

6 17 in your binder.

7 A. **Okay.**

8 Q. What are these documents?

9 A. **These are all license agreements related to the use**

10 **of the Chem-Mod technology. The first several of them are**

11 **the licenses between Chem-Mod and the CERT-related refined**

12 **coal entities, and then there is a license agreement after**

13 **that that relates to Arbor Fuels that relates to AJG --**

14 **excuse me -- DTE I'm sorry -- and then there's another**

15 **license agreement related to DTE. And then lastly there are**

16 **two or three agreements in here that relate to AJG.**

17 MR. PEARSON: Your Honor, I move to admit

18 Plaintiffs' Exhibits Number 243, 343, 352, 456, 457, 458,

19 461, 464, 467, 469, 471, 479, and 488.

20 THE COURT: Is there any objection?

21 MR. SYKES: Your Honor, I just read out of order

22 and I looked I can't keep up.

23 THE COURT: Can we -- Mr. Pearson, could I ask

24 you to consult with defense counsel to make sure you're on

25 the same page?

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1 MR. PEARSON: I can move them back in in the

2 order they're in the notebook. I just got them in

3 chronological order.

4 MR. SYKES: Mr. Pearson, that would be helpful.

5 MR. PEARSON: All right. Your Honor, I move to

6 admit into the record the same exhibits in a different

7 order: 243, 461, 467 that's tab 7 in the binder; 469, 471,

8 479, which is Tab 10; 488, 464, 343, 352, 456, which is Tab

9 15, 457.

10 MR. SYKES: Thank you, Mr. Pearson. You're

11 going fast. Let's come back to 352.

12 MR. PEARSON: Okay. Tab 14 is 352, tab 15 is

13 456, tab 16 is 457, tab 17 is 458.

14 THE COURT: Essentially you're moving to admit

15 everything from Tab 5 through Tab 17?

16 MR. PEARSON: Yes, Your Honor.

17 THE COURT: Okay. Mr. Sykes?

18 MR. SYKES: Mr. Pearson, may I just look on your

19 copy of 352? Mine is blank.

20 MR. PEARSON: It's the same 352 we disclosed to

21 you.

22 THE WITNESS: It seems to be missing a few

23 pages.

24 MR. SYKES: Your Honor, no objection.

25 THE COURT: Okay. They're admitted.

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1 (Thereupon, Plaintiffs' Exhibit Numbers 243,

2 343, 352, 456, 457, 458, 461, 464, 467, 469, 471, 479, and

3 488 were admitted.)

4 BY MR. PEARSON:

5 Q. What is the importance of these other long list of

6 Chem-Mod patent license agreements, Mr. Green?

7 A. **So what all that these licenses show us is that there**

8 **had been agreements among entities that were essentially the**

9 **refined coal LLCs to use a technology, the Chem-Mod coal**

10 **modification technology. These are patent licenses in order**

11 **to make refined coal, and what we can see is that they all**

12 **have running royalty terms, in other words, they're paying**

13 **on a dollars per ton or amount per ton of coal that was**

14 **processed, and they're also having a running royalty that**

15 **essentially throughout these agreements is from \$0.50 to**

16 **about \$0.65 throughout all of these agreements.**

17 Q. Do you consider these other Chem-Mod agreements to be

18 comparable licenses?

19 A. **Yes, I do.**

20 MR. PEARSON: Can we have slide 30 again,

21 Mr. Diaz.

22 BY MR. PEARSON:

23 Q. Now, the long list of licenses we just walked

24 through, that's the next three rows on your chart: The

25 Chem-Mod CERT entities, the Chem-Mod DTE entities and

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1 Chem-Mod AJG; is that right?

2 A. **That's true, yes.**

3 Q. And those are the payment terms you were just

4 describing, the \$0.65 and \$0.50; is that fair?

5 A. **That's right.**

6 Q. Let's move on to the -- let's skip a row and we'll

7 come back. Let's talk about Nalco Chem-Mod. Mr. Green, can

8 you explain that license to the jury?

9 A. **Sure.**

10 **So Nalco Chem-Mod license is related to a**

11 **company called Nalco that has some technology related to**

12 **removing mercury from coal stacks, and Chem-Mod wound up**

13 **getting sued by them and they settled.**

14 Q. And I believe that license agreement should be tab 21

15 in your binder. Plaintiffs' Trial Exhibit Number 240, did

16 you rely on this license in forming your opinion in this

17 case?

18 A. **Yes, I did.**

19 MR. PEARSON: Your Honor, I move to admit

20 Plaintiffs' Exhibit Number 240.

21 THE COURT: Any objection?

22 MR. SYKES: No objection, Your Honor.

23 THE COURT: All right. It's admitted.

24 (Thereupon, Plaintiffs' Exhibit Number 240 was

25 admitted.)

<p style="text-align: right;">740</p> <p>1 MR. PEARSON: May we see the agreement, 2 Mr. Diaz? 3 BY MR. PEARSON: 4 Q. Was the technology covered by this license similar to 5 the patents at issue in the hypothetical negotiation? 6 A. Yes, it is. 7 Q. And in this case there was Nalco who owed the patent; 8 is that right? 9 A. That's right. 10 Q. And Chem-Mod was the one that was paying Nalco for 11 Nalco's technologies; is that fair? 12 A. That's right, Chem-Mod and AJG are the parties you 13 can see in highlighting. 14 Q. Are Nalco and Chem-Mod and AJG similar parties to 15 those in the hypothetical negotiation? 16 A. They are in the sense that Nalco has technology and 17 AJG and Chem-Mod are using it and they're using it as it 18 relates to making refined coal and using it for refined coal 19 LLCs that are similar to the ones that are at issue in this 20 case. 21 MR. PEARSON: May we please see section 5 of 22 this agreement? 23 BY MR. PEARSON: 24 Q. What were the payment terms of this agreement, 25 Mr. Green?</p>	<p style="text-align: right;">742</p> <p>1 the challenge if we were to convert it to a running royalty. 2 The challenge is as we can see from looking at the front 3 page there are many parties, many different time frames. I 4 kind of estimated what I really do know, what we all really 5 do know is these parties paid 27 and a half million dollars, 6 and when I try to do the conversion it doesn't give me a big 7 range so I don't think it's particularly helpful. 8 MR. PEARSON: Let's go back to slide 30, 9 Mr. Diaz. 10 BY MR. PEARSON: 11 Q. Since we weren't able to -- well, first of all 12 there's checkmarks. You found this was a similar 13 technology, similar parties and similar economic terms; is 14 that fair? 15 A. That's fair, yes. 16 Q. And then the royalty structure, you put in lump sum; 17 is that right? 18 A. That's right. 19 Q. But since you weren't able to figure out a precise 20 royalty rate per ton, should we just go ahead and fill in a 21 guess here? 22 A. No. No, I just left it blank. 23 Q. Okay. And why do you think that's appropriate? 24 A. Again, there's a lot of parties, there's a lot of 25 time frames in that settlement. It just seems to me that if</p>
<p style="text-align: right;">741</p> <p>1 A. This payment was for a lump sum of \$27,500,000. 2 Q. What's the lump sum payment? 3 A. So a lump sum payment is where the parties agree to a 4 single one-time payment for the use of a technology or to 5 settle a dispute or something of that nature. It's a 6 one-time payment. 7 Q. How does that differ from the running royalty 8 payments you were discussing earlier? 9 A. So the lump sum payment basically means the 10 parties -- whoever is going to -- parties are going to 11 continue to use the technology, they don't have to pay any 12 more. So if you're licensing that technology, you're 13 assuming that the future is sort of included in that 14 agreement and that it may actually include past usage as 15 well, but again, it's not clear. 16 The parties agreed on a single number and you 17 can see throughout this license it doesn't talk about the 18 number of tons it covers. 19 Q. Did you attempt to determine what this payment would 20 have meant if it was converted into a per ton amount? 21 A. I did. 22 Q. And what did you -- what range did you find for a 23 potential per ton amount in doing your analysis? 24 A. So this could have run anywhere from I think a dime 25 to \$0.52 -- or \$0.59 excuse me -- in terms of royalties, but</p>	<p style="text-align: right;">743</p> <p>1 I was trying to come up with a number -- a single number or 2 range of numbers, it was on a per ton basis. 3 It was kind of speculating because we didn't 4 have all the facts. All I really know is that the parties 5 agreed to a \$27 and a half million payment. 6 Q. Thank you, Mr. Green. Let's move on to the next row 7 above that, which is the ME2C AJG DTE agreement. 8 If you could please turn to tab 18 in your 9 binder. 10 MR. PEARSON: And, Mr. Diaz, if we could please 11 see PTX 776, which has previously been admitted. 12 BY MR. PEARSON: 13 Q. And what is this document, Mr. Green? 14 A. So this is an agreement -- this is a settlement and 15 license agreement between Midwest, AJG and DTE. 16 Q. And this is the agreement that we've discussed -- 17 we've heard discussed a couple times earlier in this trial; 18 is that fair? 19 A. Yes. 20 Q. And what did this patent license agreement 21 accomplish? 22 A. What this did is it provided DTE and AJG with 23 licenses to the patents that are in suit in this case as 24 well as other technology that's being held by Midwest. 25 Q. Does this agreement cover the CERT defendants'</p>

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1 actions in using ME2C's technology?
2 **A. No, it does not.**
3 MR. PEARSON: If we could please turn to
4 section 5 of the agreement Mr. Diaz.
5 BY MR. PEARSON:
6 Q. What were the payment terms of this agreement?
7 **A. As we heard yesterday, ME2C -- the defendants, excuse**
8 **me, AJG and DTE who were defendants, agreed to pay**
9 **\$27,500,000 to Midwest.**
10 Q. And again generally, how may it have affected these
11 payment terms -- these patent license agreements --
12 agreement resulted from settled litigation?
13 **A. Well, so in settling litigation, no one acknowledged**
14 **that their -- that the patents were valid and infringed, and**
15 **again it's a litigation settlement, so the parties had other**
16 **motivations in terms of coming up with a royalty.**
17 THE COURT: We'll ask the witness to repeat the
18 answer.
19 THE WITNESS: The tail end of the answer was or
20 what the payment would be.
21 BY MR. PEARSON:
22 Q. If you could please turn to tabs 19 and 20 in your
23 binder. These are Plaintiffs' Trial Exhibits Number 759 and
24 760.
25 Have you seen these documents before?

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1 **A. Yes, I have.**
2 Q. Did you rely on them in conducting your analysis in
3 this case?
4 **A. I did.**
5 MR. PEARSON: Your Honor, may I please publish
6 PTX 759 and 760 to the jury?
7 THE COURT: Are they admitted?
8 MR. PEARSON: They're not yet admitted. I'm not
9 sure need to be admitted. They are on our exhibit lists. I
10 was hoping to show them to the jury.
11 THE COURT: Is there any objection?
12 MR. SYKES: Yes, we object, Your Honor.
13 THE COURT: What's the basis of the objection?
14 MR. SYKES: We believe that it's -- the exhibits
15 are inaccurate -- incomplete, inaccurately applies the
16 tonnage that's subject to the agreement.
17 THE COURT: Mr. Sykes, I'll ask that if you
18 stand when you make objections. I had trouble hearing the
19 objection.
20 MR. SYKES: My apologies, Your Honor. We would
21 object under Rule 403 and 402 as irrelevant and confusing
22 because PTX 759 and 760 don't accurately reflect the tonnage
23 that is subject to the PTX 766 agreement.
24 THE COURT: Mr. Pearson, in response?
25 MR. PEARSON: I don't know what he means,

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1 Your Honor. These exhibits are exhibits that Mr. Green
2 calculated accurately using data provided in this lawsuit.
3 I'm not sure what counsel has in mind, but I
4 believe he can follow up with cross-examination to explain
5 himself.
6 THE COURT: The documents haven't been admitted.
7 I'll sustain the objection as to them being
8 published. Plaintiffs' counsel is free to ask the witness
9 about the documents and ask him to explain what they're
10 being used for.
11 MR. PEARSON: I appreciate your consideration.
12 BY MR. PEARSON:
13 Q. Mr. Green, did you do calculations in this case for
14 this license similar to NALCO to attempt to figure out how
15 much this license would be worth if you translated the lump
16 some to a per ton amount?
17 **A. Yes, I did.**
18 Q. Were those calculation the calculations that are in?
19 Your binder at Plaintiffs' Exhibit 749 and 760?
20 **A. Yes, they are.**
21 Q. And what was the result of the calculations when you
22 attempted to translate the \$27 and a half million into a per
23 ton amount?
24 **A. So the results are a range of royalties from \$0.14 a**
25 **ton to \$0.39 a ton, but the difference is the time periods**

747

1 **and the amount of tons that are related to those**
2 **computations. The \$27 and a half million is the same**
3 **because that's what the parties agreed to in that agreement.**
4 **But the first calculation uses tonnage by --**
5 **from the AJG and DTE defendants for the period from 2013 to**
6 **2021, and then in the second calculation and that's the one**
7 **that results in the \$0.14 many more times.**
8 **And then the second calculation uses a shorter**
9 **period which is from 2019 through 2021 and that results in**
10 **the \$0.39.**
11 Q. Were you able to come to a firm conclusion about the
12 actual per ton royalty rate from ME2C and AJG DTE agreement?
13 **A. No. As you can see if you look at the agreement, it**
14 **doesn't specify what the royalty rate per ton was, and it**
15 **doesn't specify the time period over which the royalties**
16 **were being paid or how much tons are included.**
17 **So when we look at the agreement, it doesn't**
18 **help us very much to figure out a per ton rate, which is the**
19 **type of royalty that would be appropriate coming out of the**
20 **hypothetical negotiation for damages in this case.**
21 Q. The Alistar agreement said how the payment was
22 calculated. It was calculated at \$1 per ton. Do you recall
23 that?
24 **A. I do.**
25 Q. Is there a similar sentence in the ME2C AJG license

748

1 that says how the payment was calculated?

2 **A. No, there's not.**

3 **Q.** Could you please turn to tab 35 in your binder which

4 is Plaintiffs' Trial Exhibit Number 761. What is this

5 document?

6 **A. This is a term sheet that ultimately became the trial**

7 **Exhibit 766 that agreement we were just looking at.**

8 **Q.** Did you rely on this document in conducting your

9 analysis in this case and cite this document repeatedly

10 throughout your supplemental experiment report?

11 **A. I did.**

12 MR. PEARSON: Your Honor, I move to admit

13 Plaintiffs' Trial Exhibit Number 761.

14 THE COURT: Is there any objection?

15 MR. SYKES: Same as this morning, Your Honor.

16 THE COURT: This morning I discussed the

17 issue -- I gave the inclination of my ruling. If there's no

18 further argument in light of that ruling, the document may

19 be admitted.

20 (Thereupon, Plaintiffs' Exhibit Number was

21 admitted.)

22 MR. PEARSON: Can we see 761?

23 BY MR. PEARSON:

24 **Q.** What is this document, Mr. Green?

25 **A. This document as I said is a term sheet that relates**

749

1 **to the agreement that the Exhibit 766 we were just talking**

2 **about, and this just describes shows you the parties and the**

3 **entities that were being discussed at the time that they**

4 **were doing the term sheet.**

5 **Q.** Is a term sheet a thing where parties often come to a

6 binding initial agreement that contains all of the important

7 terms and then later enter into the full complete license

8 agreement; is that fair?

9 **A. Yes. That's what I've seen before.**

10 **Q.** And this term sheet was the initial binding agreement

11 that preceded the full ME2C AJG agreement: Is that fair?

12 **A. That's fair.**

13 **Q.** And this term sheet mentions the concept that

14 Chem-Mod customers and licensees will get to license ME2C's

15 patents; is that fair?

16 **A. It does.**

17 **Q.** Where in this term sheet is there a list of the 134

18 Chem-Mod licensees that we saw on the screen yesterday with

19 Mr. MacPherson when this license agreement was discussed?

20 **A. There isn't one.**

21 **Q.** Well, what does that mean about whether the parties

22 at the time of the license agreement negotiated payment in

23 terms of \$200,000 per Chem-Mod customers?

24 **A. It doesn't appear from looking at this that it had**

25 **anything to do with how the \$27 million was decided. They**

750

1 **looked at the parties, and the parties negotiated for the**

2 **payment that they finally came up with of \$27 and a half**

3 **million.**

4 MR. PEARSON: Can we have slide 30 again,

5 Mr. Diaz?

6 BY MR. PEARSON:

7 **Q.** In view of the uncertainty surrounding how the ME2C

8 AJG payment was calculated and in view of the fact that the

9 license agreement itself does not say, how did you choose to

10 fill in the royalty rate per ton information on your chart?

11 **A. I didn't. I concluded that because we can't tell**

12 **what the royalty rate per ton was, there are so many**

13 **different ways of figuring out what the tonnage was that**

14 **they were applying this agreement to, it wouldn't -- it**

15 **wasn't giving us useful information.**

16 **And so I didn't have a per ton rate that I could**

17 **rely on there.**

18 **Q.** Is it fair to say the top four rows are the licenses

19 you found most useful in conducting your analysis in this

20 case?

21 **A. Yes.**

22 **Q.** Please turn to tab 32 in your binder. Have you seen

23 this document before?

24 **A. Yes.**

25 **Q.** And did you rely on it in forming your opinion in

751

1 this case?

2 **A. I did.**

3 **Q.** This is Plaintiffs' Trial Exhibit 446.

4 MR. PEARSON: And, Your Honor, I move to admit

5 it into the record.

6 THE COURT: Any objection?

7 MR. SYKES: No objection, Your Honor.

8 THE COURT: All right. It's admitted.

9 (Thereupon, Plaintiffs' Exhibit 446 was

10 admitted.)

11 MR. PEARSON: Mr. Diaz, may I please see

12 slide 35.

13 BY MR. PEARSON:

14 **Q.** Now, I believe *Georgia-Pacific* factor 11 is related

15 to defendants' use; is that fair?

16 **A. It is.**

17 **Q.** And you analyzed that in this case, didn't you?

18 **A. I did.**

19 **Q.** What do we see on the screen here?

20 **A. What you see on the screen is a page relating to**

21 **May 2020 of the amounts of refined coal that were made by**

22 **the refined coal entities that are at issue in this case.**

23 **There are some other ones in here you can see, but we've**

24 **highlighted in this chart -- you can see that Limestone**

25 **Coletto Creek, Labadie, and so forth are highlighted.**

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1 **And what we're seeing here are the amount of**
2 **refined coal tons made at those by those refined coal LLCs**
3 **each day in May of 2020.**
4 Q. Did you and your team go through the hard work of
5 analyzing the spreadsheet and tabulating precisely the
6 amount of tons that are associated with each defendant
7 during the damages period in this case?
8 A. **Yes, I did.**
9 Q. Here we are back at the chart of the defendants that
10 you showed earlier. Could you please describe for us the
11 damages start date here on the row that's in yellow?
12 A. **Sure.**
13 **So you can see that there are essentially two**
14 **different damages start dates. One is July 17th, 2019,**
15 **that's the date the first -- the complaint was filed in this**
16 **case, and then there's an agreement related to Senescence**
17 **and Rutledge, and so their start dates for damages purposes**
18 **are September 25th, 2020.**
19 Q. What are we seeing on the second row here?
20 A. **The second row are the end dates for the damages as**
21 **they relate to each of the refined coal LLCs or the**
22 **CERT Operations defendants. And you can see that there are**
23 **a few different dates in here, some of them relate to when**
24 **licenses were granted by Midwest to the power plant owners**
25 **like NRG, and then there are other instances where the power**

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1 **plant stopped using the technology, and there's other where**
2 **there's agreement.**
3 Q. What do we see on the third row here?
4 A. **What you can see here are the accused tons made by**
5 **each of the refined coal defendants of refined coal during**
6 **the relevant damages period for each of the refined coal**
7 **defendants or the CERT Operations defendants.**
8 Q. There's been a lot of talk of a lot of tons of coal
9 for different time periods in this case so far. I think
10 it's important to be clear. You only believe damages should
11 be assessed for refined coal sold by a defendant during the
12 damages period when used with activated carbon; is that
13 fair?
14 A. **That's right.**
15 Q. And defendants contended that for the overall accused
16 coal they sold during the damages period, you needed do a
17 reduction because sometimes may might not have used
18 activated carbon. Sometimes, like Mr. Whitney said, the
19 activated carbon nozzles might be turned off for a couple
20 hours for cleanings. Do you remember that?
21 A. **Yes, I do.**
22 Q. And despite their proximity to power plants and their
23 close relationship to the customers, defendants were unable
24 to find out information related to how often the power
25 plants actually did not use activated carbon and they didn't

754

1 provide that information to you, did they?
2 A. **I didn't get that information from them, no.**
3 Q. Did you get it at all?
4 A. **I did not.**
5 Q. So how did you go about addressing defendants'
6 concern that sometimes activated carbon might be turned off
7 and so a reduction in the total amount of accused tons is
8 appropriate?
9 A. **So there's some discussion of that in Mr. O'Keefe's**
10 **report, and so what I did is I made some reductions based on**
11 **that information to the amounts that were produced, in other**
12 **words, what we just saw in that spreadsheet that I showed**
13 **you. So these numbers that are at the bottom of this chart**
14 **here reflect that deduction for time that activated carbon**
15 **may not have been used in those plants.**
16 Q. So these numbers are post reduction. These are the
17 accurate accused tons that you believe is appropriate to
18 assess a per ton amount on?
19 A. **That's right.**
20 Q. If you could please turn to tab 33 in your binder.
21 Sorry, before we get into tab 33, how much would
22 this accused tonnage be reduced by if the jury found under
23 the '517 patent?
24 A. **It would be reduced by about a third.**
25 Q. All right. Let's -- thank you, Mr. Green.

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1 Let's turn to tab 33 which is Plaintiffs' Trial
2 Exhibit Number 753. Did you create this document in
3 conducting your analysis in this case?
4 A. **Yes, I did.**
5 MR. PEARSON: Your Honor, I move to admit
6 Plaintiffs' Trial Exhibit Number 753.
7 THE COURT: Any objection?
8 MR. SYKES: No objection, Your Honor.
9 THE COURT: All right. It's admitted.
10 (Thereupon, Plaintiffs' Exhibit 753 was
11 admitted.)
12 BY MR. PEARSON:
13 Q. There's a lot of numbers up there, Mr. Green. If the
14 jury wants to double-check their notes or any other way
15 consult with your calculations in jury deliberations, what
16 should they do if they want to see this information?
17 A. **So I would turn to this exhibit which essentially**
18 **summarizes that whole bottom row by plant of the amount of**
19 **accused tons that were made by each of the refined coal LLCs**
20 **in this matter.**
21 **So you'll have this document to be able to refer**
22 **to, but these are the totals. This gives you the total**
23 **57,082,006 tons broken down by refined coal LLC defendant**
24 **and you can see what plant it relates to.**
25 Q. And that was Plaintiffs' Trial Exhibit 753; is that

756

1 correct?

2 **A. That's right.**

3 Q. Did you review whether there are any acceptable

4 non-infringing alternatives in this case?

5 **A. I did.**

6 Q. And very briefly what did you find?

7 **A. I found that there weren't any, either because they**

8 **were very expensive, they would result in a lot of capital**

9 **needing to be put in place or they just simply didn't do the**

10 **same type of thing that the technology in this case does.**

11 MR. PEARSON: Mr. Diaz, may we have slide 4.

12 BY MR. PEARSON:

13 Q. At a high level is it fair to say that the rest of

14 your *Georgia-Pacific* factor analysis can be summed up with

15 how you addressed the qualitative factors of your analysis?

16 **A. Yes.**

17 Q. Could you briefly describe how you considered the

18 qualitative factors in this case or how the jury should

19 think about whether to end up on a lower end of the range or

20 higher end of the range per ton?

21 **A. So just to sort of review, we're thinking about this**

22 **negotiation and most of us when we go into a negotiation,**

23 **we're thinking about renting an apartment, we have an idea**

24 **about how much we want to pay.**

25 **So the licenses that we were just talking about,**

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1 **the ones that go from \$0.50 to about a dollar, that gives us**

2 **a quantitative starting place. This is what people actually**

3 **paid for the use of comparable technology or even this**

4 **technology, technology related to this case. Then what we**

5 **need to think about is while in the negotiation would other**

6 **factors make us go higher or lower off of the quantitative**

7 **factors. And so the other *Georgia-Pacific* factors that we**

8 **haven't talked about in detail give us some indication**

9 **about, you know, how the parties might think about is it**

10 **higher, is it lower, where should we come out.**

11 **So one of the things to think about is the**

12 **timing. We saw in the earlier -- in the licenses for**

13 **Chem-Mod they had two royalty rates, one of them is an**

14 **earlier royalty rate, one is later. And that's what they're**

15 **telling us is later on in the process later in time the**

16 **technology seems to be getting -- to have an increase in**

17 **value and the parties are acknowledging that in that**

18 **license.**

19 **Also, in this case when we're thinking about**

20 **this hypothetical negotiation, we're thinking about validity**

21 **and infringement. That isn't something that's actually is**

22 **going to be decided, and that's not part of any of the**

23 **licenses, no one acknowledged that, and that tends to**

24 **increase the royalty rates.**

25 **Also, the parties in some respects are**

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1 **competing. The fact that Chem-Mod is working with the five**

2 **entities is essentially keeping Midwest, the plaintiff here,**

3 **from being able to make sales to those entities. So that**

4 **tends to also make it so that Midwest wouldn't want to give**

5 **them a low license.**

6 **And then lastly, there's just really not many**

7 **alternatives that are as effective or cost efficient as**

8 **using the technology in this case. So that would tend to**

9 **increase the royalty rates as well.**

10 Q. Mr. Green, could you please remind the jury of your

11 ultimate conclusion in this case, which is the result of

12 your consideration of all the information including both the

13 quantitative and qualitative factors?

14 **A. So as we said at the beginning and it was suggested,**

15 **there should a royalty rate of 65 cents to a dollar. That's**

16 **my opinion.**

17 Q. Mr. Green, would you please finally turn to tab 34 in

18 your binder, which is Plaintiffs' Trial Exhibit 754. Is

19 this a document that you created?

20 **A. Yes, it is.**

21 MR. PEARSON: Your Honor, I move to admit

22 Plaintiffs' Trial Exhibit Number 754.

23 THE COURT: Any objection?

24 MR. SYKES: No objection, Your Honor.

25 THE COURT: All right. It's admitted.

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1 (Thereupon, Plaintiffs' Exhibit Number 754 was

2 admitted.)

3 MR. PEARSON: Mr. Diaz, could we please see it?

4 Could you zoom in on the top part, please.

5 BY MR. PEARSON:

6 Q. Mr. Green, are these your damages calculations in

7 this case?

8 **A. Yes, it is.**

9 Q. And right here in this column this is the tonnage

10 that we just saw in Exhibit 753; is that right?

11 **A. That's right.**

12 Q. And then this column, the \$0.65 cents is what happens

13 if you multiply the tonnage on any row by \$0.65; is that

14 fair?

15 **A. That's right.**

16 Q. And the final column is what happens if you multiply

17 the tonnage times your opinion of \$1 rate; is that fair?

18 **A. That's fair.**

19 Q. On the left you see the names of the eight refined

20 coal entities; is that fair?

21 **A. That's right.**

22 Q. On the bottom down here you have the CERT Operations

23 entities; is their fair?

24 **A. Yes.**

25 Q. And then you see here it says: Jointly and severally

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1 liable with Marquis.
 2 Right?
 3 **A. Right.**
 4 **Q.** This is sort of like the color coding; right? RCB,
 5 the Refined Coal LLCs that RCB operated were Senescence,
 6 Bascobert, Larkwood, Rutledge and Cottbus; is that fair?
 7 **A. That's fair.**
 8 **Q.** And so to get the tonnage on the bottom row for RCB,
 9 you simply added up the tonnage for these five entities; is
 10 that fair?
 11 **A. That's right.**
 12 **Q.** Is that an accurate description of how the math works
 13 on Plaintiffs' Trial Exhibit Number 754?
 14 **A. Yes, it is.**
 15 **Q.** And so, again, if the jury would like to consult with
 16 your math or double-check it in any way, all they have to do
 17 during their deliberations is consult with Plaintiffs' Trial
 18 Exhibit Number 754; is that fair?
 19 **A. That's right.**
 20 **Q.** And if the numbers were considered at a high level
 21 overall in the aggregate --
 22 MR. PEARSON: Could we please have slide number
 23 45, Mr. Diaz?
 24 BY MR. PEARSON:
 25 **Q.** -- what are the results of your conclusions?

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1 **A. So if we use the \$0.65 per ton at over 57,082,006**
 2 **tons, the damages would be \$37,103,304 or if we use the**
 3 **dollar per ton the damages would be \$57,082,006.**
 4 MR. PEARSON: Thank you, Mr. Green. I
 5 appreciate your time and attention today.
 6 I pass the witness, Your Honor.
 7 THE COURT: Thank you, Mr. Pearson. I'll call
 8 on the defendants for cross-examination.
 9 MR. SYKES: Thank you, Your Honor. May we
 10 proceed, Your Honor.
 11 THE COURT: You may, Mr. Sykes.
 12 CROSS-EXAMINATION
 13 BY MR. SYKES:
 14 **Q.** Good afternoon, Mr. Green.
 15 **A. Good afternoon.**
 16 **Q.** I just want to cover just a bit about what you're
 17 here for and your area versus like Mr. O'Keefe's area.
 18 You're what we call a damages expert?
 19 **A. I am.**
 20 **Q.** And I think as you testified to your background is
 21 finance, accounting, evaluation of intellectual property.
 22 That's generally what you do?
 23 **A. Generally, yes.**
 24 **Q.** So you're not a technical expert?
 25 **A. That's fair, but I have to get an understanding of**

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1 **the technology to do what I do.**
 2 **Q.** You try to understand and get a handle on the
 3 technology, but you're not here to offer or pretend to offer
 4 any technical opinions, are you?
 5 **A. Not as they relate to infringement or validity, but**
 6 **certainly as they relate to damages.**
 7 **Q.** And I don't mean this in any way to be derogatory in
 8 any way, but you're not qualified or you're not competent to
 9 be testifying as an expert witness giving opinions on
 10 technology issues, mercury control and the like?
 11 **A. I think that's fair, yes.**
 12 **Q.** So in your role as a damages expert, you rely on the
 13 technical expert in the case for any technical opinions you
 14 may need to look to for comparability technology,
 15 comparability, things like that?
 16 **A. Sure, and how the technology works, things like that.**
 17 **Q.** And in this case you relied on Mr. O'Keefe for that
 18 technical basis; fair?
 19 **A. In general, yeah.**
 20 **Q.** In particular you relied on Mr. O'Keefe for the
 21 opinion that the patents and the technology in the Chem-Mod
 22 -- subject to the Chem-Mod license agreements we reviewed
 23 and the patents and the technology and the ALCO license that
 24 was referenced, those are technically comparable to ME2C's
 25 patents in this case; fair?

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1 **A. Yes.**
 2 **Q.** And, in fact, you didn't rely upon the opinions of
 3 anyone other than Mr. O'Keefe about the Chem-Mod and Nalco
 4 technology for the comparability aspect in your opinions?
 5 **A. Right. I spoke with Mr. O'Keefe about those patents**
 6 **and what they covered and so sure.**
 7 **Q.** And just to be clear at the time you gave your
 8 opinions in this report, we've heard -- we've seen this
 9 week -- you sat in this week and watched the testimony;
 10 right?
 11 **A. I have.**
 12 **Q.** And you've seen references to the EERC Section 45
 13 certification reports that have been presented from time to
 14 time?
 15 **A. I have.**
 16 **Q.** And at the time you gave your report, you hadn't
 17 reviewed or seen any of these EERC section 45
 18 certifications, had you?
 19 **A. I don't think so, no.**
 20 **Q.** And regarding your conversation with Mr. O'Keefe,
 21 when was that?
 22 **A. So I spoke with Mr. O'Keefe before issuing my first**
 23 **report in this matter which was in October of 2022.**
 24 **Q.** And do you remember about how long before your report
 25 you spoke to him?

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1 **A. My recollection was there were a couple of**
2 **conversations, so in the weeks leading up to the issuance of**
3 **my report.**
4 **Q.** In person or over the telephone?
5 **A. Over the phone.**
6 **Q.** And you didn't talk to Mr. O'Keefe about the Chem-Mod
7 patents with respect to NOx, did you, reduction of nitrous
8 oxide emissions?
9 **A. I wouldn't say it that way, but, I mean -- because I**
10 **understood what the Chem-Mod technology was about, but I**
11 **don't think we spoke about it other than thinking that we're**
12 **talking about mercury reduction in this case.**
13 **Q.** Yeah. And just to be clear, you've given a
14 deposition or two in this case?
15 **A. I have, two.**
16 **Q.** And you -- you testified, didn't you, that in your
17 conversations with Mr. O'Keefe, we didn't talk about the
18 Nalco patents with respect to NOx: Is that fair?
19 **A. In general, that's true, yes.**
20 **Q.** And Mr. O'Keefe, he didn't provide you technical
21 opinions about the reduction of nitrous oxide or NOx
22 emissions regarding the Nalco patents did he?
23 **A. We were talking about the similarity between the**
24 **Chem-Mod technology and its mercury reduction capabilities**
25 **and the patents that are in this case.**

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1 **Q.** And your understanding is that ME2C technology is
2 fundamentally focused on the removal of the mercury?
3 **A. Yes.**
4 **Q.** And isn't it true that at the time you gave your
5 opinions, you testified it was your understanding that NOx
6 could be removed by running different temperatures of the
7 boiler, and it wasn't a chemical issue, a chemical added to
8 the coal?
9 **A. I don't recall saying that, but that's possible,**
10 **sure.**
11 **Q.** So do you remember giving a deposition in the case as
12 we discovered?
13 **A. Yeah.**
14 **Q.** Let's look at -- I think you have your binders.
15 Let's look at page 75, beginning at line 14.
16 "Question: You have no reason to think that
17 ME2C's technology enables NOx removal; correct?
18 "Answer: It's my understanding that the ME2C
19 technology is fundamentally focused on the removal of
20 mercury, and the removal of NOx can be done in a variety of
21 different ways.
22 "Question: And among the variety of different
23 ways that NOx can be removed are methods that are not
24 patented by ME2C; correct?
25 "Yeah. My understanding is they could be

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1 removed by simply running different temperatures of the
2 boiler and so forth. It's not a chemical issue."
3 Did I read that accurately?
4 **A. You did. You said boiler. I just heard what you**
5 **said for the first time. You said "boiler."**
6 **Q.** Now, there's a parlance in this case of the furnace
7 people and boiler people, and I think sometimes we talk past
8 each other, but I think in the trade they call them boilers
9 rather than furnaces.
10 At any rate, so your understanding I think as
11 you testified before is you believe that reduction of NOx is
12 more -- was more of a question of how the power plant
13 operator operated its plant?
14 **A. So again I'm not the technical expert. I spoke with**
15 **Mr. O'Keefe about what the patents in this case do**
16 **generally, and I also got an understanding of what**
17 **Chem-Mod's technology did generally, and your question was**
18 **how else could they do it, not chemically, I think, so I was**
19 **just explaining what I understood.**
20 **Q.** Well, your understanding at the time you gave your
21 expert report was that Chem-Mod's technology -- it was
22 MerSorb and S-Sorb and that was -- excuse me. The Chem-Mod
23 technology chemicals, MerSorb and S-Sorb, were used to
24 reduce mercury and to reduce sulfur; correct?
25 **A. Right.**

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1 **Q.** And as you understood it, Chem-Mod's technology was
2 used to reduce either mercury or sulfur; correct?
3 **A. The combined technologies would be used to reduce the**
4 **both of them, but MerSorb was intended to reduce mercury.**
5 **Q.** And you believe that S-Sorb was intended to reduce
6 sulfur; right?
7 **A. At the time I gave my report, I knew that S-Sorb was**
8 **used to remove something other than mercury.**
9 **Q.** Let's again -- let's take a look at page 76 of your
10 deposition beginning at line 1. Defendants in this case...
11 "Question the defendants in this case met the
12 NOx requirements for meeting Section 45 emission standards
13 by using Chem-Mod's technology; correct?
14 "Answer: To my knowledge they had a license to
15 use Chem-Mod's technology. Chem-Mod's technology was
16 MerSorb and S-Sorb so mercury and sulfur, and again it's my
17 understanding that the removal of NOx was more a question
18 how you operated the plant."
19 Do you see that?
20 **A. I do.**
21 **Q.** And with respect to the refined coal companies, you
22 testified that it was your opinion that it was the mercury
23 and sulfur reduction, that that technology was what was of
24 value to the Refined Coal LLCs like the CERT entities in
25 this case; correct?

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1 **A. So I mentioned that it was sulfur -- in order to be**
2 **able to get the Section 45 tax credits, my understanding is**
3 **that you had to reduce mercury by 40 percent by one of**
4 **either NOx or sulfur to be able to get the credits.**
5 **Q.** And what you testified to was that the technology
6 that was of value to the refined coal companies was the
7 reduction of mercury and sulfur. You weren't focused on
8 NOx, were you?
9 I see you reading your deposition. Just to
10 clarify, page 54, line 15:
11 "Question: Are all patents that reduce mercury
12 emissions in coal-fired power plants of equal value at a
13 given point of time?
14 "Answer: So the intention of the patents, the
15 "083 or Chem-Mod's technology as well as the ME2C technology
16 is to reduce or remove mercury or sulfur in the case of
17 S-Sorb, and so those are of value to the technology -- the
18 technology is of value to the licensees in this case, the
19 Refined Coal LLCs. I haven't seen anything that would
20 suggest there's any reason to believe there's a big
21 difference between ME2C's technology or that of Chem-Mod."
22 Did I read that correctly?
23 **A. You did.**
24 **Q.** And then in your direct today, the big stack of
25 exhibits that Mr. Pearson went through and with a little

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1 fumbling by me admitted them in a block those were Chem-Mod
2 licenses; right?
3 **A. That's right.**
4 **Q.** And they were Chem-Mod licenses to a number of
5 refined coal companies?
6 **A. That's right.**
7 **Q.** And with respect to those Chem-Mod license
8 agreements, your opinion at the time you testified and gave
9 your report was that the royalty rates charged by Chem-Mod
10 had nothing to do with the NOx reduction; right?
11 **A. My understanding is that the Chem-Mod licenses**
12 **are for -- the royalties that are being charged are for the**
13 **use of the technology, period, whatever the technology was**
14 **doing.**
15 **Q.** Okay. Well, let's -- again let's revisit your
16 deposition, and this time let's flip over to page 82 and the
17 beginning of a question.
18 "As you sit here today you're not aware of
19 whether the defendants refined coal products qualify for tax
20 credits because the coal was sufficiently treated or whether
21 they qualified for the tax credits because the firing
22 process for the coal at the customer plants was adjusted in
23 some way?
24 "Answer: I wouldn't say it that way. I would
25 say that it's my understanding that if you're burning PRB

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1 coal, you wind up having a low sulfur content coal. And so
2 what's left is the potential for NOx emissions as well as a
3 reaction between Nox emissions and mercury.
4 "So what we know is that the shift in reduction
5 of NOx is one aspect of the qualifying for the Section 45
6 tax credit, but the other part of it is the use of the
7 technology that's covered by the patent here in suit and
8 that owe can see the royalty rates that were being charged
9 by Chem-Mod for the use of its technology had nothing to do
10 with the NOx reduction either. So the royalty rates make
11 sense if we're just thinking about it in terms of mercury
12 reduction."
13 That was your testimony?
14 **A. That's right.**
15 **Q.** And I think you've heard a lot of discussion about
16 the Section 45 program and the use of the CERT companies
17 with the EERC test reports and the measuring of NOx
18 emissions and NOx reduction; right?
19 **A. That's right.**
20 **Q.** 20 percent reduction of NOx was what the refined coal
21 companies were focused on to get their tax credits in
22 addition to the 40 percent reduction of mercury under the
23 law fair?
24 **A. Right, or it would be a reduction in sulfur dioxide.**
25 **Q.** The way Section 45 was set up was up was you could

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1 do -- you could do mercury or sulfur, but you also had to do
2 NOx; right?
3 **A. Correct.**
4 **Q.** Okay. So NOx was essential to getting the tax credit
5 wasn't it?
6 **A. NOx was part of it, yes.**
7 **Q.** Without NOx -- without a 20 percent reduction in NOx,
8 you wouldn't get any tax credit, if you just reduced
9 mercury?
10 **A. I think that's correct.**
11 **Q.** So we -- I'm going to shift gears. I'm going to
12 shift over to the Alistar agreement. So that's PTX 763.
13 Mr. Green, in this case you provided an opening
14 and reply report in which you provided your opinions on
15 damages for the Alistar Company in this case, and you swore
16 those reports were true and correct in a declaration you
17 submitted to the Court; fair?
18 **A. I think so, yes.**
19 **Q.** And I noted that a schedule in your binder today --
20 your direct examination binder, PTX 661, it didn't actually
21 show your Alistar calculations. I don't recall if that was
22 put on the screen.
23 Let's take a look in your cross-examination
24 binder, we're all getting good with our binders, at PTX 641,
25 642, and 646.

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1 The binders -- the tab match the numbers it
2 looks like the PTX tab -- well, excuse me. They're not -- I
3 think they're numerically ranked.
4 Have you found PTX 641, 642, and 646?
5 **A. I found them, yes.**
6 **Q.** And you recognize those exhibits as your very own --
7 as your exhibits to your reply report on damages for the
8 defendants in this case including Alistar; correct?
9 **A. Yes.**
10 MR. SYKES: Move to admit PTX 641, 642 and 646.
11 THE COURT: Is there objection?
12 MR. PEARSON: Yes, there is, Your Honor. I
13 don't think we need to admit tonnage calculations for
14 defendants that are no longer in this case. I prefer to
15 have a clean verdict form.
16 And despite the fact that counsel insists on
17 showing the jury consistently irrelevant amounts of tonnage,
18 I'd prefer to keep the record clean and not admit the
19 calculations which are not his current damages calculations
20 which were admitted as PTX 754.
21 THE COURT: Let me talk to counsel at sidebar.
22 (Thereupon, a discussion was held at sidebar.)
23 THE COURT: First, can you tell me again what
24 exhibits we're speaking about?
25 MR. SYKES: 641, 642, 646.

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1 THE COURT: So PTX 641, 642 and 646, okay. So
2 these are documents that were attached to Mr. Green's reply
3 expert report.
4 MR. SYKES: Yes, Your Honor.
5 THE COURT: And the documents, what do they
6 demonstrate?
7 MR. SYKES: The documents demonstrate his
8 calculation of tonnage for Alistar during the lawsuit, and
9 so it's a point of contention between the parties, is the
10 amount of tonnage of coal subject to the Alistar agreement
11 because it's a piece of their damages case and these are --
12 THE COURT: That's the part that both sides have
13 talked about so far, the whether there Alistar license --
14 exactly. I was saying that that's the point that both sides
15 have talked about and asked witnesses about, exactly what
16 the Alistar agreement represents in terms of tonnage, et
17 cetera. I see that.
18 MR. SYKES: And Mr. MacPherson made a very loud
19 proclamation yesterday twice during his direct testimony
20 that Alistar paid \$1 per ton for every ton of coal that they
21 burned since the filing of this lawsuit. And this agreement
22 shows Mr. Green's own calculations of the number of tons
23 that Alistar had burned, so it's highly relevant.
24 THE COURT: Okay. Do I have it right that we're
25 just talking about this exhibit so far? That's why you're

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1 using it?
2 MR. SYKES: That one shows the tonnage. The
3 next one shows this is the damages. It will be 1.4 million
4 based on that.
5 THE COURT: It's again related to the Alistar
6 issue?
7 MR. SYKES: Yes, Your Honor.
8 THE COURT: And similarly for the third
9 document?
10 MR. SYKES: And so the third document shows the
11 dates of the period. You heard a lot of discussion about
12 the applicable damages period in the direct testimony of
13 Mr. Green, and he testified repeatedly that the 107,000 tons
14 was the amount of tonnage during the applicable damages
15 period, and this shows his own calculation of the applicable
16 damages period for CERT -- I mean for CERT Alistar. And the
17 testimony we heard on direct was that it was a quote, "very
18 short damages period" September to January or something, and
19 this shows that he previously calculated that exact same
20 damages period to be much longer.
21 THE COURT: I think I understand the reason why
22 you're using the document. What you want to question him
23 about relates to the Alistar issue, the Alistar licenses are
24 we correctly calculating and thinking about how many tons of
25 coal were used to generate the license.

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1 Mr. Pearson, my guess is you don't have a
2 problem with that but maybe your objection is that there's a
3 lot of other stuff in the documents. Is that the reason for
4 your objection?
5 MR. PEARSON: I object to the admission only of
6 the exhibits. I don't object to the line of questioning
7 which I think makes sense and I understand, and I think it's
8 fair. I just think on the exhibits themselves are a lot of
9 other extraneous information that could be confusing under
10 403 to the jury, and I don't want prior damages calculations
11 that have later been supplemented to be put into the record
12 and the jury room and they're doing their own math. I want
13 a clean record based on what we're asking for and them doing
14 their own math. We don't know what it is.
15 THE COURT: Mr. Sykes, my thought is there is
16 something to the 403 argument because there's a lot of other
17 stuff in these docs. You can, if your purpose is to review
18 the docs with the witness and talk about them and get the
19 information you're looking for without having the evidence
20 shown.
21 MR. SYKES: These are Mr. Green's own opinions
22 that he relied on and he gave on Alistar. He was sitting on
23 that stand giving a completely different opinion than what
24 he gave.
25 THE COURT: There's no question you should be

<p style="text-align: center;">776</p> <p>1 able to examine him and go through all the information he 2 said or didn't say or wrote or didn't write with regard to 3 Alistar. The only issue is these documents have lots of 4 other numbers about lots of other entities that aren't 5 related to reasons why you're asking the questions. Could 6 you speak to that? 7 MR. SYKES: Yes, Your Honor. All of the other 8 numbers on these pages are directly relevant to PTX 766 9 which is the DTE Gallagher agreement that he testified about 10 on opening. So those are the entities that he says are 11 subject to that agreement and there's a whole -- so it's 12 independent. The rest of the figures are infinitely 13 relevant to 766. 14 THE COURT: I don't want to keep the jury 15 waiting. What I'll say is for now I'll sustain the 16 objection on 403 grounds because at least with regard to the 17 questions at issue and how I understand they're going to be 18 used, it's a very small portion of this document that is 19 relevant. There's a lot of other information, but to the 20 extent that there's an argument later that other material in 21 here may be relevant to other aspects of Mr. Green's 22 testimony, we can address that issue at the time. 23 MR. DORSNEY: Would the Court admit them 24 conditionally given the fact that they're needed for the 25 later exhibit that wants to be admitted and foundational</p>	<p style="text-align: center;">778</p> <p>1 THE COURT: For now what we're dealing with is 2 just the limited redacted exhibit we're talking about. 3 MR. SYKES: Could we just in terms of the 4 witness, he'd look at these in his binder. He's very 5 familiar with these. These are his reports and then just 6 when we move to admit them and they're admitted and 7 displayed on the screen to the jury, it's all redacted 8 except for the one line. So we don't have to generate a 9 hard copy redacted version in the next 15 minutes, can we 10 just redact an electronic display for the jury? 11 THE COURT: Any objection? 12 MR. PEARSON: No. 13 THE COURT: That's fine. 14 (The discussion at sidebar ended.) 15 THE COURT: Ladies and gentlemen, we have to 16 deal with a legal issue and it's getting close to 2:45, so I 17 figured why don't we go ahead and we need to do a little bit 18 of work on something, so why don't we go ahead and take our 19 afternoon break. And with that we'll have the jury led out 20 for their break. 21 (The jury exited the courtroom.) 22 THE COURT: It's 2:38 now. Let's come back at 23 2:53. The Court will stand in recess. 24 (A recess was taken, after which the following 25 proceedings were had:)</p>
<p style="text-align: center;">777</p> <p>1 material for that exhibit or can we remove it at that time? 2 MR. SYKES: Could we make a redacted version for 3 this purpose? 4 THE COURT: You certainly could produce a 5 redacted version of this solely relating to the Alistar line 6 of defendants. That wouldn't be objected to. Is that 7 something you could do? 8 MR. SYKES: We could work with our tech guy and 9 do that. 10 THE COURT: I guess we could take our afternoon 11 break now. Do you think you could do it in that period of 12 time? 13 MR. PEARSON: I apologize, Your Honor, just for 14 the record. 15 THE COURT: The only thing we're talking about 16 right now is the last suggestion, they would redact the 17 document only to include the Alistar lineup. 18 MR. PEARSON: No objection to that. 19 THE COURT: As to that, the objection is 20 withdrawn for the purpose the parties are entering the 21 exhibit. We'll take our break now and work on getting the 22 exhibits and move forward. 23 MR. DORSNEY: Just briefly, we're not the 24 precluded from removing from what we talk about the later 25 exhibit that deals with the numbers?</p>	<p style="text-align: center;">779</p> <p>1 (The jury entered the courtroom.) 2 THE COURT: We'll continue with defendants' 3 cross-examination. 4 CROSS-EXAMINATION 5 BY MR. SYKES: 6 Q. Mr. Green, are you ready? 7 A. Yes, sir. 8 MR. SYKES: Pursuant to our discussion with the 9 Court, defendants move to admit a redacted version -- 10 electronically redacted version for the publication to the 11 jury of PTX 641, PTX 642, PTX 646 which as we discussed 12 before the break are exhibits to the reply reports you 13 previously had in the case with the preservation, if I 14 understood Your Honor correctly, that we were able to place 15 out foundation and for the remainder of the document and the 16 Court found it otherwise admissible, we could move for that 17 at this time. 18 THE COURT: So with regard to the request to 19 admit, the now redacted versions of these exhibits I 20 understand there will be no objections to that. So I'll 21 order that they be admitted. To the extent there's further 22 dispute about a difference with the fuller version, we can 23 take that up. 24 MR. SYKES: Thank you, Mr. Brown. 25 BY MR. SYKES:</p>

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1 Q. You can see the redacted version of PTX 641. So
 2 referring to this, Mr. Green, this is an exhibit to your
 3 rely report in the case in which you presented as it's
 4 titled Adjusted Tonnage Produced Per Plant During the
 5 Damages Time Frame. Do you see that?
 6 A. **Yes.**
 7 Q. And in this particular line item is for the Alistar
 8 entity that we've been talking about; correct?
 9 A. **Yes, it is.**
 10 Q. And the tonnage that you computed it looks like in
 11 the initial report, there was one number and I think as you
 12 testified working with all these tonnages there's always
 13 rounding errors and I think maybe you adjusted a few percent
 14 down.
 15 So in your reply report you came up with the
 16 final tonnage number of 1,424,924 tons for the Alistar
 17 tonnage during the damages time frame; right?
 18 A. **That's right.**
 19 Q. And let's just flip over to PTX 642. And for -- so
 20 this is the companion schedule in which you've taken your
 21 adjusted tonnage per plant from the previous and now you --
 22 and you have that laid out as the royalty base which for
 23 Alistar was 1.4 million tons for either 2013 and 2019 and
 24 then you have your royalties at the top, your rates of
 25 looking at the 2019 period you have your \$0.65 to \$1 to have

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1 our tons here, and we have our rates and then we -- easy
 2 math even a lawyer can do -- 1.424924 tons results in about
 3 \$1.4 million as at \$1 a ton; right?
 4 A. **That's right.**
 5 Q. And then let's take a look at PTX 646. And here is
 6 the damages period.
 7 MR. SYKES: So, Mr. Brown, if we could look at
 8 just the -- I don't know.
 9 BY MR. SYKES:
 10 Q. The very top of the chart is entitled "Damages
 11 Period" for the '114 patent; correct?
 12 A. **That's right.**
 13 Q. And the '114 patent is the same '114 patent we're
 14 here today about; this is the very same lawsuit?
 15 A. **That's right.**
 16 Q. And so you have the damages period in your initial
 17 report as July 17th, 2019, to January 5th, 2021, and then
 18 there's a response and a reference to a Lawton report --
 19 we'll get to that in a moment -- that the start date should
 20 actually be September 25th, 2020, with the same end date,
 21 and then here's your reply report column July 17, 2019, with
 22 an end date of July 5th, 2021. Do you see that?
 23 A. **I do.**
 24 Q. And so you had -- so you had calculated the damages
 25 period for the '114 patent in both your initial report and

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1 your reply report to run from the filing date of the lawsuit
 2 July 17, 2019, all the way to January 5th, 2021; correct?
 3 A. **In both cases, yes.**
 4 Q. And the January 5th, 2021 date, it cut off there
 5 because that was the date of the NRG license agreement, and
 6 that was the power plant that Alistar was supplying to;
 7 right?
 8 A. **That's right.**
 9 Q. And the NRG license agreement is DTX 21. It's at the
 10 front of your binder. We don't have to look at it with the
 11 jury right now.
 12 A. **DTX 21 in the binder.**
 13 Q. We've been talking about those exhibits. All right.
 14 So in -- in your opening and your reply reports,
 15 you calculated in your report, which was submitted under
 16 oath, that all the coal burned by Alistar since ME2C filed
 17 this lawsuit was 1,424,924 tons, didn't you?
 18 It's just what we looked at on PTX 641 and 642?
 19 A. **Yes.**
 20 Q. And you were in the courtroom yesterday, weren't you?
 21 A. **I was.**
 22 Q. And you heard Mr. MacPherson's testimony?
 23 A. **I did.**
 24 Q. And you heard him testify, didn't you:
 25 "Question: Would you please remind the jury

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1 what amount per ton Alistar paid under its license agreement
 2 to your company under the patent in this case?
 3 "Answer: Sure. To the best of my understanding
 4 they paid a dollar a ton for all the refined coal they
 5 burned since the time we filed the lawsuit."
 6 Do you remember that testimony?
 7 A. **I do remember that testimony.**
 8 Q. But Alistar only paid \$107,776; right?
 9 A. **It did, yes.**
 10 Q. And if you had calculated not once but twice under
 11 oath 1,424,924 tons, a very precise number, it's just not
 12 true that Alistar paid a dollar per ton for 1,424,924 tons
 13 you calculated Alistar burned from the start of the lawsuit
 14 on July 2019, is it?
 15 A. **No, it paid for the period that's in the green on the
 16 chart here, which is a shorter period.**
 17 Q. Which was a shorter period.
 18 And that was from the defendants -- in the case
 19 hired, as is customary, a damages expert who would review
 20 your report and critique and analyze it and provide a
 21 response; right?
 22 A. **That's right.**
 23 Q. And that was -- Ms. Lawton is her name?
 24 A. **That's right.**
 25 Q. So the Lawton report, that's -- she had said the

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1 middle period; right?

2 **A. That's right.**

3 **Q.** The short period. And you reviewed the Lawton

4 report, and even though she said September 25, 2020, was the

5 proper start date, you rejected that, and you stuck to your

6 guns to the original filing date, didn't you?

7 **A. I used the dates that I was aware of both from the**

8 **filing of the complaint and when the NRG license occurred**

9 **sure, yes.**

10 **Q.** And I think that you've testified, and you and I had

11 the pleasure of taking a deposition about a month ago;

12 right?

13 **A. We did.**

14 **Q.** And I believe you testified that you revised your

15 number from the 1,400,000 number to the 107,000 number

16 because a stipulation had come to your attention since you

17 had done that calculation, and the stipulation shortened the

18 damages period to September 25th?

19 **A. Right.**

20 **Q.** But to be clear, setting aside the stipulation it's

21 undisputed that the lawsuit was filed July 17, 2019?

22 **A. Right, and you can see --**

23 **Q.** So the tonnage --

24 **A. You can see from looking at the license that it talks**

25 **about a particular number of 107,000 tons, and those are the**

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1 **tons that are in that time period that's highlighted in**

2 **green.**

3 **Q.** And -- but the tonnage that you calculated since the

4 filing of the lawsuit was 1.4 million tons?

5 **A. That's right.**

6 **Q.** That's right. Let's talk a bit about that

7 stipulation. I think you just agreed that it came to your

8 attention after -- after you had gotten to the \$1.4 million

9 number again. You have your report in front of you.

10 Let's look at paragraph 221 of your reply

11 report. I'll just go ahead: "The Lawton report sets forth

12 the damages period at CERT Alistar Enterprises, LLC, and NRG

13 Powerton plant start on September 25, 2020, and ends on

14 January 5, 2021.

15 "This is based on a secure look back from the

16 stipulation dated September 25, 2020, that's 287, and you

17 cite to a particular schedule. It appears that the Powerton

18 plant was first included in the second amended complaint

19 dated May 21, 2021. However, based on the six-year look

20 back from either of these dates, no adjustment was necessary

21 to the tonnage royalty base for this plan.

22 "Based on the analysis of estimated annual

23 activated carbon injection rates, the Powerton plant

24 produced tonnage of 1,424,924 starting in 2019."

25 Did I read that correctly?

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1 **A. Yes.**

2 **Q.** So Ms. Lawton brought that stipulation to your

3 attention about the September 25, 2020, date, and you

4 disagreed with her, and you stuck to your 1,424,924 number,

5 didn't you?

6 **A. I included that in the report as -- in the reply**

7 **report consistent with --**

8 **Q.** Mr. Green -- go ahead. I apologize.

9 **A. -- consistent with my understanding of what the**

10 **parties were talking about at the time, sure.**

11 **Q.** You just testified two minutes ago that the

12 stipulation came to your attention after your reply report,

13 but you actually considered the September 25th stipulation

14 in your reply report, and you stuck to your guns on the

15 \$1.4 million final number, didn't you?

16 **A. Yes, I did.**

17 **MR. SYKES:** Let's just take a look, Mr. Brown,

18 at -- drop a footnote -- just to tie this all together drop

19 a footnote in that paragraph to footnote 292 down here at

20 the bottom, reply Exhibit C1.

21 We just looked at reply Exhibit C1 as PTX 641 a

22 few moments ago; right?

23 **A. Yes.**

24 **Q.** Just to tie it all together, you're aware, aren't

25 you, ME2C entered your 1,424,924 tons figure to the Court

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1 for its damages demand in a pretrial filing for Alistar in

2 late October 2023, about four months ago; right?

3 **A. I believe so, yes.**

4 **Q.** Yeah. You actually cite that in your supplemental

5 report. Let's look at your supplemental report exhibit K

6 three footnote three.

7 **A. I cite to the statement of damages in that footnote.**

8 **Yes, sir.**

9 **MR. SYKES:** Let's see if we can -- Mr. Brown, at

10 the very end of Mr. Green's supplemental report, do you not

11 have it? I'll just read it.

12 **BY MR. SYKES:**

13 **Q.** So you cite to plaintiff ME2C's technical damages

14 dated October 26, 2023?

15 **A. That's right.**

16 **Q.** So just a few months ago you submitted that. It's

17 been suggested perhaps to use the Elmo, and I don't know if

18 I want to attempt it. The Elmo is kind of like a 1980

19 overhead projector. I'll pass. It's the 2020 version of a

20 1980 overhead projector.

21 So up to October 26, 2023, you were sticking to

22 your damages number of 1.4 million tons for Alistar, the

23 amount of coal they burned since the filing date of the

24 lawsuit; right?

25 **A. That's right.**

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1 Q. So when did you change your tonnage figure for
2 Alistar?
3 **A. So the tonnage figure is described in the license**
4 **that we talked about earlier in my testimony.**
5 Q. But you changed your tonnage figure a little bit
6 before that license agreement, didn't you?
7 **A. I'm not sure what you're referring to, sir.**
8 MR. SYKES: May I approach the witness,
9 Your Honor?
10 THE COURT: You may.
11 BY MR. SYKES:
12 Q. Mr. Green, I've just handed you a list of schedules
13 attached to an e-mail between counsel, and you'll see an
14 Exhibit C1 attached to the e-mail which has the number for
15 Alistar 106,696.
16 Do you see that?
17 **A. I do.**
18 Q. And what's the -- what's the -- this is an updated
19 damages schedule for this case, wasn't it?
20 **A. Yes, it was.**
21 Q. And these are a bunch of -- this is a bunch of your
22 work product with damages calculations for the CERT
23 defendants, all the ones in this case as well as Alistar?
24 **A. Yes, it is.**
25 Q. All right. And here you've got 106,000 tons -- 696.

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1 And what was the date this was disclosed by ME2C?
2 **A. It was disclosed on November 9, 2023, which is the**
3 **same date as -- the effective date as the agreement between**
4 **Alistar and Midwest.**
5 Q. It was disclosed November 9, 2023, at 6:26 p.m.;
6 correct?
7 **A. Yes.**
8 Q. So let's take a look at that Alistar agreement.
9 PTX 763 is in evidence. Let's flip to the back page. Look
10 at the signatures. It was -- what day was it signed?
11 **A. Signed on November 10th.**
12 Q. And ink signatures on November 10th; right?
13 **A. That what it looks like, yes.**
14 Q. So you would agree from these handwritten ink
15 signatures, including Rick MacPherson, CEO, of ME2C, this
16 agreement was signed on the 10th?
17 **A. Right, one day after the e-mail you showed me.**
18 Q. What's that?
19 **A. One day after the e-mail that you just handed me.**
20 Q. The very next day?
21 **A. That's correct.**
22 Q. That's right. So you changed your damages numbers
23 the night before this agreement was signed?
24 **A. Right.**
25 Q. After sticking to them for how many years?

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1 **A. A year.**
2 Q. I think your first report was October 2022, and then
3 you -- we had the little just the adjustments, your second
4 report, February 2023.
5 And remember that in between October 22nd and
6 February 23rd, the September stipulation was brought to your
7 attention, and you said, No, it doesn't affect my number.
8 You stuck with it from -- you're right. It is a year. I
9 was going '22 to '24.
10 But you stuck it out for a year and a month -- a
11 year and a few weeks, you stuck with it despite the
12 stipulation.
13 And then somehow the night before the agreement
14 was signed, you dropped your number to 106,000 tons, which
15 just magically works out to about a dollar per ton, doesn't
16 it?
17 **A. I wouldn't say it that way. I would say that by the**
18 **time we were at November 9, 2023, you can see that there are**
19 **more limitations in the case, other things that happened,**
20 **and so I used the 106,000 or 107,000 number in schedules**
21 **that are attached to this e-mail.**
22 Q. Mr. Green, you testified that you changed it because
23 you reviewed a stipulation with a September 25th date, but
24 you'd seen the stipulation nine months before in February.
25 Actually you'd seen it longer before that when

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1 Ms. Lawton pointed it out to you in her report. You said,
2 Oh, the stipulation doesn't affect my opinions, and then all
3 of a sudden, when the Alistar agreement is getting drafted
4 up in the middle of the night, you just change your number
5 to 100,000, which magically works out to a nice easy
6 litigation payment and gives ME2C a number to point to?
7 **A. Sir, I wasn't involved in the execution of or signing**
8 **or calculation or anything having to do with**
9 **Plaintiffs' 763.**
10 **You can tell -- you can tell that those**
11 **numbers -- no one is saying that the 106- or 107,000 tons**
12 **isn't the actual number of tons that were actually processed**
13 **as Alistar from September 25, 2020, to January 5, 2021.**
14 **These are the right numbers for that time**
15 **period, and they appeared based on Exhibit 763 as the amount**
16 **that was paid on by Alistar to Midwest.**
17 Q. So let's go look at Alistar again PTX 763. Let's
18 page over to page 2, section 3. Let's zoom in on ME2C
19 release. "And as we've learned in this case, when people
20 sign these agreements, they give a release, and ME2C
21 releases and discharged Alistar and all of its affiliates,
22 managers --" these long synonyms "-- for all causes of
23 action for patent infringement, and all causes of action and
24 all claims and demands of whatever kind and whatever nature
25 arising out of the claims and defenses that were or could

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1 have been asserted against Alistar with respect to the
2 action on or before the effective date November 10th, all
3 claims that were or could have been asserted."
4 So there was a claim asserted against Alistar
5 for 1.4 million tons, wasn't there?
6 **A. No. There's a claim asserted against Alistar for
7 patent infringement the number of tons during the time
8 period was 1.4 million tons over from the time of the filing
9 of the complaint through January 5, 2021, the parties
10 settled very clearly, we can see it in section 4.2, on
11 107,000 tons.**
12 Q. From your perspective, a hundred percent on the up
13 and up?
14 **A. The numbers agree to the underlying tonnages. The
15 parties paid a dollar. Alistar paid a dollar per ton. It
16 says so in the agreement. The agreement means what it says,
17 I would assume.**
18 Q. Mr. Green, I notice you're usually very precise when
19 you look at the schedules, they're -- these 6 and 7 digit
20 numbers, 2129349 they're very precise, and the new Alistar
21 number disclosed it on the night of November 9th was
22 106,696; right?
23 **A. Yes.**
24 Q. Yet somehow the next morning that number had changed
25 to our 107,000 number.

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1 Did you just make a mistake? How did the number
2 go from 106,696 the night of November 9th, which you say is
3 the effective date of the agreement, to the next day when
4 they signed the agreement of our 107,776?
5 **A. Because as I mentioned earlier, we gave the CERT
6 plants certain reductions for not running the ACI, the
7 reduction on the Powerton plant that's at issue in Alistar
8 was exactly 1 percent different between 107,776 that appears
9 in the license agreement versus the 106,696 that appears in
10 the schedule. So we just carried over the 1 percent
11 reduction for the ACI in the schedule that you just handed
12 me.**
13 Q. So were you involved in the negotiation of this
14 agreement?
15 **A. I was not.**
16 Q. So you got word, like, overnight on November 9th to
17 round up by 1 percent?
18 **A. Sir the agreement is actually the day after. I
19 wouldn't have known about this until the 10th or later.**
20 Q. These legal agreements -- these license agreements
21 like the Alistar agreement and these other big agreements in
22 your binder, they're somewhat involved agreements; aren't
23 they? A lot of these have a lot of long complicated terms?
24 **A. I'm not sure what your referring to. They look like
25 license agreements for the use of technology that I see in**

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1 **other -- in my daily practice and help people negotiate.**
2 Q. How long do you usually take in your experience to
3 negotiate a technology license agreement?
4 **A. Some days -- sometimes it takes us a month or two,
5 sometimes it can take years.**
6 Q. Okay. So is it your testimony that you think that
7 this agreement just got started being negotiated between
8 6:26 p.m. when the 106,000-ton number appeared and the next
9 morning when it was signed?
10 **A. So to my knowledge Exhibit 763 is a license agreement
11 that settled a litigation between Alistar and Midwest, and
12 there was a litigation pending. I've seen and we saw
13 earlier, for example, a term sheet that turned into a
14 license. It didn't take that long to do. The term sheet is
15 in early November the license is by late December.
16 Similarly the parties could have been in the same time frame
17 here.**
18 Q. Well, exactly. That's what I'm getting at. Parties
19 might have been working on this for a whole week or ten days
20 before -- before the November 10th signing date; right?
21 **A. They could have been.**
22 Q. Yeah. So it might have been negotiated, hey, let's
23 come up with a dollar a ton and pick a number you guys are
24 willing to pay. I know you're not going to pay 1.4 million,
25 the old tonnage number, but hey, here's a number that we can

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1 get to that's just a hundred thousand bucks, and so we're
2 papering it up and just disclose a new damages schedule.
3 Nothing like that happened, did it?
4 **A. I don't know what the parties were doing with respect
5 to licensing. What we do know is looking at this document
6 it tells us exactly what the royalty per ton is paid for the
7 use of the technology, for use of Midwest technology in this
8 case.**
9 Q. Let's pop up PTX 761, term sheet. So this was the
10 other agreement. Let's see, let's flip to the back page.
11 This one was signed November 9, 2023, wasn't it? So this
12 was signed around the same time as the e-mail; correct -- or
13 same day, excuse me, say day?
14 **A. It appears to have been signed on the same day as the
15 e-mail, yes, sir.**
16 Q. All they were able to come up with was a term sheet
17 it's not a complete agreement, is it?
18 **A. Right, it's a term sheet.**
19 Q. Yeah. And it took them another six weeks to
20 December 28, 2023, to fully flesh out and sign PTX 766, the
21 Chem-Mod Alistar -- or Chem-Mod DTE AJG agreement?
22 **A. Possibly, yes.**
23 Q. What's possible is that this Alistar agreement,
24 PTX 763, it might have been in the works for a week or more,
25 you don't know?

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1 **A. I don't know. I wasn't involved. Again, it gives us**
2 **a royalty rate based on the number of tons, and it's very**
3 **specific about what that calculation is.**
4 **Q.** Let's shift gears. Let's talk a little about tax
5 credits. We've talked a lot about in this case about tax
6 credits, haven't we?
7 **A. There has been discussion about them, sure.**
8 **Q.** Do any of ME2C's power plant customers that are
9 licensed to use ME2C's technology and actually use ME2C's
10 patent products, do they qualify for or receive Section 45
11 tax credits for removing mercury from flue gas with ME2C's
12 technology?
13 **MR. PEARSON:** I object to this question,
14 Your Honor, as irrelevant under 402 and 403. This is not
15 part of his opinion. His opinion doesn't have anything to
16 do with tax credits. Counsel knows this, he has an
17 opportunity to review the reports, and his report is not
18 about this.
19 **THE COURT:** Let's try to make the objections
20 straightforward and not argumentative, but your objection is
21 on relevance grounds in light of the witness's direct
22 testimony with regard to his opinion?
23 **MR. PEARSON:** He offered no opinion on this,
24 Your Honor.
25 **THE COURT:** Mr. Sykes.

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1 **MR. SYKES:** I think that his reply report says
2 that the economic basis of his of the defendants
3 infringement is Section 45 tax credits.
4 **THE COURT:** Mr. Sykes, I believe in his direct
5 testimony and I listened to it I didn't hear the witness
6 mention Section 45 tax credits once. I think I do believe
7 the defendants are correct, so I'll sustain the objection.
8 **BY MR. SYKES:**
9 **Q.** You've got your opening report up there with you,
10 don't you, Mr. Green?
11 **A. Yes, I do.**
12 **MR. SYKES:** Mr. Brown, if you could pull that
13 up. I think it's -- let's -- I believe it's page 105 of the
14 PDF.
15 **BY MR. SYKES:**
16 **Q.** Jump down to Exhibit J of your report. Let's just
17 kind of zoom in on the left-hand side of this Exhibit J.
18 **Exhibit J -- Mr. Brown, let's take a look at the**
19 **title first. Comparable Royalty Rate Summaries; right? Is**
20 **that what it says?**
21 **A. Yes.**
22 **Q.** Okay. And -- all right. And then let's just have a
23 look at the left-hand column. This lists a bunch of license
24 agreements that you have identified as being comparable; is
25 that fair?

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1 **A. Yes.**
2 **Q.** And this goes on for a page or so, your Exhibit J;
3 right?
4 **A. Two and a half pages, sir.**
5 **Q.** Let's just go back. And these agreements are --
6 correspond to the big stack of exhibits that Mr. Pearson
7 admitted as a set in your direct testimony, didn't he?
8 **A. For the most part.**
9 **Q.** And those are the agreements that you say you're
10 getting your comparable royalty rate from; right?
11 **A. They help us with understanding what comparable**
12 **royalty rates would be, sure.**
13 **Q.** Okay. And let's just look at what you say the
14 royalty is on just the very first one. So what you say is
15 comparable royalty is \$0.99 per dollar of tax credits. Do
16 you see that?
17 **A. I see that, yes.**
18 **Q.** So you identified the comparable royalty in your
19 agreement as a dollar per tax credit?
20 **A. I would say that that's not actually identifying it**
21 **as a royalty. It's actually identifying what the terms are**
22 **of the agreement to be able to understand what it is.**
23 **As you can see down below, I identified that**
24 **there's also other royalty terms that say after**
25 **December 21st, 2012, the royalty is no less than \$0.50 her**

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1 **ton, just as I said during my direct testimony.**
2 **MR. SYKES:** Let's just look briefly at the next
3 one on the list, the next one down, Mr. Brown.
4 **BY MR. SYKES:**
5 **Q.** These are also included in your summary the tax
6 credit per ton, don't you?
7 **A. Yes, again the royalty is no less than the greater of**
8 **\$0.50 a ton or 7.5 percent of the tax credit.**
9 **Q.** And just one more and we'll stop. Next one. And you
10 say \$0.99 per dollar of tax credits.
11 **A. That's what it says. Again, it's the same term that**
12 **after it has to be no less than \$0.50 a ton after December.**
13 **Q.** That's not what it says, that's what you wrote. You
14 looked at the big thick agreement and decided to pull that
15 out and put it in your schedule, didn't you?
16 **A. Sure, that's what is in the paragraph that identifies**
17 **the royalty terms, yes, sir.**
18 **Q.** And it's your testimony that there's not in your \$1 a
19 ton rate, there's not one penny of that that reflects the
20 value of -- value attributable to a Section 45 tax credit;
21 is that fair?
22 **A. It's my understanding looking at the Alistar**
23 **agreement the royalties were due whether any tax credits**
24 **were realized.**
25 **Q.** And so the \$1 reflects the value of ME2C's technology

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1 for mercury control?

2 **A. It reflects the value of the use of ME2C's technology**

3 **by the defendant, sir.**

4 Q. Well, what is that use?

5 **A. It's typically related to mercury control, although**

6 **we saw in the '517 patent that there are other chemicals in**

7 **Claim 2 -- excuse me -- whatever the second thing was Claim**

8 **2.**

9 Q. You're not confident as a damages expert to offer any

10 opinion as to what those chemicals are or what they do, are

11 you?

12 **A. No, sir.**

13 Q. And the power plants -- the power plants are the ones

14 that ME2C is identified as the direct infringers, and the

15 power plants are performing both steps of the two-step

16 method?

17 **A. That's what I understand, yes.**

18 Q. They burn the coal that has bromine on it and add

19 activated carbon to the flue gas?

20 **A. That's right.**

21 Q. And you heard Mr. MacPherson say that the power plant

22 agreements DTX 19, 20, 21, and 23 reflect a fair price for

23 mercury control; right? Did you hear him testify to that

24 yesterday?

25 **A. That's not how I understood what he was saying, no,**

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1 **as it relates to those agreements.**

2 Q. Okay. Well, the transcript will show.

3 We referenced a little while ago this

4 Ms. Lawton, the damages expert hired by the defendants, to

5 critique your report and she provided a rebuttal and you

6 responded and that's how we get your second report we call a

7 reply report; correct?

8 **A. My reply report relates to issues that were provided**

9 **in Ms. Lawton's report, yes.**

10 Q. You were replying to her analysis?

11 **A. Among other things, yes.**

12 Q. And you carefully considered Ms. Lawton's report

13 before you responded to it in your reply?

14 **A. Right all thousand pages of it, yes, sir.**

15 Q. It was lengthy.

16 And let me just show you DTX 419, Schedule 720

17 that you would have reviewed in those materials. It's at

18 the back of your binders. You would have reviewed this in

19 connection with your analysis of the Lawton report to

20 prepare your response; right?

21 **A. Yes.**

22 MR. SYKES: I move to admit DTX 419.

23 THE COURT: Any objection?

24 MR. PEARSON: No objection, Your Honor.

25 THE COURT: All right. It's admitted.

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1 (Thereupon, Defendants' Exhibit 419 was

2 admitted.)

3 BY MR. SYKES:

4 Q. I'm going to ask you a few quick questions about

5 this. We can display it.

6 And so this is a summary of the ME2C litigation

7 license agreements that were provided to you. And these

8 correspond to our DTX 19, DTX 20, 21, and 23; right?

9 **A. I don't have them memorized, but -- the trial exhibit**

10 **numbers memorized, but I'll take your word for it.**

11 Q. Yeah, but the utility agreements?

12 **A. Right.**

13 Q. And those are the dates we looked at. There's our

14 January 5th date, July 30th date. And so my question is:

15 You didn't have any reason to dispute, did you, the number

16 of plants that Ms. Lawton identified for each of these

17 utilities, did you?

18 **A. I don't think I disputed the number of plants that**

19 **she identified. I disputed the entire concept of the**

20 **licenses being meaningful in the hypothetical negotiation.**

21 Q. You don't think that these licenses are comparable

22 for the hypothetical negotiation?

23 **A. No, they're not, sir.**

24 Q. And these are not hypothetical licenses, are they?

25 **A. No.**

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1 Q. These are real licenses that are actually negotiated

2 by ME2C for these patents in this case with defendants in

3 this case for coal including the covered refined coal

4 because they stopped and went down the conveyer; right?

5 **A. No, not really, sir.**

6 Q. Okay. You stop your damages for NRG on July 5th,

7 2021, because the NRG license covered the refined coal after

8 January 5th, 2021, didn't you?

9 **A. I stopped the NRG damages as they remit to CERT on**

10 **January 5th, 2021, yes, sir.**

11 Q. And CERT continued to sell NRG refined coal for the

12 remainder of the year 2021?

13 **A. That's right.**

14 Q. So these agreements actually licensed CERT refined

15 coal going down the conveyer belt under these patents and

16 this case to utilities and power plants in this case, and

17 you say they're not comparable, and we should consider a

18 hypothetical alternative.

19 **A. We should because these are licenses with power**

20 **plants. They aren't licenses with refined coal entities.**

21 **They're different parties, and as we heard Mr. MacPherson**

22 **and Mr. Pavlish both say, these are agreements intended to**

23 **get ME2C to be able to supply these big power plants.**

24 **They were done in an effort to be able to**

25 **provide chemicals and other services to those companies.**

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1 Q. So speaking of Mr. Pavlish, you heard him say
2 yesterday that a large utility like Vistra -- the agreement
3 may cover 400 to 500 million tons of coal.
4 Did you hear that testimony?
5 A. **I did.**
6 Q. And that for AEP, a somewhat similar couple hundred
7 million tons of coal, and for Talen you agreed a couple
8 million tons, probably that, but his memory faded on NRG.
9 So if we just -- let's just round down to a
10 hundred million tons. If we divide, picking NRG, that's
11 6/1000ths of a penny per ton; right? \$600,000 divided by a
12 hundred million tons is 6/1000ths of a penny?
13 A. **That's arithmetic, yes, sir. I'm not doing**
14 **arithmetic for you, but that's not -- you can just explain**
15 **the problem. It doesn't specify the rate per ton. It**
16 **doesn't help us figure out patent damages, which is what**
17 **we're all here to do.**
18 Q. At a dollar a ton, this would be a couple million
19 dollars for each of these in the power plants for the same
20 patents, for the same coal, the same two-step process
21 they're paying thousandths of a penny, a few hundred
22 thousand bucks.
23 And you're saying that ME2C discounted the value
24 of its technology by several hundred million dollars just
25 for an opportunity to make a pitch?

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1 A. **It did. It intended to do -- what it wanted to do**
2 **which was to sell to these power plants, and that's what it**
3 **considered to be more valuable when it negotiated the**
4 **agreements, yes, sir.**
5 Q. And how much coal has ME2C sold to Talen, do you
6 know?
7 A. **I don't think ME2C sells coal.**
8 Q. How much coal has ME2C sold to NRG?
9 A. **NRG doesn't sell coal.**
10 Q. Excuse me. Sorry. How much of its products and
11 sorbents, patented products and sorbents, sold?
12 A. **I don't know.**
13 Q. How much of ME2C's patented product was sold to NRG?
14 A. **I don't know.**
15 Q. What about to AEP?
16 A. **I don't know.**
17 Q. But if you could figure out how many -- the tonnage
18 of this, I think you heard Mr. Pavlish's testimony about
19 this EIA database. That's a public database; correct?
20 A. **I did.**
21 Q. And you pulled a lot of coal numbers in your expert
22 report tonnages from the EIA database?
23 A. **I did.**
24 Q. So the math and data would be available to you to
25 look at the tonnage sold to these, but you just don't think

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1 that applies?
2 A. **No. I don't. These are -- again you don't have**
3 **specific time frames for any of these agreements. You know**
4 **that they're for obtaining a supply agreement. They -- they**
5 **don't specify tons. They don't specify a royalty rate per**
6 **ton.**
7 **They're really not helping us with trying to**
8 **figure out what a reasonable royalty would be in this case.**
9 **They're also not with the right parties. The parties**
10 **they're licensing here are refined coal entities not the**
11 **power plants themselves, who are ME2C's intended customers.**
12 Q. Let me -- I'm going to ask a few questions of
13 PTX 766. That's the AJG DTE agreement. Let's page down.
14 Your understanding is that this settled this is
15 a settlement of the of some of the previous parties of this
16 case and other refined coal entities as well as I guess some
17 parent entities and Chem-Mod; is that fair?
18 A. **That's right.**
19 Q. Let's flip over to Exhibit A. I think it's page 17.
20 That's a list of the defendants; right? Then Exhibit B is
21 the second set.
22 A. **Right. These are these are the AJG entities in**
23 **Exhibit A, and the DTE entities in Exhibit B.**
24 Q. And the tonnages for these two lists of entities,
25 that's where you got the range you testified about in your

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1 opening of -- what was it, \$0.14 to \$0.39 a ton?
2 A. **I testified about it on my direct, that's correct.**
3 Q. Thank you. Yeah. But the 14 to \$0.39 was as to the
4 tonnage for these entities?
5 A. **They were based on the tonnages for these entities,**
6 **that's correct.**
7 Q. And you actually -- the exhibits we looked at before
8 PTX 641, 642, and 646 that we previously redacted, those
9 list the tonnages that you actually calculated for that same
10 set of entities don't they?
11 A. **Not quite, no.**
12 Q. Not quite. What's different about it?
13 A. **So --**
14 Q. Includes the CERT entities?
15 A. **-- exhibit -- so PTX 642, for example, has five DTE**
16 **entities, and Exhibit B has nine DTE entities, so they're**
17 **not quite the same in what's on exhibit -- on PTX 642.**
18 Q. You agree that all of the entities excluding the CERT
19 entities for DTE and AJG are listed on Exhibits A and B of
20 PTX 766?
21 A. **I would agree that these are defendants or were**
22 **defendants at one point in this litigation.**
23 Q. And you agree that PTX 641, 642, and 646 provide some
24 information by which we can get a better idea of the
25 tonnages and estimates of the value paid in PTX 766;

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1 correct?

2 **A. No. I don't think so. As I said in my direct, you**

3 **can see that there's \$27,500,000 that was paid. There's a**

4 **variety of different dates that are related to when the**

5 **damages were run for each of the parties as we can see from**

6 **the exhibits that you were just mentioning.**

7 **So the agreement tells us some things, like**

8 **charts tell us some things, but we don't know what an**

9 **effective royalty rate would be coming out of this agreement**

10 **for any one of the defendants that settled.**

11 Q. Mr. Green, you're telling me that the damages and the

12 numbers that you calculated for all of these entities is not

13 informative of the royalties those same entities paid in

14 PTX 766?

15 **A. I'm saying PTX 766, \$27 and a half million payment**

16 **was a lump sum. PTX 766 doesn't identify by plant or entity**

17 **what the dollar values were that are associated with any of**

18 **those entities, nor does it identify for us in the document**

19 **the tonnage nor does it tell us what the royalty per ton was**

20 **that the parties were considering, and they obviously chose**

21 **a lump sum.**

22 Q. All right. You're making it sound so complicated.

23 Royalty per ton, you take the dollars, the royalty. You can

24 just divide by tons; right? That's how you got your \$0.14

25 per ton and your \$0.39 cents per ton.

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1 **A. Right, you can estimate.**

2 Q. Right. I mean, it's third or fifth grade arithmetic?

3 **A. You can estimate a broad range of royalties based on**

4 **the ton.**

5 Q. You can add up the tonnage, take up the dollars, and

6 add up the tonnage and divide them to get your cents per

7 ton?

8 **A. Sure.**

9 Q. Yeah. PTX 641, 642, 646 provide that tonnage, don't

10 they? They provide at least some of the tonnage that went

11 into PTX 766?

12 **A. Some of the tonnage, yes.**

13 MR. SYKES: So I move to admit PTX 641, 642, and

14 646 in unredacted form, Your Honor.

15 THE COURT: Mr. Pearson?

16 MR. PEARSON: Same objection under 403 and juror

17 confusion that I stated previously.

18 I don't have an objection to the line of

19 questioning. I just have an objection to the introduction

20 of the exhibits.

21 THE COURT: I'm going to go ahead and sustain

22 the objection. I think we've had -- expert reports

23 generally are not admitted as exhibits in cases like these.

24 And while occasionally the charts or exhibits

25 attached to them at the end could be admitted, it's almost

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1 always the case that happens when there's a stipulation.

2 That said, of course, defense counsel is free to

3 cross-examine the witness with bearing on the content if he

4 wishes.

5 MR. SYKES: I'll take a moment to talk about the

6 content.

7 BY MR. SYKES:

8 Q. Do you recall, Mr. Green, what your -- if we look at

9 PTX 642 your damages for these different entities, what you

10 calculated their damages would be, you've got that one

11 number that includes the CERT entities of 168 million, and

12 another number of 137 million.

13 Do you see that?

14 **A. That's not quite right.**

15 Q. Just referring to PTX 642.

16 **A. I am too. It's not quite right.**

17 Q. What is your view of the \$1 per ton rate that you

18 calculated? What was the total?

19 **A. The total is \$137,689,384.**

20 Q. To be clear, that was inclusive of certain entities

21 and the 1.4 million for the Alistar; right?

22 **A. And assuming that damages started in 2019.**

23 Q. And then on the 2013 you came up with \$168,265,451;

24 correct?

25 **A. Applying a royalty rate of \$0.65 a ton starting with**

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1 **tonnage back in 2013, yes, sir.**

2 Q. We'll peek at PTX 766 to remind the jury -- we'll

3 jump back to Exhibit 4.

4 **A. What would you like me to turn to, sir?**

5 MR. SYKES: Mr. Brown, if we could go to

6 Exhibit 4 of PTX 766 -- Exhibit D. I apologize, Exhibit D

7 additional license entities, a couple of pages back. There

8 we go.

9 BY MR. SYKES:

10 Q. So these are all the entities we established that

11 were licensed under additional license entities under this

12 agreement and you did not try to investigate the tonnages

13 associated with any of these entities when you came up with

14 your \$0.14 and \$0.39 a ton, did you?

15 **A. I disagree. I think a number of the entities that**

16 **are on Exhibit D actually appeared in earlier exhibits and**

17 **were part of the analysis that I did so I have actually**

18 **considered this, sure.**

19 Q. But you didn't look it up for a whole bunch of them,

20 did you? Aren't there a lot of these that you did not go

21 into the EIA database and try to determine the tonnage when

22 you calculated your \$0.14 and \$0.39 cent?

23 **A. That's true.**

24 Q. Do you know how many of them you considered versus

25 not?

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1 **A. No, I looked at the ones that were settling**
2 **Defendants' Exhibits A and B to this agreement.**
3 **Q.** You know the tonnage of the other ones can be found
4 in the EIA database; right?
5 **A. That gives us a third way of knowing what the**
6 **\$27 million might mean and, again, we don't know based on**
7 **the defendants identified in the agreement what the royalty**
8 **and tonnage is.**
9 **Q.** You didn't go down that third way path?
10 **A. No, sir.**
11 **Q.** Just to be clear, as we add more and more tons, the
12 cents per ton get smaller and smaller, don't they?
13 **A. That would be the math.**
14 **Q.** If we came up with 500 or a billion tons adding up
15 the tonnage for pages and pages and pages of power plants
16 that burn trainloads of coal every day, that would come out
17 to a tiny, tiny number wouldn't it?
18 **A. I don't know. It could, but that's why looking at**
19 **the parts and rates of the agreement -- it doesn't say.**
20 **Q.** You didn't investigate that, did you?
21 **A. No, I investigated --**
22 **Q.** You came in here and you gave an opinion of 14 and 39
23 cents on a subset of about 20 of the 134 entities listed on
24 Exhibit D and you didn't bother to go to then EIA public
25 database to look up the tonnage for the rest to get the

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1 actual, whatever it may be, one penny, three pennies per ton
2 rate?
3 **A. We don't know if it's a penny, three pennies. No one**
4 **has done that math. All we know is that they paid a \$27 and**
5 **a half million. It's not in the agreement.**
6 **MR. SYKES:** Can I take just a moment,
7 Your Honor, to confer with counsel?
8 **THE COURT:** You may.
9 **BY MR. SYKES:**
10 **Q.** Just a few more questions. I'm going to try to wrap
11 this up. I know it's dragging.
12 **Speaking of the utility agreements, DTX 19, 20,**
13 **21, and 23, as we established earlier, you don't think these**
14 **are comparable?**
15 **A. That's correct.**
16 **Q.** And if you look at your reply report, bottom of page
17 41. Let's highlight paragraph 161. Let's get the title to
18 that, Mr. Brown.
19 **So you entitled this "The 2019 Licensing**
20 **Program," and you referencing eight agreements. Four of**
21 **those are licenses known as the litigation licenses, and**
22 **those are the ones we've been talking about; correct?**
23 **A. Right. I referenced them in this whole section in**
24 **response to Ms. Lawton.**
25 **Q.** And you go on to discuss them. Let's look at the top

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1 of the next page. We see the fleet wide licenses of Vistra.
2 That's one of the ones we looked at; fair?
3 **A. Yes, sir.**
4 **Q.** And you know that the utilities are part of the 2019
5 licensing program; right?
6 **A. Yes, they are.**
7 **Q.** And these utilities, Vistra, Talen, NRG, they settled
8 out of this very litigation; right?
9 **A. They did, yes.**
10 **Q.** And you talk about them as the litigation licenses.
11 So this litigation that we're dealing with now is part of
12 the 2019 licensing program of ME2C as you call it; fair?
13 **What can I help you find?**
14 **While he's looking, let's look at the bottom of**
15 **page 41 again.**
16 **A. I don't characterize them as part of a licensing**
17 **program. I simply in my report identify the licenses and**
18 **their terms. I think the licensing program is something**
19 **that Ms. Lawton was using.**
20 **Q.** I mean, you have a title: "ME2C's 2019 Licensing
21 Program." That's not -- you're saying that's not you?
22 **A. That's coming from, as I said, this page 41 is in**
23 **response to Ms. Lawton.**
24 **Q.** But you are referring to the pending litigation;
25 right? Or the settlement litigation?

815

1 **A. I'm referring to the licenses that Midwest executed**
2 **with the power plants, yes.**
3 **Q.** And you would want, as you're considering those and
4 the defendants in this case, they're a part of the same
5 litigation, aren't we?
6 **A. You are part of the same litigation, yes.**
7 **Q.** And you would want to be careful and thorough in your
8 work when you're analyzing agreements coming out of
9 litigation and look at documents that might be somehow
10 related to that, wouldn't you?
11 **A. Yes.**
12 **Q.** And this litigation, it was filed July 17, 2019?
13 **A. That's right.**
14 **Q.** Against CERT but also these utilities here. And I
15 want to you to look at DTX 97 in your binder. This is a
16 document dated July 2, 2019, so about two weeks before the
17 litigation was filed. It's on ME2C letterhead. And you
18 know from having been involved in litigation there's a
19 number on the bottom ME2C we call it a Bates number RC
20 00223105 shows that ME2C provided this document in the case
21 and that John, Jim, Rick, and Rich were present.
22 **Did you use all that? Have you found the**
23 **document?**
24 **MR. PEARSON:** I'm sorry, counsel. I missed the
25 number.

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1 MR. SYKES: 97. Right in the middle.
2 MR. PEARSON: Sorry.
3 THE WITNESS: I see the document.
4 BY MR. SYKES:
5 Q. And you see the stuff I just described, ME2C
6 letterhead, the ME2C Bates number that shows that ME2C
7 provided it in this case, the date of two weeks before the
8 litigation, and that John and Rick were present?
9 A. **I do see that.**
10 Q. And you understand John and Rick to be John Pavlish
11 and Rick MacPherson? You're not aware of any other John and
12 Rick in management in ME2C?
13 A. **I assume that's what it's referring.**
14 Q. You see there's a bullet, a second bullet down, IP
15 announcements. And it says, "Three key areas of endeavor:
16 The refined coal business and three major utilities we're
17 filing against and a letter campaign."
18 Do you see that?
19 A. **Can you point me to it again, sir? I'm sorry.**
20 Q. Yeah there's a --
21 MR. SYKES: May I approach the witness?
22 THE COURT: You may.
23 BY MR. SYKES:
24 Q. Do you see under the sort of heading IP announcements
25 there's a subheading, three areas, three key areas of

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1 endeavor. One, refined coal business, three major utilities
2 we are filing against, and three, a letter campaign. Do you
3 see that?
4 A. **I do.**
5 Q. And you understand the three mayor utilities would
6 be -- it would include Vistra, Talen, and NRG who were sued
7 maybe two weeks after this document?
8 A. **Yes.**
9 Q. So this would relate to the litigation licenses in
10 your expert report that you considered and you considered
11 noncomparable; is that fair?
12 MR. PEARSON: Your Honor, I apologize. I object
13 to speculation on this. I'm not sure this document is in
14 his report, and he's asking fact questions about what
15 happened at the company.
16 THE COURT: Mr. Sykes.
17 MR. SYKES: I'm asking him questions about
18 whether he considered documents relating to what he entitled
19 a 2019 licensing program and we see in this document what is
20 clearly a licensing program, IP announcements, a letter
21 campaign suing three major utilities in the refined coal
22 business. And I think this is directly relevant to the
23 comparability analysis in his report because as he just
24 agreed, we're parties to the same litigation. These are
25 litigation licenses, and this at least tends to show that we

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1 are participants in the same licensing program from which
2 the utility licenses arise.
3 THE COURT: So I'll overrule the objection to
4 the extent the witness can be asked if he considered the
5 document and its content with regard to his analysis and
6 depending on the answer from there.
7 BY MR. SYKES:
8 Q. And, Mr. Green, did you consider this document -- did
9 ME2C provide this document to you when you did your review
10 and consideration of the 2019 licensing program?
11 A. **When you were asking me questions before, the thing I**
12 **was doing while I was going through this document is see if**
13 **I could find this Bates number, and I did not.**
14 Q. ME2C didn't provide this to you?
15 A. **I haven't seen this document.**
16 MR. SYKES: Your Honor, I think this bears upon
17 the thoroughness with which he analyzed the issues in his
18 report, and since it's an ME2C document on letterhead with
19 the executive officers that they provided, we would move to
20 admit DTX 97.
21 THE COURT: Mr. Pearson.
22 MR. PEARSON: I think that counsel absolutely
23 cross-examined Mr. MacPherson and could have entered it with
24 him. This witness laid no foundation for the document.
25 THE COURT: I agree, so the objection is

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1 sustained.
2 MR. SYKES: With that, I'll pass the witness.
3 THE COURT: Mr. Pearson, redirect.
4 MR. PEARSON: Thank you, Your Honor.
5 REDIRECT EXAMINATION
6 BY MR. PEARSON:
7 Q. Mr. Green, did anything happen in the last 90,
8 120 minutes that would cause you to reconsider your opinion
9 or change your opinion in this case?
10 A. **No.**
11 Q. You've been here for the whole trial; right?
12 A. **I have.**
13 Q. You are an expert not only on patent damages but
14 patent licenses. I think you testified in the beginning you
15 have a lot of experience with patent licensing; is that
16 fair?
17 A. **Yes that's fair.**
18 Q. I'm not sure why there's been a lot of discussion in
19 this case about letters that might or might not have been
20 sent. We had a question about letter writing campaign or
21 non letters or something.
22 Do you recall?
23 A. **Yes.**
24 Q. In your experience in patent licensing, is there
25 something like a magic letter, like, where you send a notice

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1 letter to a potential infringer, they automatically sign a
 2 license with you?
 3 **A. That doesn't usually happen, no.**
 4 **Q.** Is it that simple?
 5 **A. No.**
 6 **Q.** Sort of working in reverse order of what I wrote down
 7 in my notes happened, there was some more discussion of the
 8 ME2C AJG agreement.
 9 Do you remember that?
 10 **A. Yes.**
 11 **Q.** And that was the one where you testified there was a
 12 lump sum and you put a little dash up there.
 13 Do you remember that?
 14 **A. Yes.**
 15 **Q.** And I said why, and I recall your testimony was you
 16 just were uncertain about what the per unit royalty was.
 17 Do you remember that?
 18 **A. That's right.**
 19 **Q.** Did I summarize that fairly?
 20 **A. You did.**
 21 **Q.** And then counsel for the defendants spent seemed like
 22 a while trying to prove up that you in fact were uncertain
 23 and might not have had all the data you needed.
 24 Do you recall that?
 25 **A. Yes.**

821

1 **Q.** He was talking about the EIA database. Do you
 2 remember that?
 3 **A. Yes.**
 4 **Q.** And that was the one he said was publicly available;
 5 is that right?
 6 **A. That's what he said.**
 7 **Q.** And that's true? It is publicly available; is that
 8 fair?
 9 **A. It is.**
 10 **Q.** So that means I could go look it up?
 11 **A. You can.**
 12 **Q.** And you can go look it up?
 13 **A. Yes.**
 14 **Q.** Could counsel for CERT go look it up?
 15 **A. I would expect so, yes.**
 16 **Q.** There's no reason he doesn't have access to the EIA
 17 database?
 18 **A. Not that I know of, no.**
 19 **Q.** If there was something in there about tonnages that
 20 he thinks proves his point. Doesn't it seem fair that he
 21 would go to the database and retrieve the data that proved
 22 his point?
 23 **A. I would think.**
 24 **Q.** Mr. Diaz, could I please have Plaintiffs' Exhibit
 25 353.

822

1 There was a confusing exchange in the middle and
 2 I want to make sure the record is crystal clear. There was
 3 a detour about tax credits somewhere in the middle of the
 4 cross-examination.
 5 Do you remember that?
 6 **A. Yes.**
 7 **Q.** And I made an objection and said I don't know what
 8 this is about.
 9 Do you remember that?
 10 **A. I do.**
 11 **Q.** Because you hadn't testified about tax credits?
 12 **A. That's right.**
 13 **Q.** Can we please see PTX 353? And PTX 353 is the
 14 Chem-Mod and Alistar license; right?
 15 **A. Yes.**
 16 **Q.** And there was some question about whether your
 17 analysis was inappropriate or somehow infected with tax
 18 credits. Do you remember that?
 19 **A. Yes.**
 20 **Q.** And I believe you testified, no, my opinion doesn't
 21 have anything to do with tax credits, these licenses aren't
 22 about tax credits; is that fair?
 23 **A. Yes.**
 24 **MR. SYKES:** Can we see section 5.3 of the
 25 Chem-Mod and Alistar agreement, which is PTX 353. Thank you

823

1 Mr. Diaz.
 2 BY MR. PEARSON:
 3 **Q.** Is this the language you had in mind whenever you
 4 said these agreements aren't about the value of tax
 5 credits -- the Chem-Mod agreements aren't about tax credits?
 6 **A. Yes.**
 7 **Q.** It's really long, and I don't want to beat a dead
 8 horse, but could you at least tell us what this language
 9 means?
 10 **A. What this is simply saying, ladies and gentlemen, is**
 11 **that it's after the bold piece. It just says that it's**
 12 **understood that any royalty payable to Chem-Mod with respect**
 13 **to the permitted use of the technology is not dependent on**
 14 **whether the licensee or any of its affiliates receives the**
 15 **benefit of any form of a tax credit claimed by the licensee**
 16 **and its affiliate.**
 17 **Q.** This language says, no matter what about tax credits,
 18 get them, don't get them, this license and this payment is
 19 not about tax credits; it's about the technology; is that
 20 fair?
 21 **A. That's right.**
 22 **Q.** Going back even further into your cross-examination
 23 which was now sometime ago, there's a lot of discussion
 24 about the ME2C Alistar agreement. Do you recall that?
 25 **A. I do.**

824

1 Q. And there was a lot of discussion about dates and
2 tons and Lawton and schedules. Do you recall all that?
3 A. **I do.**
4 Q. I did my best to follow along. And is it fair to say
5 that you and Ms. Lawton were having a dispute about what is
6 the appropriate damages period for Alistar, the prior CERT
7 defendant who has now settled and taken a license to ME2C's
8 technology; is that fair?
9 A. **That's fair.**
10 Q. Okay. Was it surprising that when two parties
11 come together to negotiate and come to an agreement where
12 they don't take up a full week of good people's lives, they
13 might come to an agreement over their differences. Does
14 that seem fair?
15 A. **It does.**
16 Q. And sometimes you might give and take, but you can
17 write it down in an agreement; is that right?
18 A. **That's right.**
19 MR. SYKES: Your Honor I object to counsel
20 leading the witness.
21 THE COURT: Sustained. The questions are a bit
22 leading. I ask you to refrain.
23 BY MR. PEARSON:
24 Q. What was the damages period that was listed on the
25 face of the ME2C Alistar agreement? I'll withdraw the

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1 question.
2 What was the tonnage listed as the payment on
3 the ME2C Alistar agreement?
4 A. **The tonnage is 107,776 tons, and we know that because**
5 **the royalty is a dollar a ton as it says in the agreement,**
6 **and it says it sold during the applicable damages period for**
7 **Alistar and the lawsuit.**
8 Q. Do you recall when we discussed plaintiffs' trial
9 Exhibit 446 which was the big spreadsheet with the sales
10 data or tonnage data for CERT? Do you recall that?
11 A. **Yes.**
12 Q. In that document, there was tonnage by date; is that
13 fair?
14 A. **That's right.**
15 Q. Is it fair to say that you calculated for the longer
16 damages period you initially contended; is that right?
17 A. **Yes, I did.**
18 Q. What damages period did the 107,776 tons of coal
19 relate to?
20 A. **It related to September 25, 2020, through January 5,**
21 **2021.**
22 Q. And those are the numbers that match precisely to the
23 ton the amount of refined coal burned at Alistar between
24 those dates; is that fair?
25 A. **That's right.**

826

1 Q. Counsel for CERT didn't show you that data and say,
2 You did your math wrong, did he?
3 A. **No.**
4 Q. What he did show you was Exhibit C1, the one where he
5 said, Aha, I got you, 106,000. Do you remember that?
6 MR. SYKES: Your Honor, continuing to lead the
7 witness.
8 THE COURT: Sustained. Mr. Pearson, please ask
9 your questions in a non-leading way.
10 BY MR. PEARSON:
11 Q. What program did you use to create Exhibit C1 which
12 reflected 106,000 tons for Alistar?
13 A. **I used Excel.**
14 Q. When you use Excel, does it contain formulas?
15 A. **In calculating these things, yes, there's a lot of**
16 **numbers here.**
17 Q. When you put in 107,776 tons for the damages period
18 of Alistar, what number do you get?
19 A. **When you run it through the analysis that we were**
20 **doing because we were taking off the 1 percent we get**
21 **106,696.**
22 Q. Did you have a chance to review Ms. Lawton's reports?
23 A. **Yes.**
24 Q. Where in Ms. Lawton reports did she contradict the
25 math of your tabulations?

827

1 A. **So Ms. Lawton's reports have schedules and**
2 **differences of when we start damages and when you stop**
3 **damages, but once we pretty much -- once we got all the**
4 **dates together, we didn't really disagree on the tonnages.**
5 Q. What reply did Ms. Lawton offer to your calculation
6 of 106,696 tons, which is the real amount reduced by 1
7 percent?
8 A. **I don't believe there was any.**
9 Q. What was Ms. Lawton's ultimate damages opinion in
10 this case?
11 A. **I don't recall how it relates specifically to this**
12 **case. I mean, she ultimately came up with a running**
13 **royalty.**
14 Q. And do you recall that her damages opinion was
15 de minimis?
16 A. **It was very small, yes.**
17 Q. Was that damages opinion offered by Ms. Lawton when
18 she was representing AJG DTE and CERT?
19 A. **She was working on behalf of all of those entities,**
20 **yes.**
21 Q. Was that opinion offered by Ms. Lawton prior to AJG
22 and DTE taking a license to ME2C's patents for
23 \$27 and a half million?
24 A. **Yes.**
25 Q. Do you recall when defendants told us they had

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1 withdrawn Ms. Lawton as an expert, and she would not attend
2 this trial?
3 **A. I don't know the specific date.**
4 MR. PEARSON: No further questions, Your Honor.
5 Thank you.
6 THE COURT: Thank you. Mr. Green, you can step
7 down. I'll have counsel retrieve the binders.
8 MR. CALDWELL: Would it be okay to start sending
9 around binders for the next one?
10 THE COURT: You may. Yes.
11 MR. PEARSON: May I approach, Your Honor?
12 THE COURT: You may, whenever you're ready.
13 MR. CALDWELL: At this point the plaintiff calls
14 the corporate representative for the defendants, Mr. Jeff
15 Green, adverse.
16 THE COURT: Mr. Green can come forward. We'll
17 have you sworn.
18 THE CLERK: Please state and spell your name for
19 the record.
20 THE WITNESS: Jeff Green, J-E-F-F, G-R-E-E-N.
21 JEFF GREEN,
22 called as a witness on behalf of the
23 Plaintiff, was sworn, and testified
24 as follows:
25 **DIRECT EXAMINATION**

829

1 BY MR. CALDWELL:
2 Q. Hi, Mr. Green. Take a moment to get comfortable.
3 **A. I just want to be close to the microphone.**
4 Q. We have learned. We have learned.
5 Are you ready to proceed?
6 **A. I am.**
7 Q. Good afternoon, Mr. Green.
8 **A. Good afternoon.**
9 Q. You and I met at an earlier proceeding, and we said
10 hi during the break, but other than that we don't know each;
11 is that correct?
12 **A. That is correct.**
13 Q. And you're a lit bit different as a witness in the
14 sense that you're not one of the witnesses that's like an
15 employee of ME2C. You actually are associated with the
16 defendants in this case; correct?
17 **A. That is correct.**
18 Q. And, in fact, you are the CERT corporate
19 representative; is that correct?
20 **A. Yes, sir.**
21 Q. Which defendants are you representing as CERT's
22 corporate representative?
23 **A. I'm representing the six named refined coal company**
24 **defendants. Would you like me to list those?**
25 Q. The eight named --

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1 **A. I'm sorry. The eight and the four Operations**
2 **defendants.**
3 Q. Okay. All 12 defendants is really -- I won't make
4 you do the list right now.
5 **A. That's right.**
6 Q. Now, like I say this is a little bit unusual because
7 I've called you in what's a process called calling a witness
8 adverse, and that doesn't mean we have to fight. It's just
9 the terminology in court; is that fair?
10 **A. That's fair.**
11 Q. But also you watched the lawyers for CERT do
12 cross-examination where they phrase these sort of leading
13 questions and stuff like that.
14 You understand that that's kind of the position
15 I'm in here since you are their corporate representative;
16 correct?
17 **A. Sure.**
18 Q. I just want to make sure you understand that if I'm
19 asking you cross-examine type questions, I mean no
20 disrespect. It's just the way the mechanics of the court
21 process goes; fair?
22 **A. Fair.**
23 Q. You and I have something in common, as it turns out,
24 in that we both studied engineering at Texas A&M University
25 but at different times; is that fair?

831

1 **A. That's fair.**
2 Q. Would you just take -- take a second and introduce
3 yourself to the jury?
4 **A. Sure. My name is Jeff Green. I grew up in Alvin,**
5 **Texas. It's a small town.**
6 Q. Home of Nolan Ryan?
7 **A. Yeah, he was my neighbor, and I lived there, and I**
8 **moved to Birmingham, Alabama, in 2002, and I've been there a**
9 **long time. Like he said, I did graduate from Texas A&M**
10 **University, and that was 1993.**
11 **So now I'm living in Birmingham, Alabama, been**
12 **ever since I've been there so that's a little bit about me.**
13 Q. I didn't know the part about Alvin. Did they sell
14 Nolan Ryan beef hotdogs in Birmingham, or do you have to
15 come to Texas for these?
16 **A. You have to get them in Texas.**
17 Q. So you do represent all 12 defendants here; correct?
18 **A. Correct.**
19 Q. And we hear the abbreviation CERT, like CERT
20 Operations IV, something like that.
21 What does CERT stand for?
22 **A. Combustion emission reduction technologies.**
23 Q. Has it always stood for combustion emission reduction
24 technologies?
25 **A. It used to be coal emission reduction technologies**

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1 **several years ago.**

2 Q. Do you know when that changed?

3 A. **I don't recall it. If I were to guess, it would be**

4 **2018, maybe 2019. I don't -- I don't recall.**

5 Q. Thanks. That's helpful. If we see documents that

6 say coal emission reduction technologies, it's not that we

7 screwed up and got the wrong family of companies. It was a

8 change?

9 A. **That's correct.**

10 Q. What does the word "Senescence" mean?

11 A. **It has no meaning.**

12 Q. Well, it kind of means like senility and old age,

13 something like that?

14 A. **A lot of the names we see, they're strange names.**

15 **Those were developed by our business development guy, and**

16 **they really had no meaning whenever we set those up back in**

17 **2009 to start getting the licenses.**

18 Q. There's not like a Mr. and Mrs. Bascobert or

19 Buffington?

20 A. **No, no relationship.**

21 Q. Do you ever drive to Larkwood?

22 A. **Never had.**

23 Q. Who's Mr. and Mrs. Rutledge?

24 A. **I don't know.**

25 Q. What's a Cottbus? And what resources does Springhill

833

1 Resources have?

2 A. **Just a refined coal facility.**

3 Q. So who made up these names?

4 A. **That was Barr Linton.**

5 Q. And each one of them do they have a website?

6 A. **No, they do not.**

7 Q. Do they have a phone number?

8 A. **Yes.**

9 Q. Whose phone number is that?

10 A. **That would be our corporate office in Birmingham.**

11 Q. If I want to call Springhill Resources, I call the

12 corporate office for CERT?

13 A. **You would.**

14 Q. Are you familiar with the eight power plants that are

15 at issue as associated with the 12 defendants?

16 A. **Do I know the power plants?**

17 Q. Yes.

18 A. **Yes, I'm familiar with them.**

19 Q. Have you been to them?

20 A. **I have.**

21 Q. And I would assume -- I mean geez, particularly in

22 the last 23 years, you don't just sort of roll up and walk

23 into a power plant, there's probably some amount of

24 security?

25 A. **There's security, yes, sir.**

834

1 Q. So how does that work for you? Does someone have to

2 get you on an access list to get into the power plant?

3 A. **Typically you would make contact, you'd have to have**

4 **permission to get in. Once you were at the power plant, you**

5 **have to have a -- you know, there's safety protocols. You**

6 **have to watch a video, a safety video. And then you really**

7 **weren't allowed to go into the power plant without being**

8 **escorted.**

9 Q. When you said the power plant, there's like a -- do

10 you roll up in your car and there's probably a security gate

11 to get you into the power plant?

12 A. **That's correct.**

13 Q. And on how many occasions have you been in the power

14 plant of one of the eight power plants that's at issue here?

15 A. **Several dozen times.**

16 Q. For each one or several dozen times altogether?

17 A. **Well, just well, quite a few times in the ones that**

18 **are in Texas and Louisiana I've probably been out to North**

19 **Dakota and Wyoming and Utah half a dozen times each. So it**

20 **just depends on my location.**

21 MR. CALDWELL: Your Honor, may I move around the

22 easel?

23 THE COURT: You may.

24 BY MR. CALDWELL:

25 Q. I made this board in opening. I realize you didn't

835

1 have a good view of it because of where the board was

2 located, but at least in terms of red, I have what you guys

3 would call the refined coal LLCs. I have those correctly

4 listed; correct?

5 A. **Yes, you do.**

6 Q. And do you remember my explanation as to why Alistar

7 is grayed out?

8 A. **Yes, I do.**

9 Q. Have I correctly identified the four operations

10 companies that are defendants in this case?

11 A. **Yes, sir, you have.**

12 Q. Okay. Perfect.

13 So right now are any of these entities making

14 refined coal?

15 A. **No, they are not.**

16 Q. All right. So how many employees are there in what

17 you guys call the refined coal LLCs?

18 A. **There's no longer employees in those facilities.**

19 Q. And I'm not talking about these operations companies

20 I'm mean, these LLCs, how many employees currently are there

21 of those red refined coal LLCs?

22 A. **They don't have employees.**

23 Q. At the absolute peak of producing refined coal, how

24 many employees did these refined coal LLCs have?

25 A. **There were no employees.**

836

1 Q. So with respect -- not absolutely nothing personal,
 2 but who is it and I don't mean a lawyer, I'm not talking
 3 about who thinks Mr. Green is the best witness, but who from
 4 a business perspective decides that you will come to court
 5 and testify as the corporate representative for each of
 6 those entities?
 7 MR. DYESS: Your Honor, objection. This is
 8 coming mighty close to work product.
 9 THE COURT: Can you restate the objection?
 10 MR. DYESS: This is attorney work product and
 11 attorney-client communication. I'm not sure how he can
 12 answer that question without divulging communication.
 13 THE COURT: Mr. Caldwell?
 14 MR. CALDWELL: I literally said I'm not looking
 15 for anything with lawyers who decided who would be the best
 16 witness or anything like that. I want to know the business
 17 authority who would identify who would be the corporate
 18 representative to speak on behalf of them.
 19 THE COURT: So I'll overrule the objection with
 20 the proviso that the question should be re-asked to make it
 21 clear that it is not seeking conversations with attorneys,
 22 and to the extent that an answer can be given in light of
 23 that, the witness may answer.
 24 BY MR. CALDWELL:
 25 Q. With respect, I hope you understand from the

837

1 beginning I indicated I'm not trying to get into privileged
 2 communications.
 3 Do you understand that?
 4 A. **I do.**
 5 Q. I want to know from a purely business perspective who
 6 is it that has the authority to designate you as the
 7 corporate representative to speak on behalf of these
 8 refined coal LLCs.
 9 A. **As VP of operations of all of the CERT Operations**
 10 **entities, I'm acting on behalf of the refined coal LLCs.**
 11 Q. I'm not trying to quibble. I understand you have a
 12 title with the ones in purple, the operations LLCs. I'm
 13 asking from a business perspective who can designate that
 14 you have the authority to speak on behalf of the
 15 refined coal LLCs?
 16 A. **I'm not certain how to answer that question.**
 17 Q. Is there anyone else that will testify as a fact
 18 witness on behalf of any CERT entity?
 19 A. **No.**
 20 Q. Now, who's Corporation Service Company?
 21 A. **I'm sorry?**
 22 Q. Who's Corporation Service Company?
 23 A. **Corporation Service Company?**
 24 Q. Yes. Does that ring a bell?
 25 A. **No, sir.**

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1 Q. If I refer to them as CSC, does that ring a bell?
 2 A. **CSC? No, are we talking --**
 3 Q. Go ahead.
 4 A. **No, it doesn't.**
 5 Q. Okay. And there's a reason I ask. You've been here
 6 for the whole trial; correct?
 7 A. **That's correct.**
 8 Q. And you remember there was a time period where
 9 Mr. MacPherson, because he's not one of the corporate
 10 representatives here, he had to be out for certain testimony
 11 and can now be back, but you've never had an exclusion
 12 period like that. You've been here for all the testimony;
 13 right?
 14 A. **Yes, sir.**
 15 Q. And you remember when your lawyers made a really big
 16 deal crossing Mr. MacPherson about how he did not contact
 17 CERT before filing a lawsuit?
 18 Do you remember that?
 19 A. **Yes, sir.**
 20 Q. Did that make you uncomfortable?
 21 A. **No, it didn't make me uncomfortable. Made me -- I**
 22 **thought that there wasn't really attempt to do that.**
 23 Q. Okay. Do you remember how he said, well, you could
 24 have taken a stamp, it's \$0.49 or whatever, you put it on a
 25 letter and you send it to our registered agent for service?

839

1 Do you remember that?
 2 A. **Yes, sir.**
 3 Q. Do you know who that is?
 4 A. **Who is that?**
 5 Q. Sir?
 6 A. **Who is that?**
 7 Q. Do you know who your registered agent for service is?
 8 A. **It's a firm in Delaware.**
 9 Q. It's Corporation Service Company, the one that you've
 10 never heard of; right?
 11 A. **Right.**
 12 Q. Okay. Now, there is no website where I can go to
 13 find how to contact these guys; right?
 14 A. **No, we do not have a website.**
 15 Q. And is there a website that's going to tell me -- I
 16 guess the answer is no. Is there something that's going to
 17 tell me CERT Operations IV, that one's working with
 18 Springhill Resources?
 19 A. **No, there's not a website that would show that.**
 20 Q. I hope you understand. This isn't a matter of
 21 disrespect, but your lawyer crossed my client suggesting he
 22 should have been able to figure that out and contact you
 23 guys.
 24 Do you kind of remember those questions?
 25 A. **I do.**

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1 Q. So anyway, let's say that we put a stamp on a letter
 2 and sent it to you guys and it goes to your registered
 3 agent, and your registered agent picks it up, scans it,
 4 whatever they do, and get it to you. Okay. Would you guys
 5 have stopped putting brominated coals on conveyer belts that
 6 are going into boilers of power plants?
 7 MR. DYESS: Objection, Your Honor. Calls for
 8 speculation.
 9 THE COURT: Mr. Caldwell.
 10 MR. CALDWELL: It's literally their suggestion
 11 that something would have gone down a different path if we
 12 would have contacted them before suing them. They opened
 13 the door to that.
 14 MR. DYESS: There's no suggestion that ever
 15 occurred, so he's asking him to speculate on something.
 16 There's no evidence that ever occurred.
 17 MR. CALDWELL: That's the implication of asking
 18 Mr. MacPherson the cross questions in the first place.
 19 THE COURT: Hold on a second. I'll allow the
 20 questions. Objection is overruled.
 21 THE WITNESS: Would you repeat your question?
 22 BY MR. CALDWELL:
 23 Q. My question was, if we would have put that letter in
 24 the mail to this company you've never heard of and they sent
 25 it to you, would you guys have stopped putting brominated

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1 coal on the conveyer belts going into boilers?
 2 A. **I'm certain we would have had to evaluate the letter
 3 and the context of what it said. I'm not saying we
 4 wouldn't. I can't speculate what the letter would say, who
 5 would receive it, what would be done with it.**
 6 Q. Fair enough. Let's assume it's very thorough and it
 7 literally spells out one of the claims of the patent exactly
 8 like all the language of the claim of the patent and then it
 9 says we believe that your entities, your refined coal
 10 companies, and your CERT Operations companies are inducing
 11 and contributing to infringement and gave you all that
 12 detail. Would you have stopped at that point?
 13 A. **I think we would have handled it the same way we
 14 handled it when we were served with the lawsuit. We would
 15 have turned it over to our attorneys so they could advise
 16 us. We're not patent lawyers.**
 17 Q. So the suggestion that having called you or sent you
 18 a letter would have changed anything, there's just not
 19 really a basis for that; right?
 20 MR. DYESS: Your Honor, I'm going to register
 21 the same objection. He's talking about a hypothetical
 22 letter that's never been written.
 23 THE COURT: I'll allow the question. The prior
 24 question, had there been an objection, I may have agreed on.
 25 This question, I'll allow it, so overrule the objection.

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1 THE WITNESS: I can't speculate on what we would
 2 or wouldn't have done on a letter we did not receive.
 3 BY MR. CALDWELL:
 4 Q. Thank you.
 5 MR. CALDWELL: Mr. Diaz, can I get slide
 6 number 1?
 7 BY MR. CALDWELL:
 8 Q. Do you remember when this slide as a demonstrative
 9 was shown by my colleague, Mr. Nemunaitis, with Mr. O'Keefe?
 10 A. **Yes. I remember this slide.**
 11 Q. And, I mean, obviously you can take a second to check
 12 it. I'm not trying to cheat you or anything, but you don't
 13 dispute that this is sort of generally the orientation of
 14 the companies, at least in terms of which operations
 15 companies are associated with which contracting defendants
 16 or power plants; right?
 17 A. **Yes, sir, I agree with that.**
 18 Q. And then Mr. Nemunaitis showed that in the system,
 19 tax credits flow up to these investors like JPMorgan and
 20 Mylan Pharmaceuticals, correct?
 21 A. **Correct.**
 22 Q. How do you pronounce that one that starts with a K?
 23 A. **Kiewit.**
 24 Q. Kiewit? Okay. And then there was another one click
 25 that he didn't get to show, but I think you have personal

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1 knowledge that money comes from the CERT investors down to
 2 the CERT Partners; correct?
 3 MR. DYESS: Your Honor, I object. May we
 4 approach, please?
 5 THE COURT: You may. We'll see counsel at
 6 sidebar.
 7 (Thereupon, a discussion was held at sidebar.)
 8 THE COURT: Okay. What's your objection?
 9 MR. DYESS: Your Honor, my concern is where this
 10 is going. Jeff Green is not on trial here. He hasn't been
 11 accused of infringement in this case. We've already let
 12 them get into the investors of the company.
 13 Are we going to let -- I'm concerned we're going
 14 to let him try this case by putting somebody on trial that
 15 hasn't been accused of anything. In this case Jeff Green is
 16 not on trial here.
 17 THE COURT: Let me understand the basis for the
 18 objection. Mr. Green is not on trial. He's not a
 19 defendant. He's an adverse witness, so the questions are
 20 leading so there's going to be an aspect of them that he's
 21 going to be suggesting an answer or disbelieving the
 22 response, but there's nothing inappropriate about that.
 23 So I'm not sure I understand the nature of the
 24 objection.
 25 MR. DYESS: I apologize for speaking over

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1 Your Honor. I think the basis of it would be a Rule 403
2 objection. We really don't see the relevance of it because
3 Mr. Green is not on trial. It's extraordinarily prejudicial
4 if they're going to get into how much money the witness
5 has --

6 THE COURT: The nature of the objection is less
7 about the nature of the questions or the tone of them and
8 more that you're asking some questions about monies that
9 flowed from some of the CERT entities and the defendants to
10 the investors and the monies that flow back to the parties
11 and CERT entities.

12 And what's your response?

13 MR. CALDWELL: There's two fundamental
14 responses. One is this is the way every trial goes in the
15 sense there's a human being that speaks on behalf of the
16 company. That's not something that changes unless we have
17 AI trials at some point in the future, which is scary.

18 Your Honor has squarely addressed the relevance
19 of these funds in this situation where intent and motive and
20 then continued motive, continued intent, from selling
21 continues after you know about the patents at issue.

22 This has been squarely addressed in multiple
23 rulings, I think, from Your Honor. I'm going directly to
24 the thing.

25 Now, our expert wasn't allowed to do it because

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1 of the qualifications. This gentleman is one of the guys
2 that gets money. He has personal knowledge --

3 THE COURT: What Mr. Caldwell says seems correct
4 to me.

5 Anything more you want to add?

6 MR. DYESS: The only thing I would add is to the
7 extent this is a consideration, they have said Mr. Green
8 had -- and Philip Green had said this information is not
9 relevant to his damages. I would add that adds to the lack
10 of relevance I understand.

11 THE COURT: Fair enough. I'm going to overrule
12 the objection.

13 And, Mr. Caldwell, the Court has addressed this
14 issue, which is that testimony about monies that flowed to
15 CERT entities including those partners that ran or
16 controlled them, that it in some way relates to the
17 provision of the refined coal is relevant to the issues of
18 direct infringement, including the (inaudible) that is
19 asserted to have engaged in that, and that certainly can be
20 the subject of questioning back from defendants' counsel
21 after Mr. Caldwell is done.

22 So I'll overrule the objection.
23 (The discussion at sidebar ended.)

24 THE COURT: Mr. Caldwell?

25 MR. CALDWELL: Thank you.

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1 BY MR. CALDWELL:

2 Q. So I don't remember what my question was, but I tend
3 to re-ask the exact same question.

4 So you know, based on personal knowledge,
5 correct, that then money flows from the CERT investors over
6 and down to the CERT Partners of which you are one; correct?

7 A. **Correct.**

8 Q. Speaking of these refined coal or investment vehicle
9 LLCs, the ones in red, do they share a bank account?

10 A. **Do they share a bank account?**

11 Q. Yes.

12 A. **No.**

13 Q. Is that something you would defer to Ms. Schaatt on
14 or are you certain about that?

15 A. **All of these bank accounts are held separately, and
16 they all have bank accounts for each on of these CERT
17 Operations -- well, each of the refined coal project
18 companies.**

19 Q. And you are aware at least that the CERT organization
20 overall provides sort of like a treasury management function
21 on behalf of all entities?

22 A. **Yes, that's correct, and that's what I think
23 Leah Schaatt testified to in her deposition.**

24 Q. So Mr. Dyess I think it was made it clear or made the
25 point at some point in this trial that these investors up

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1 here aren't actually the ones that fronted the cost for
2 things like sprayers and whatnot. Maybe they invested later
3 or something along those lines?

4 A. **All of these refined coal project companies were
5 installed and operating before any of the investors came
6 into the project.**

7 Q. I hadn't quite got to the question. I was going to
8 ask: Who was it that fronted the money for the sprayers and
9 all that?

10 A. **The CERT Partners did.**

11 Q. And then off of these contracting defendants and
12 operating defendants associated with these eight power
13 plants, approximately how much money have the CERT Partners
14 made?

15 A. **During what time period are we talking about?**

16 Q. Overall.

17 A. **I don't know. I don't think the CERT Partners made
18 anything directly other than salaries.**

19 Q. That's a because it actually just goes into on LLC
20 that you set up to hold your interest?

21 A. **There are LLCs that hold different members' interest
22 yeah.**

23 Q. Well, I mean, I don't want to have to do a big org
24 chart on what's going on in the CERT Partners.

25 Let me just ask you this: From certain

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1 investors to CERT, how much money has flowed associated with
2 these defendants?
3 **A. I couldn't tell you that off the top of my head.**
4 **Q.** Overall, can you give me at least an order of
5 magnitude?
6 **A. I would say that the investors pay anywhere from**
7 **75 percent to 95 percent of the value of the tax credits**
8 **that was forecasted prior to them buying into the project**
9 **that they would produce. It was just based on a tonnage.**
10 **Q.** Just a wild guess, even within 30, 50 percent, rough
11 estimate, how much money has gone from investors to CERT for
12 these companies?
13 **A. I can't speculate.**
14 **Q.** Is there an LLC that's a CERT partner that you own?
15 **A. I'm sorry?**
16 **Q.** Is there an LLC you own that is a CERT partner?
17 **A. As a CERT partner, do I own an LLC?**
18 **Q.** Yes.
19 **A. Yes.**
20 **Q.** And is that where the entirety of your portion of the
21 investment money goes?
22 **A. It is.**
23 **Q.** About how much money has your LLC made from the
24 defendants that are in this case?
25 **MR. DYESS:** Your Honor, we just need to lodge

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1 the same objection.
2 **THE COURT:** Okay. That objection is noted.
3 Overruled.
4 **THE WITNESS:** I would just have to look at
5 records. I couldn't tell you right now.
6 **BY MR. CALDWELL:**
7 **Q.** Can you tell me within \$15 million?
8 **A. Yeah. I would say -- I mean, maybe say 50 million.**
9 **Q.** And that's for -- that's for -- to be clear, I was
10 asking about for your LLC within the CERT Partners; correct?
11 You understood that was my question; right?
12 **A. Yeah -- just I have to -- I'd have to look at it and**
13 **see.**
14 **Q.** I'm not trying to pin you to exactly \$50 million.
15 I'm looking for an order of magnitude.
16 **And my question was:** You understood that when I
17 asked that question, I was just referring to your LLC's
18 portion of CERT Partners.
19 **Did you understand that that's what I was**
20 **asking?**
21 **A. Yeah, okay. I mean, I would say it's in the**
22 **neighborhood of \$50 million.**
23 **Q.** Now, are you the majority -- is our LLC the majority
24 partner of CERT Partners?
25 **A. No, sir.**

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1 **Q.** What percent of CERT Partners is your LLC?
2 **A. Under 20 percent.**
3 **Q.** Do you have a sense as to what the value of the tax
4 credits is that these investors, JPMorgan, Kiewit, and
5 Mylan, have made from the defendants in this case -- the
6 work of the defendants in this case in the damages period
7 we're talking about from starting July of 2019?
8 **A. I think somebody testified yesterday or the day**
9 **before that the tax credit values were 25 and \$7.**
10 **Q.** And you understand that's what at issue is 57 million
11 tons of coal?
12 **A. Okay.**
13 **Q.** And so we would be looking at 5 to \$7 in tax credits
14 times 57 million tons of coal, if those numbers are correct;
15 right?
16 **A. Correct.**
17 **Q.** Do you agree with that?
18 **A. I do.**
19 **Q.** And this isn't the first time you guys have operated
20 a tax credit business; right?
21 **A. No, I've been involved in a prior one.**
22 **Q.** And am I correct that the way that your group, the
23 CERT group, got involved in this one is that another company
24 that had previously done a tax credit business with you guys
25 invited you to this one or introduced you to it?

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1 **A. We had acquaintances with another refined coal**
2 **producer.**
3 **Q.** Which refined coal producer was that?
4 **A. That was AJ Gallagher.**
5 **Q.** And you're aware that AJ Gallagher, a refined coal
6 producer, who was previously a defendant in this case;
7 right?
8 **A. I'm aware of that.**
9 **Q.** When did you learn that AJ Gallagher and DTE paid
10 over \$27 million for a license to the patents?
11 **A. It was in November of '22, I guess. I think about --**
12 **Q.** You mean November of '23, just this last November?
13 **A. Yeah, you're correct.**
14 **Q.** So how did you get access to that document? How did
15 you get access to that --
16 **A. I saw it on the screen.**
17 **Q.** No, no. I'm asking: When did you learn that
18 AJ Gallagher had paid over 27- -- AJ Gallagher and DTE paid
19 over 27 million to license the patents?
20 **A. I didn't know that AJ Gallagher had paid 27 -- or**
21 **whatever that settlement was. I didn't know that number**
22 **until this week in court.**
23 **Q.** Thank you.
24 **So you said C-E-R-T, CERT, that stands for**
25 **Combustion Emission Reduction Technologies, and so just to**

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1 be clear, I kind of Googled this. There's a lot of things
 2 that relate to energy that actually say CERT but they're not
 3 you guys; right? You're not Clean Energy Resource Team,
 4 that's not you; right?
 5 **A. That's not us.**
 6 **Q.** And you're not CERT systems that's part of
 7 breakthroughenergy.org?
 8 **A. No, sir.**
 9 **Q.** And you're not the Council of Energy Resource Tribes,
 10 that's a Native American group obviously; correct?
 11 **A. Not us.**
 12 **Q.** So what combustion emission technologies did you guys
 13 come up with?
 14 **A. We licensed technology from Chem-Mod.**
 15 **Q.** You used somebody else's technology; correct?
 16 **A. Yes, sir.**
 17 **Q.** Do you practice the Chem-Mod patent?
 18 **A. Yes, sir.**
 19 **Q.** Would you also agree -- we took your deposition like
 20 everybody else had their depo taken. Am I correct that it
 21 is your view, you, Mr. Green, who is an engineer have no
 22 firsthand knowledge that the refined coal from CERT produces
 23 any emissions benefit at a power plant?
 24 **A. That I don't have firsthand knowledge?**
 25 **Q.** Yes.

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1 **A. The utilities do not -- we're on -- we're there to**
 2 **sell them a fuel. The utilities don't share their emissions**
 3 **data with a lessee on their property.**
 4 **Q.** So I think we're in agreement. I just want to make
 5 it clear. You have no firsthand knowledge that your refined
 6 coal has made an emissions improvement at an actual coal
 7 plant; correct?
 8 **A. No firsthand knowledge, no, sir.**
 9 **Q.** But you do understand that the point of the Section
 10 43 tax credits is to reduce mercury emissions; right?
 11 **A. No, I would say that the purpose of the refined coal**
 12 **program is to reduce mercury emissions and NOx emissions.**
 13 **Q.** Did I say the section wrong? In addition to the NOx.
 14 Did I say the section number wrong?
 15 **A. Mercury and NOx.**
 16 **Q.** There's a requirement when you are going to claim tax
 17 credits that you intend for that refined coal to be burned
 18 to generate steam; right?
 19 **A. That's correct.**
 20 **Q.** So when Springhill Resources has CERT Operations IV
 21 generating refined coal at Big Cajun II, where are they
 22 intending for that coal to be burned to generate steam?
 23 **A. Well, in that instance it would be we're selling that**
 24 **to Big Cajun II, so most likely it's going to be burned at**
 25 **Big Cajun II.**

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1 **Q.** You have no expectation that it will be burned
 2 anywhere other than Big Cajun II; correct?
 3 **A. That's not our expectation. We're under contract to**
 4 **sell it to Big Cajun II so that's what I assume they would**
 5 **be doing.**
 6 **Q.** I don't want to belabor this. The point I want to
 7 sort of get to quickly is in every one of these instances
 8 where you're operating a refined coal facility, your
 9 expectation is it will go into the boilers at that facility;
 10 correct?
 11 **A. I would say that's our overall expectation.**
 12 **Q.** But yet you say you don't have any firsthand
 13 knowledge that you actually help emissions, and I'm
 14 wondering is that because the position in this trial of CERT
 15 is trying to distance itself from knowing about the
 16 emissions equipment at the coal plants?
 17 **A. No, we're not involved in emissions control equipment**
 18 **at power plants. We are a fuel manufacturer that qualifies**
 19 **for the Section 45 program.**
 20 **Q.** Right. You claimed what sounds like I guess it's
 21 hundreds of millions of dollars of tax credits for that
 22 refined coal and yet you say as a company we don't even
 23 really know if we reduced emissions?
 24 **A. We believe we do. You have to have firsthand**
 25 **knowledge of what happened at the power plant. I have**

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1 **firsthand knowledge of the testing I've been involved with.**
 2 **Q.** And I think -- I mean, is it fair that in this trial
 3 it is CERT, all the CERT defendants, it's their position
 4 that they just don't know what's going on in terms of
 5 emissions control at the power plants?
 6 **A. We are not involved with the emissions control at**
 7 **power plants. We are involved in producing a fuel.**
 8 **Q.** Again, I mean no disrespect, but there's something
 9 I'm asking that's a tiny bit different. I'm not asking what
 10 you would refer to is involved. I said are you trying to
 11 have the position in this trial that you don't know what's
 12 going on with the emissions control equipment at those power
 13 plants?
 14 **A. Not at all. That's not the position I'm taking, I**
 15 **don't have knowledge of what's going on with the emissions**
 16 **control at those power plants.**
 17 **Q.** Now, one thing is that in opening your lawyer said
 18 that we don't go inside the walls of the power plant.
 19 And just to be clear, you do get security
 20 clearance, you get to go to a power plant, you just may not
 21 go inside something like the boiler. There may be certain
 22 buildings you don't go into; right?
 23 **A. We do not go into the generating area.**
 24 **Q.** When you take refined coal and you put it on that
 25 conveyer belt expecting that it's going to be burned at Big

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1 Cajun II, what do you expect is going to happen with the
2 exhaust gases from it being burned?
3 **A. What do I expect is going to...? The last part of**
4 **your question, what do I expect the exhaust gases to what?**
5 **Q.** Sir, when you take what you call refined coal and put
6 it on the conveyer belt to go to the boiler at Big Cajun II,
7 what are you expecting is going to happen with the exhaust
8 gases when that coal is burned?
9 **A. I'm expecting the exhaust gases to have 40 percent**
10 **less mercury and 20 percent less NOx.**
11 **Q.** And at that point right then after the boiler with
12 40 percent less mercury, you expect them to just go ahead
13 and release it into the atmosphere?
14 **A. Let me try to be clear again. We are a fuel**
15 **manufacturer. We sell the self-contained fuel to a power**
16 **plant. I am not privy to what goes on at that power plant**
17 **in the furnace, in the flue gas, in the ESP. I'm not sure**
18 **what you're trying to get at, but that is not part of my**
19 **business and that's not what I'm here to testify about.**
20 THE COURT: Mr. Caldwell, you have time for one
21 more question.
22 MR. CALDWELL: Oh, before the end of the day?
23 BY MR. CALDWELL:
24 **Q.** Mr. Green, you know full well that the exhaust path
25 after the boiler at every one of the power plants involved

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1 in this case, the exhaust path includes injection of
2 activated carbon, don't you?
3 **A. I do now. I do, yes.**
4 **Q.** And you did at the very least for almost two and a
5 half years before you guys shut down the program; correct?
6 **A. That's correct.**
7 MR. CALDWELL: This is a pretty good time to
8 stop.
9 THE COURT: All right. Thank you.
10 All right. So that ends our testimony for
11 today. Again we thank our jurors and look forward to seeing
12 them tomorrow morning by 9:00 a.m. With that, we'll have
13 the jury led out.
14 (The jury exited the courtroom.)
15 THE COURT: Mr. Green, you may come down. Go
16 back to counsel table.
17 Just a couple housekeeping things. Parties may
18 have noticed, we had a chair malfunction with one of the
19 chairs in the jury. The bolts are old, so our juror who was
20 previously the second juror in the back row has now shifted
21 up to sit in the second seat in the front row where the
22 juror got excused. I'm just explaining what had happened.
23 Let me briefly talk about the plaintiffs' motion
24 for a curative instruction based on defendants' improper
25 arguments made to the jury concerning indirect infringement.

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1 So I reviewed that motion which is at DI 686. I
2 also reviewed the CERT defendants response to the motion,
3 and essentially I agree with everything in the CERT
4 defendants' response. If I were issuing a decision on the
5 motion, I would write it almost exactly the way the CERT
6 defendants wrote it in their response. And just more
7 specifically, particularly to the core of the request which
8 was that the Court issue a curative instruction during the
9 trial prior to, I guess, the initial testimony of Mr. Green
10 and defendants beginning of their case in chief. I don't
11 believe that it's appropriate to do so for the reasons
12 essentially that the CERT defendants gave me in their
13 letter.
14 I agree with the CERT defendants that the
15 evidence at issue can be relevant for the particular purpose
16 that the CERT defendants are attempting to use it for and
17 not for any other purpose. I certainly agree with the
18 plaintiffs that otherwise it isn't relevant and the jury is
19 certainly going to be instructed that with regard to the
20 elements of contributory infringement that the coal that is
21 materially at issue is only that coal dating from the
22 beginning of the damages period and thereafter. We'll need
23 to craft a jury instruction that's sufficiently makes that
24 clear to the jury but that also makes clear in what way any
25 other coal that they may have occurred could possibly be

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1 relevant to a response and to the charges by the defendants.
2 The plaintiffs' proposal doesn't adequately do
3 that and we'll need to work on that. We'll work on that at
4 the prayer conference, but there's a lot of, I think,
5 difficult issues in the case. The jury will have to go
6 through the technology and the law. I don't know that this
7 issue, although I admit it's a challenging one, is
8 necessarily more challenging than other difficult issues the
9 jury will have to address and parse through. Of course the
10 way they're going to be able to do that is for able counsel
11 here through their direct and cross-examinations and also
12 through the closing arguments with the benefit of the final
13 jury instructions that I provide we will try to walk the
14 jury through that evidence and that walk in a way that they
15 believe is favorable to the client, and I agree with the
16 CERT defendants that there's not a reason to prioritize that
17 issue or put it front and center because I think it's not
18 warranted and could I think be seen as pejorative in some
19 way to the defendants. I don't know that they have done
20 anything wrong at this stage.
21 So for that reason I'm going to deny the motion
22 to the extent of the request that I issue a jury instruction
23 prior to final jury instructions would risk further the
24 issue of what the appropriate instruction will be on that
25 front at the prayer conference. So I wanted to deal with

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1 that issue.

2 With that said, is there anything further that

3 either side wishes to raise procedurally before we conclude

4 for the day, knowing that you have work ahead of you

5 tonight?

6 Mr. Caldwell?

7 MR. CALDWELL: The only thing I would seek ten

8 seconds of clarity on. We had an understanding with

9 opposing counsel that when someone is on cross-examination

10 they can't be interfered with by counsel or whatever, that

11 they're sort of sequestered. I'm sorry, it doesn't mean

12 Mr. Green can't have dinner, but I just want to make sure

13 that...

14 THE COURT: The rule is that they're discussing

15 is while a witness is on cross-examination or the

16 equivalent, the counsel can't discuss the substance of the

17 witness's testimony with the witness.

18 Mr. Dorsney?

19 MR. DORSNEY: We have the same question. So we

20 still have to prepare the witness for direct. Does the

21 Court have guidance on preparing the witness for direct?

22 Because the Court hasn't -- will be there be some allowance

23 for like an hour-and-a-half break, some way to prepare our

24 witness for direct? Otherwise, we'll suffer a good deal of

25 prejudice not being able to talk to our witness.

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1 THE COURT: Have you not prepared your witness

2 for direct testimony to date?

3 MR. DORSNEY: Well, Your Honor, of course, we

4 prepared him up to this point, but in any trial of this

5 length and magnitude -- just asking for guidance on the

6 issue. If we're not allowed to talk to the witness at all,

7 that's guidance. That's all I was asking for.

8 THE COURT: Okay. Mr. Caldwell, do you see some

9 distinction between questions or discussion of the substance

10 of Mr. Green's testimony here as you called him as a witness

11 vis-à-vis the intended or proposed direct that's coming

12 perhaps tomorrow?

13 MR. CALDWELL: Absolutely not. The parties were

14 disclosing multiple witnesses that were going to come after

15 him today because I think the whole day proceeded much

16 slower. I mean, clearly they were prepared to go forward on

17 direct today. We were expecting, like I say, two witnesses

18 beyond this. And I mean, I think the exception swallows the

19 rule if basically you're saying well, let's go work on this

20 direct, then there's no point in having the rule in the

21 first place.

22 THE COURT: I agree. So overnight, until

23 Mr. Green takes the stand again, there will be no discussion

24 of the substance of his testimony, whether it be his

25 anticipated response to cross-examination as the first

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1 witness or his direct testimony.

2 Let me say for the record that I do agree with

3 the plaintiffs that the parties, no doubt, have been

4 preparing multiple witnesses over many days and weeks,

5 witnesses that might well have testified the day before or

6 day after, depending exactly how the trial went.

7 There might be a chance tomorrow depending on

8 how things go with breaks and things where we can try to

9 give the defendants a little leeway in speaking with

10 Mr. Green after his testimony as an adverse witness is done.

11 We can always keep that as possible. Otherwise, that will

12 be the Court's ruling.

13 Anything further from the plaintiff?

14 MR. CALDWELL: No, sir.

15 THE COURT: On the defendants' side, anything to

16 take up?

17 MR. DYESS: No, sir.

18 THE COURT: I wish everybody a good night. The

19 Court will stand adjourned for the day.

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1 CERTIFICATE

2 I, Deanna L. Warner, a Certified Shorthand Reporter,

3 do hereby certify that as such Certified Shorthand Reporter,

4 I was present at and reported in Stenotype shorthand the

5 above and foregoing proceedings.

6

7

8 Deanna L. Warner, RPR, CSR

9 Official Court Reporter

10 U.S. District Court

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1 A. **No, I'm saying that Big Cajun II has no obligation to**
2 **burn the fuel they purchase in their boiler.**
3 Q. I really just want a clear answer as to your
4 expectation. When you guys made refined coal at one of
5 these plants, you want it to get burned so you can claim a
6 tax credit; correct?
7 A. **No question about that.**
8 Q. And you expect that to happen at the coal plant where
9 you created that refined coal; right?
10 A. **That is not an obligation of the contract of where**
11 **they burn that coal.**
12 Q. Did I ask anything about, like, obligation of a
13 contract?
14 A. **It would make the most sense that that coal is burned**
15 **at Big Cajun II.**
16 Q. Mr. Green, when you make refined coal at your Big
17 Cajun II refined coal sprayers, it is CERT's expectation it
18 will get burned at Big Cajun II; correct?
19 A. **We do not have an expectation, and I don't know what**
20 **you're referring to as "sprayers."**
21 Q. So yesterday when I said your expectation it was --
22 it will go into that -- I'm sorry, lost track.
23 Yesterday when I asked you: "Your expectation
24 is it will go into the boilers at that facility; correct?
25 And you said: "I would say that's our overall expectation."

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1 That's what you testified here in court under
2 oath; correct?
3 A. **You're reading from the testimony, yes.**
4 Q. And today you're saying you did not have that
5 expectation?
6 A. **I'm not trying to be argumentative. I'm telling you**
7 **that it makes the most sense that Big Cajun II would burn**
8 **that coal. If that's an expectation as where it will be**
9 **burned, then I would agree with you. I'm saying we do not**
10 **have -- Big Cajun II does not have an obligation to burn**
11 **that coal. I do agree with your statement that we do expect**
12 **that coal to be burned to generate heat, to make steam to**
13 **make electricity. That is our expectation.**
14 Q. Let's approach it slightly differently. When you
15 make refined coal at Big Cajun II, you weren't expecting it
16 to be burned anywhere other than at Big Cajun II; right?
17 A. **It made the most sense to be burned at Big Cajun II,**
18 **yes, it did.**
19 Q. And for W.A. Parish, when CERT made refined coal at
20 W.A. Parish, you were not expecting it to be burned anywhere
21 else than in the coal combustion process at W.A. Parish;
22 correct?
23 A. **There was no expectation it would be burned somewhere**
24 **else.**
25 Q. And the same thing for Coletto Creek; correct?

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1 A. **Correct. I mean, all of those would fall under the**
2 **same impression that that coal is being sold to a utility**
3 **where it's located at that plant. If there were economic**
4 **incentives for them to move it somewhere else they could**
5 **burn it, but I'm not saying that we never expected that coal**
6 **to not be burned for the production of electricity.**
7 Q. At the plant where you turned it into refined coal;
8 correct?
9 A. **Our expectation is that we would be paid for the**
10 **refined coal that we were producing and selling to a**
11 **utility.**
12 Q. I'm asking you questions about location and you're
13 telling me things about selling. Your expectation is the
14 coal, the refined coal you make will be burned in the coal
15 combustion process at the plant where you made the refined
16 coal; correct?
17 A. **All of it was.**
18 Q. You've been here for the whole trial; right?
19 A. **Yes, sir.**
20 Q. And you remember your lawyer said in opening he's,
21 like, well, there's some questions that get to our state of
22 mind, so you're going to have to look at the credibility of
23 the witnesses and only our witnesses can tell you about our
24 state of mind. Do you remember stuff like that?
25 A. **I do.**

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1 Q. And you also remember the judge said there's direct
2 evidence and there's circumstantial evidence of what was
3 going on and the facts that the jury gets to determine?
4 A. **Yes, sir.**
5 Q. Is this the reason you're refusing to answer this
6 question about whether in each instance you expected the
7 coal to be burned in the combustion process at the plant
8 where you made it?
9 A. **I'm just -- I'm here to testify about facts. We were**
10 **selling refined coal from a facility that was located at a**
11 **power plant. It makes the most sense that it would be**
12 **burned at that power plant. All of the coal produced at**
13 **those power plants were burned at those power plants.**
14 **I can't speak to the state of mind of what a**
15 **utility is going to do that has the contractual rights to**
16 **burn that coal anywhere.**
17 **We produced coal at those facilities, yes, that**
18 **is correct.**
19 Q. And you wanted the coal to be burned in a steam
20 generation electrical process; right?
21 A. **Yes, sir, that is correct.**
22 Q. And had no expectation that it would in any other
23 steam-generation process than the one at the plant where you
24 made that coal, you had no other expectation; right?
25 A. **I am not are trying to argue, sir. I'm just saying**

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1 we have an expectation that that coal is going to be used to
2 produce power.
3 Q. When I said: What do you expect?
4 You say: I'm not sure they can contractually
5 move it somewhere else.
6 And then when I reframed it earlier to: Okay.
7 But you definitely weren't expecting it to go somewhere
8 else.
9 Do you remember that? And you were, like, yeah,
10 I can't really identify a place where it can go somewhere
11 else.
12 I'm hoping that we can at least agree on that.
13 You can't identify an expectation that coal is going
14 anywhere else than the power plant where you make the
15 refined coal; right?
16 A. That is true, I can't identify anywhere else.
17 Q. I'm trying to agree with you. I'm trying to stick
18 with that you have no other expectation of it going
19 somewhere else. That's why I'm trying to piece this
20 together using what you just agreed to.
21 You want it to be burned in a coal steam
22 electrical generation process for the IRS credits; yes?
23 A. That was our expectation, yes.
24 Q. And that's what you want to happen so you can claim
25 tax credits, the burning in a steam generation process;

873

1 right?
2 A. That is our full expectation that TT would be done.
3 Q. And you tell the IRS that's what you believe is going
4 to happen; right?
5 A. Yes, sir.
6 Q. And you have no expectation, none, that it's going to
7 happen somewhere other than where you made the refined coal;
8 right?
9 MR. DYESS: Your Honor, we have an objection.
10 This question has been asked and answered several times.
11 THE COURT: I'll overrule the objection.
12 THE WITNESS: I don't know how to be more clear.
13 It makes the most sense that it would be burned at that power
14 plant. I'm not objecting -- I'm not -- I'm not disagreeing
15 with every bit of coal that was produced at Big Cajun II was
16 burned at Big Cajun II.
17 BY MR. CALDWELL:
18 Q. All right. At the end of your testimony yesterday I
19 had asked you this question about whether you know full well
20 that the exhaust path after the boiler at every one of those
21 power plants involved in this case, the exhaust path
22 includes injection of the activated carbon. Do you remember
23 that question?
24 A. Yes, sir.
25 Q. And as I understand your response was "I do now";

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1 right?
2 A. I do, yes.
3 Q. And was your point that once CERT entities received
4 the original complaint, they check with plants and confirm
5 which ones were using activated carbon?
6 A. We did confirm at that time, yes, sir.
7 Q. But you and others in the CERT partners already knew
8 each of the plants that are in this case were using
9 activated carbon; right?
10 A. We did know. We had had some e-mails. When we were
11 **sued in this case, we started looking at e-mails to see when**
12 **we may have been notified to have the information that they**
13 **were using activated carbon.**
14 Q. So yesterday the emphasis on "now," you didn't mean
15 to imply that you were unaware of these plants using
16 activated carbon prior to the lawsuit? You didn't mean to
17 give that impression, did you?
18 A. No, sir.
19 Q. And would it be accurate if your lawyers were to
20 represent that we didn't know that these plants were using
21 activated carbon, that's why we had to call them?
22 A. That would not be correct that we had to call them.
23 **There were some that we had no idea about.**
24 Q. It's not any of these eight plants. You knew Big
25 Cajun II, Parish, Coletto Creek, Limestone, Labadie, Laramie,

875

1 Rush Island, Powerton and Antelope Valley were using
2 activated carbon?
3 A. I think that we knew at some point that they were
4 **using activated carbon for some amount of time, but that's**
5 **really not part of our business. So it wouldn't have stuck**
6 **with you.**
7 Q. You knew it before the lawsuit?
8 A. I can agree with that.
9 Q. You should have your cross binder up there. We'll
10 try to do this quickly since you're kind of agreeing with me
11 that you knew some of this. But will you flip to the tab
12 that's for Plaintiffs' Exhibit 545?
13 A. 545, is that a tab number?
14 THE COURT: I think it's tab 3, Mr. Caldwell.
15 MR. CALDWELL: I'll try to keep the little index
16 handy so I get you there quicker.
17 THE WITNESS: I'm here.
18 BY MR. CALDWELL:
19 Q. Okay. And just -- I mean, you're aware of what 545
20 is; right? It's one of the Sargent & Lundy reports that
21 were prepared?
22 A. Yes, sir, I'm familiar with this.
23 Q. And in this case this Sargent & Lundy report is
24 related to -- the second one on my chart here, the W.A.
25 Parish plant; right?

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1 A. **That is -- that is correct.**

2 Q. That's the big plant I showed in the opening, just

3 the big coal pile that's kind of outside of Houston; right?

4 A. **Yes, sir. That's right.**

5 Q. All right. And just for the context of this

6 document, obviously your company is not Sargent & Lundy, but

7 am I correct that what happened is JPMorgan says, hey,

8 before we invest or around the time we're considering

9 investing, we'd like you to commission some sort of

10 engineering report about the plant?

11 A. **Yes, JPMorgan did engage Sargent & Lundy to prepare**

12 **this report prior to investing in the project.**

13 Q. Well, I think technically JPMorgan required you guys,

14 CERT, to engage -- to get a report commissioned; correct?

15 A. **I don't recall that we engaged. No, we did not**

16 **engage Sargent & Lundy.**

17 Q. Okay. Well, then let's just do it this way: You

18 provided some information to support the report; correct?

19 A. **Absolutely.**

20 Q. And you received a final copy; right?

21 A. **Yes, sir.**

22 Q. All right. And for the sake of just being

23 expeditious, let's look at -- just flip to the one that's

24 for -- I was going to say PTX 77 but it kind of doesn't

25 matter. It's already been admitted. And there's a PTX --

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1 it's fine, I'll show them in just a second. It's PTX 690.

2 There's a Sargent & Lundy report for Limestone which is PTX

3 690, and you don't dispute that there's one for Limestone;

4 correct?

5 A. **Can you tell me what tab number that is?**

6 Q. I don't actually -- it's in there. I'll show you in

7 a just second. My point is, for each one of the five

8 JPMorgan plants, you don't dispute that there's a Sargent &

9 Lundy report; correct?

10 A. **To my recollection, yes.**

11 Q. And I'm happy to give it to you, I'm definitely not

12 trying to hide. My point is that --

13 A. **I'm familiar. Thank you.**

14 Q. Yes, sir. My point is that --

15 A. **The dates are before the lawsuit; right? All of them**

16 **are dated. Are they all dated before 2019?**

17 Q. I'm going to -- we'll get into all this. I'm just

18 asking you, there's no dispute there's a Sargent & Lundy

19 report for each of the five plants that JPMorgan got

20 involved in that are in this case which is Big Cajun II,

21 W.A. Parish, Coletto Creek, Limestone and Labadie?

22 A. **Yes, sir.**

23 Q. We're on the same page. One of the things that

24 Sargent & Lundy looked at in there was the emissions

25 equipment for the plants, are you aware of that?

878

1 A. **I recall that, yes.**

2 Q. And like I said, you received the final version for

3 each one of these; correct?

4 A. **That is correct.**

5 MR. CALDWELL: Mr. Diaz, can I have slide 17?

6 BY MR. CALDWELL:

7 Q. Now, this is from Plaintiffs' Exhibit 545. It's

8 already an admitted exhibit. All I wanted to observe just

9 to make sure we don't have a terminology problem, is there

10 were describing activated carbon injection as AECI; correct?

11 A. **That is correct.**

12 Q. And each of these reports kind of acknowledges that

13 that plant is using activated carbon for Hg or mercury

14 control; right?

15 A. **That is correct.**

16 Q. And then this is one for Springhill -- not to belabor

17 the same point -- activated carbon for mercury control. And

18 that's Springhill Resources, so that would be for the Big

19 Cajun plant; correct?

20 A. **Yes, sir, that's correct.**

21 Q. So now for this Rutledge LLC that's the Limestone

22 plant and, again, it was using activated carbon for mercury

23 control?

24 A. **That's correct.**

25 Q. Then for Labadie, Labadie which is associated with

879

1 this Larkwood LLC entity; correct?

2 A. **Yes, sir, that's correct.**

3 Q. They used activated carbon injection for mercury

4 control; right?

5 A. **At some point in time, yes, sir.**

6 Q. Okay. And then for the Bascobert, that's related to

7 Coletto Creek; correct?

8 A. **That is correct.**

9 Q. And Coletto Creek was using activated carbon injection

10 for mercury control; correct?

11 A. **Correct.**

12 Q. So trying to do this quickly, I just want to observe

13 that for five of the eight plants, prior to this lawsuit you

14 guys had -- or at least on three of them I think are old

15 enough to be prior to the lawsuit, maybe two of them

16 happened in 2019. Does that sound right?

17 A. **Sounds right.**

18 Q. And one of the things you've heard from being here in

19 court is you heard the testimony of Mr. Pavlish; right?

20 A. **Yes, I did.**

21 Q. And you heard your lawyers and me all of us kind of

22 referring to this two-part process of bromine that sort of

23 comes in with the coal and then there's combustion, and in

24 the flue gas there's activated carbon and people have called

25 it, like, a two-step process?

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1 A. **Yes.**

2 Q. So the reports you guys had from Sargent & Lundy,

3 they describe that that's really exactly what each of those

4 plants is doing, doesn't it?

5 A. **I'm not sure how you make that conclusion.**

6 Q. Well, when they refer to MerSorb, that's the bromine

7 compound at these facilities; correct?

8 A. **It's used in the production of refined coal, but yes.**

9 Q. I didn't ask if it was used in the production of

10 refined coal. I'm asking MerSorb is the bromine?

11 A. **MerSorb does contain the bromine, yes. Right.**

12 Q. So each one of the Sargent & Lundy reports tells us

13 that MerSorb, the bromine, is a proprietary solution

14 including calcium bromide. The chemicals are added to the

15 coal on the conveyer belt, coal yard in the boiler building

16 before the fuel enters the boiler. Did I read that

17 correctly?

18 A. **You read that correctly.**

19 Q. Then it says -- do you remember when Mr. Pavlish was

20 describing oxidation or iodizing so that you can then

21 capture the mercury?

22 A. **Yes, sir.**

23 Q. And that's exactly what the Sargent & Lundy reports

24 describe, that the MerSorb and bromine additive ionizes

25 elemental mercury in the coal so that it can form a compound

881

1 with unburned carbon in the coal, fly ash, bottom ash,

2 activated carbon and then to a lesser extent, the S-Sorb.

3 Do you see that?

4 A. **I see that.**

5 Q. And you don't dispute that each of these Sargent &

6 Lundy reports relays this information about mercury control,

7 do you?

8 A. **No, I don't. I believe that this -- the text that**

9 **you just read comes from the Chem-Mod Technology's website**

10 **if I'm not mistaken.**

11 Q. What makes you think that's true?

12 A. **Well, all of that informations is information that we**

13 **received from Chem-Mod about how their process works.**

14 Q. And so then did you provide it to Sargent & Lundy?

15 A. **You know, I don't know exactly how they came up with**

16 **this text. My role in preparing or assisting in the**

17 **preparation of these reports was to get information that I**

18 **could and that typically dealt with discussing our refined**

19 **coal facilities.**

20 Q. Okay. Fundamentally you don't dispute that whether

21 you know that's from Chem-Mod's website originally or

22 whatever, that the Sargent & Lundy reports that were

23 prepared for JPMorgan and for which you received a final

24 copy, they describe how the bromine solution will be used on

25 the inbound part of the coal and that there could be

882

1 activated carbon?

2 A. **That's what it says, yes, sir.**

3 Q. So the thing is I showed you this little chart, sort

4 of tracking knowledge of activated carbon use -- at least

5 that's our view, you may disagree -- for those five plants,

6 but the thing is you also knew activated carbon use was in

7 play for mercury control at Laramie River, Rush Island and

8 Antelope Valley well before the filing of this case; right?

9 A. **I don't dispute that.**

10 Q. You -- I'm kind of caught in a pickle here because I

11 don't want to waste anybody's time, but you understand your

12 lawyers have implied to the Court and to the jury that you

13 didn't know any of this and had to call them to learn it

14 once the lawsuit was filed. You know they implied that;

15 right?

16 A. **I think what our lawyers said, and I may be wrong,**

17 **but when we were served with this lawsuit, we reached out to**

18 **the utilities to ask were they using activated carbon.**

19 **Prior to that time -- and this was all from**

20 **research that we did for discovery is, were we ever notified**

21 **over the 11, 10 years that we had been working with the**

22 **utilities did they use activated carbon, and in some cases**

23 **we found e-mails where the utility was telling us that they**

24 **were going to be using activated carbon, and in some of**

25 **those cases it was power plants that never installed**

883

1 **activated carbon.**

2 **So the information that we received before this**

3 **lawsuit was utilities telling us that they would be using**

4 **activated carbon or working on a carbon system or what have**

5 **you, but we didn't -- we did not know for certain until the**

6 **lawsuit was filed and we reached out to our clients to ask**

7 **the question so we could understand these complaints, were**

8 **they using activated carbon.**

9 Q. So to the extent that you guys worked with Sargent &

10 Lundy and these reports were prepared for your potential

11 investors, you had no idea whether this information about

12 mercury control that you were presenting to your investors

13 was true?

14 A. **I'm not saying that. That doesn't say when how, how**

15 **often that activated carbon is used. It says that they're**

16 **using -- and I'm looking for the sentence. I'm sorry.**

17 **Where does it say activated carbon on that slide?**

18 **It does -- I'm not disputing that activated**

19 **carbon is spelled out in these Sargent & Lundy reports, but**

20 **that is not our business. We're not an emissions control**

21 **company. We're a fuel provider. If the power plant tells**

22 **me that they are going to use activated carbon, which they**

23 **had done in the past and in several instances never did, it**

24 **doesn't matter to our business.**

25 MR. CALDWELL: Your Honor, I don't want to be

884

1 confrontational. I'll just object to the narrative answers
2 as nonresponsive to my questions. I'd like to strike the
3 extraneous answers that are beyond the scope of the
4 question.
5 THE COURT: I'll overrule that objection for
6 now. I'll let you continue with your examination.
7 MR. CALDWELL: Thank you.
8 BY MR. CALDWELL:
9 Q. So let's talk about what you knew before the Sargent
10 & Lundy reports. Would you turn in your binder to -- it's
11 tab 7, Plaintiffs' Trial Exhibit 232?
12 A. **Give me just a second. I'm on the exhibit. I'm just**
13 **looking at it. It's the e-mail dated...?**
14 Q. It's on the screen.
15 A. **Yes, sir. Yes, sir.**
16 Q. It's previously admitted. So some of the ones that
17 haven't been previously admitted, I'll have to go through
18 the process of having you look at in the binder first. Some
19 of them are previously admitted and I'll just try to cut to
20 the chase. Make sense?
21 A. **Yes, sir.**
22 Q. All right. So when we see Barr Linton, that's
23 someone who's kind of in a similar position to you in the
24 sense that that is one of the members of CERT, LLC; right?
25 Or one of the officers?

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1 A. **He's an officer yes or he was an officer.**
2 Q. Recently passed away?
3 A. **Yeah, I agree with that statement. Job roles were**
4 **different than mine, but, yes. He was a member.**
5 Q. But still -- I mean, maybe the titles or roles were a
6 little different, but still kind of like you would serve a
7 support function or an officer function or something for
8 these various LLCs; correct?
9 A. **Yes, sir.**
10 Q. All right. And what we see -- and this is in 2015,
11 so what is that? A little over four years before the
12 lawsuit was filed?
13 A. **That's correct.**
14 Q. And Mr. Linton is writing to you, so this -- I'm
15 sorry, he's writing to another investor at Coke Industries
16 that's Daniel Murray. Was that somebody that was looking at
17 investing in some of these same plants at some point in
18 time?
19 A. **I think Coke Industries owned some of these**
20 **facilities at one point in time. They were probably the**
21 **owner at that time.**
22 Q. Gotcha. And some of those facilities are now owned
23 by Kiewit or Mylan as time went on; right?
24 A. **That's correct.**
25 Q. But with regard to that facility, Mr. Linton was

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1 telling the investor -- and you were copied -- that these --
2 he's referring to the Basin and Ameren facilities, the
3 reason why these are requested is that the power plant is
4 relying on calcium bromide together with the activated
5 carbon to meet their MATS compliance. Did I read that
6 correctly?
7 A. **You did.**
8 Q. And when we refer to Basin and Ameren -- and it says
9 "but so far not in our geo" -- we'll come back to that in a
10 minute, but it said with regard to Basin and Ameren: In the
11 context of the plants that are at issue in this case, we're
12 talking about the Laramie plant and the Labadie plant;
13 correct?
14 A. **Yes, that is correct.**
15 Q. Now, did you guys ever talk to... Let's back up.
16 Let's see what the context of this e-mail is. It's a little
17 bit interesting.
18 You know how there's been some conversation in
19 this trial about how there's an additional chemical that you
20 guys spray on that the purpose of doing that is so that you
21 can claim tax credits by meeting in addition to mercury sort
22 of the NOx reduction?
23 A. **I agree with it. There is a second chemical in the**
24 **process to qualify the fuel, and I don't agree with your**
25 **comments about spraying it on.**

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1 Q. Okay. I'm sorry, maybe that was the wrong term, I
2 just -- and I apologize if that was wrong. I wasn't trying
3 to mislead you there.
4 What I'm saying is you're aware that there's
5 kind of a second chemical and that goes by S-Sorb?
6 A. **That is correct.**
7 Q. So what's interesting about this particular e-mail is
8 if we actually pay attention above the highlight, you had
9 utilities actually wanting you guys to help guarantee that
10 even if you didn't use S-Sorb, you would still put the
11 bromine solution MerSorb on the coal because whether or not
12 you're doing the two-part thing or the two chemicals for tax
13 credits, they need the mercury part, the bromine part so
14 they keep meeting the MATS standard; right? Isn't that what
15 they're saying?
16 A. **I agree that they had requested us to provide**
17 **pricing -- to provide pricing to apply calcium bromide on**
18 **their coal when we were not producing refined coal. That's**
19 **what that letter asked.**
20 Q. And it says specifically the reason behind these
21 requests is that the power plant is relying on the calcium
22 bromide together with activated carbon to meet the MATS
23 compliance standard. That's what it says; right?
24 A. **That's what it says.**
25 Q. So once again, I have a bad habit of talking with my

888

1 hands.

2 We have the tax credit guy heres where you guys

3 needed to do MerSorb and S-Sorb; right?

4 **A. That is correct.**

5 **Q.** But then after the tax credit thing starts, you have

6 the EPA saying your 40 percent thing is not enough, MATS is

7 in effect and you need to get 90 percent of mercury; right?

8 That came into effect later?

9 **A. That came into effect later, yes.**

10 **Q.** And the context of this is the plant is concerned

11 that if you stop doing the bromine part of it, they will

12 fall out of compliance over here on the EPA MATS requirement

13 of meeting 90 percent capture of mercury; right?

14 **A. I can only assume that what they were thinking when**

15 **they asked the question to Barr, could we apply calcium**

16 **bromide to their coal if we were not producing and selling**

17 **them refined coal.**

18 **Q.** Did you ever have potential investors who were

19 concerned about making sure that enough mercury was being

20 removed from the plants they would be invested in?

21 **A. I think without exception all of the investors were**

22 **concerned with meeting the technical qualifications that**

23 **meets the Section 45 tax credit requirements.**

24 **As far as are we talking about in a lab that we**

25 **couldn't achieve those reductions? I'm not -- I'm not**

889

1 **following your question completely.**

2 **Q.** Let me try and clarify.

3 Your point is our investors want to make sure we

4 can do tax credits, but you're not -- think our investors

5 actually care that much about whether we truly reduce

6 90 percent of mercury from the emissions?

7 **A. Oh, no, I disagree with that completely.**

8 **Q.** Some of your investors did care whether you

9 actually --

10 **A. Oh -- I'm sorry. I didn't mean to speak over you.**

11 **Q.** That's okay.

12 **A. All of our investors expected that we would see the**

13 **same emission reductions in the field as were in the lab.**

14 **It's very, very difficult to correlate those two together**

15 **for a number of technical reasons.**

16 **Q.** Let's investigate something slightly different then.

17 Did your investors care whether the mercury

18 reduction was enough to meet the MATS 90 percent threshold?

19 **MR. DYESS:** Your Honor, I object. He's asking

20 for speculation about what's in the mind of the parties.

21 **MR. CALDWELL:** He just testified what all our

22 investors care about, so I think it's very fair.

23 **THE COURT:** Hold on a second. I do think the

24 witness spoke -- attempted to speak to the investors'

25 mindset previously, so I'll allow the question and I'll

890

1 overrule the objection.

2 **THE WITNESS:** I'm sorry. You asked if I believe

3 that all of our investors wanted to meet what standard? I'm

4 sorry.

5 **BY MR. CALDWELL:**

6 **Q.** You've told us that the investors cared about meeting

7 the numbers they needed to meet in order to apply for tax

8 credits. What I'm asking is, did they care about meeting

9 the high level of mercury reduction that was necessary to

10 comply with MATS?

11 **A. So without speaking to their mind, I would say based**

12 **on their actions, they were -- they were -- all of these**

13 **investors that are on the board and prior investors, their**

14 **objective in investing in these projects was to meet the**

15 **technical requirements of Section 45 fuel.**

16 **Those technical requirements had nothing to do**

17 **with governmental requirements, the EPA guidelines at the**

18 **power plant. So I'd say they would not care about the**

19 **90 percent reduction because that wasn't even in their**

20 **business model or plan. Their business model and plan --**

21 **I'm sorry if I'm -- I don't think I'm not answering your**

22 **question, I'm trying to speak to their mindset and to their**

23 **actions and the requirements they placed upon us as**

24 **operators that we would produce a refined coal that**

25 **qualified for Section 45 tax credits, that has nothing to do**

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1 **with what power plants' EPA requirements for air quality is.**

2 **Q.** Okay. So as far as you know, your investors as long

3 as they get their tax credits, doesn't really matter to them

4 if they're reducing 90 percent of the mercury?

5 **A. I can't speak to what our investors' moral beliefs**

6 **are. I can tell you that I know the investors require us to**

7 **produce a fuel that achieves a 40 percent reduction. If**

8 **that 40 percent reduction in mercury and 20 percent**

9 **reduction in NOx is the current EPA standards, because we're**

10 **not talking apples and apples, we're talking 40 percent.**

11 **The EPA standard is a limit of mercury.**

12 **So I just can't speak to whether investors care**

13 **about if their fuel they're selling the power plant meets**

14 **the EPA requirements.**

15 **Q.** They had a huge -- your investors had a huge

16 incentive to care about whether the coal being burned was

17 done in a way that would meet MATS; right?

18 **A. And how is that?**

19 **Q.** How many tons of coal would you sell to a plant that

20 gets shut down for not complying with MATS?

21 **A. We're a coal -- we sell a product to a power plant.**

22 **Of course they want the power plant to stay in business.**

23 **But that doesn't speak -- that doesn't speak to -- the power**

24 **plant's going to figure out how to maintain compliance or**

25 **shut their plant down.**

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1 Q. Right. That is precisely my point. If they shut
2 their plant down, you don't get tax credits if you just keep
3 cranking out coal and it piles up in the parking lot because
4 there's no plant to burn it; right?
5 A. **I would say that's correct.**
6 Q. All right. Now, would you turn to your binder to
7 Plaintiffs' Trial Exhibit 688 at tab 6? I can't put this
8 one on the screen.
9 A. **I'm here. I'm just taking a look real quick. The**
10 **one dated 2016.**
11 Q. No problem. I was actually just making sure the
12 court reporter had the right numbers.
13 And it is a 2016 e-mail. It's one you wrote
14 assuming you were Jeff Green there; correct?
15 A. **It is.**
16 Q. And you wrote it to a Jeffrey Jones; is that right?
17 A. **That's correct.**
18 Q. Who's that fellow?
19 A. **He is a business guy for Ameren utilities.**
20 MR. CALDWELL: Plaintiff moves for admission of
21 688, this e-mail the witness wrote.
22 THE COURT: Any objection?
23 MR. DYESS: No, Your Honor.
24 THE COURT: It's admitted.
25 (Thereupon, Plaintiffs' Exhibit 688 was

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1 admitted.)
2 BY MR. CALDWELL:
3 Q. Now, I've got some access to this e-mail, and keep in
4 mind if you need me to pull up the whole thing, I can have
5 Mr. Diaz can do that. I'm not trying to cheat you in any
6 way.
7 But this is what I was referring to. It's the
8 e-mail March 9th, 2016, written by you; correct?
9 A. **That is correct.**
10 Q. And in this instance you were reaching out to someone
11 at Ameren. And which plants would that relate to of the
12 plants that are at issue in the case?
13 A. **That would be Labadie and Rush Island.**
14 Q. Labadie and Rush Island are the Ameren plants. And
15 you had a potential investor who found an article, it's an
16 older article 2011 saying Labadie was the second worst
17 mercury polluter in the U.S. emitting a lot of pounds of
18 airborne mercury. Do you see that?
19 A. **I do see that.**
20 Q. And the investor was concerned; right?
21 A. **The potential investor was concerned.**
22 Q. Maybe about being associated with the second worst
23 polluter -- mercury polluter in the U.S. or something like
24 that; right?
25 A. **I can't speak to the reason for their concern, but I**

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1 **will say it was concern for some reason, yes.**
2 Q. In order to help address the concern from the
3 investor, you were writing the power plant people to say,
4 can I get your mercury numbers now from 2015. And you said
5 which I will read: "As long as the comparison shows
6 positive results, it would quickly put this issue to bed.
7 The results should show positive results since you guys are
8 using refined coal and also installed powered activated
9 carbon systems."
10 Right?
11 A. **Yes, sir.**
12 Q. That's what you wrote to the plant; right?
13 A. **Yes, yes.**
14 Q. Now, we also see -- it's one of those e-mail chains
15 where I think you start at the bottom and the more recent
16 e-mails are towards the top, if that makes context -- makes
17 sense in terms of the context. And you get a response back
18 from the power plant, don't you, the power plant company?
19 A. **Right.**
20 Q. So what the power plant tells you is what's important
21 to note is that Labadie is complying with the emissions
22 laws. They must comply with MATS by April 16th, 2016. I'm
23 going to stop there. This is consistent with what all these
24 other witnesses have explained; right? Sort of in the
25 middle 2010s MATS started to take effect and plants had to

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1 be in compliance?
2 A. **By 2016.**
3 Q. Yes, and I think the date may be different for CERT?
4 A. **Yeah, yeah.**
5 Q. But that comports with your understanding of about
6 when MATS came into effect for some of these plants; right?
7 A. **That is correct.**
8 Q. And he told you Ameren's compliance plan for mercury
9 control includes activated carbon injection at the plant,
10 which is currently under testing construction -- send you
11 photos -- and mercury measuring equipment is also being
12 installed. They will do what is required to meet the MATS
13 requirements.
14 That's what he told you; right?
15 A. **That is what he said.**
16 Q. And he also tells you Rush Island uses this Chem-Mod
17 process with MerSorb for refined coal and has an activated
18 carbon injection system very similar to what Labadie is then
19 installing; right?
20 A. **Yes, I agree with that.**
21 Q. And then finally in order to help you along with
22 signing up an investor, the power plant even offered you a
23 tour of the activated carbon injection system. Do you see
24 that?
25 A. **I think they're offering the tour to the potential**

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1 **investor.**
2 Q. Did either of you take it?
3 A. **No, sir.**
4 Q. Now, I believe this didn't just go to you. You then
5 forwarded this information on to -- I'm sorry I'm going to
6 have to admit this before I show it. You forwarded it on to
7 your partners at CERT; right? Flip to tab 9. Plaintiffs'
8 Trial Exhibit.
9 A. **Could you redirect me? Tab 8?**
10 Q. Tab 9. Plaintiffs' Trial Exhibit 96, tab 9. I'm
11 sorry. I said too many numbers. That's unfair to you.
12 A. **I'm sorry. No, you can't show it. I forwarded that**
13 **e-mail to my partners is what you're saying?**
14 Q. Yes. It should be tab 9 in your binder, and it
15 should have a sticker on it that says PTX 96.
16 A. **Okay. What was your question because this is not...?**
17 Q. Okay. All right. Never mind. I'll just keep going.
18 Would it surprise you if on Plaintiffs' Trial
19 Exhibit 68 you get information about Labadie and Rush Island
20 and share it with your partners? Does that surprise you?
21 A. **No, that would not surprise me.**
22 Q. Fair enough. Now -- and I think this is where the
23 confusion comes from because I was actually thinking about
24 the other one. Now look at the one that is tab 9, 96.
25 A. **Okay. I'm looking at that one.**

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1 Q. Sorry. I was inadvertently tricking you into looking
2 at the next one. That's my fault. What is Plaintiffs'
3 Trial Exhibit 96, sir?
4 A. **It is an e-mail between Barr Linton and Allen Weiner**
5 **copying me dated May 19, 2015, with a draft of a proposed**
6 **Chem-Mod amendment.**
7 Q. So you received this as a cc; correct?
8 A. **Correct.**
9 Q. And it was written by your business partner Barr
10 Linton; correct?
11 A. **That's correct.**
12 Q. No question you received this e-mail; right?
13 A. **No, no question.**
14 MR. CALDWELL: I move for admission of
15 Plaintiffs' Exhibit 96.
16 THE COURT: Any objection?
17 MR. DYESS: No, Your Honor.
18 THE COURT: All right. It's admitted.
19 MR. CALDWELL: Thank you, Your Honor.
20 (Thereupon, Plaintiffs' Exhibit Number 96 was
21 admitted.)
22 BY MR. CALDWELL:
23 Q. Let me go ahead put 66 up. Just direct you to the
24 top.
25 Barr Linton is your partner; correct?

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1 A. **Yes.**
2 Q. Who is Allen Weiner?
3 A. **I think he's a tax director for what used to be**
4 **Mylan.**
5 Q. And this is another instance; right, where you guys
6 are looking into addressing this issue where producers want
7 to make sure that even if you're not able to do tax credit
8 refined coal, that you will still apply the calcium bromide
9 on the coal; correct?
10 A. **Yes, I'd say it's similar to the prior e-mail. Yes,**
11 **that is correct.**
12 Q. And that's because, again, even if tax credits can't
13 be generated, in order to keep rocking and rolling and
14 generating electricity, the plants are trying to stay in
15 compliance with the EPA MATS guidelines; correct?
16 A. **I can't speak to the power plant state of mind. I**
17 **can speak to our state of mind is that when these utilities**
18 **would ask us as a vendor to accommodate them for a request,**
19 **which was in this case when we can't sell them refined coal**
20 **to provide calcium bromide to their coal, we would -- we**
21 **were looking to attempt to accommodate them which I don't**
22 **think any of these ever went into place. We never acted on**
23 **any of these agreements.**
24 Q. Well, regardless of what you say now about whether
25 you guys can talk about their state of mind, I believe you

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1 had said in an earlier e-mail here -- Barr Linton, we see
2 him writing and copying you -- that the reason behind these
3 requests is that the power plant is relying on calcium
4 bromide together with activated carbon to meet their MATS
5 compliance standard. I read that correctly, didn't I?
6 A. **You did read that correctly.**
7 Q. And you were fully aware of that fact in 2015;
8 correct?
9 A. **I was aware of that sentence in 2015.**
10 Q. Is this document in connection with the investment
11 that became -- the investor that became the Mylan investor
12 in Antelope Valley?
13 A. **Yes, Mylan owned a few facilities.**
14 Q. Including Antelope Valley?
15 A. **Including Antelope Valley.**
16 Q. What kind of company is Mylan?
17 A. **They're a pharmaceutical company.**
18 Q. Pharmaceuticals. Did they have anything to do with
19 making the chemicals used in a refined coal facility or
20 anything?
21 A. **No, they are not.**
22 Q. So if you remember, I put up the slide where I had
23 five Sargent & Lundy reports. I'm going to come back to
24 those, but focusing on the plants on the right-hand side,
25 those three, we have seen e-mails between you and investors

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1 or you and power plants or you and your partners indicating

2 you guys were aware that activated carbon was being used at

3 each of the other three plants that are at issue in the

4 case, the Kiewit and Mylan plants; right?

5 **A. We were aware.**

6 **Q.** Now, can I have you flip to tab 2 in the binder.

7 **A. I'm sorry, 2?**

8 **Q.** Yes, 2. And it should be Plaintiffs' Trial

9 Exhibit 235?

10 **A. Okay.**

11 **Q.** Just kind of tell us a little bit about who that's

12 from and when it is?

13 **A. Looks like it's from Barr Linton to Thomas Ryan and**

14 **Arthur Kwauk. Both of those gentlemen are with ING Bank I**

15 **believe.**

16 **Q.** A possible investor?

17 **A. They were an investor.**

18 **Q.** And then are you cc'd on it?

19 **A. Yes, I am.**

20 **MR. CALDWELL:** So I move for the admission of

21 Plaintiffs' Trial Exhibit 235.

22 **THE COURT:** Any objection?

23 **MR. DYESS:** No, Your Honor.

24 **THE COURT:** All right. It's admitted.

25 (Thereupon, Plaintiffs' Exhibit 235 was

901

1 admitted.)

2 **BY MR. CALDWELL:**

3 **Q.** Is this Plaintiffs' Trial Exhibit 235 you were just

4 looking at, sir?

5 **A. Yes, it is.**

6 **Q.** And I'll try to do this quickly, but I want to talk

7 about, again, the Sargent & Lundy reports. Those aren't the

8 only source of information that you had that the JPMorgan

9 five plants were using activated carbon; fair?

10 **A. That's -- yes, that's fair.**

11 **Q.** Okay. So like Big Cajun II, for example, you guys

12 were aware that they were going to be relying on activated

13 carbon; right?

14 **A. Yes, that's what this e-mail says.**

15 **Q.** Now, may I -- can I get you to flip to tab 4?

16 **A. Okay.**

17 **Q.** Tab 4, it's one that's been marked at least for

18 identification so far as PTX 95. Do you see that?

19 **A. I do.**

20 **Q.** What is it?

21 **A. It's an e-mail that ultimately came to me from**

22 **Dennis Beck with a few subsequent e-mails dated August 20,**

23 **2018.**

24 **Q.** And they relate to the Coletto Creek plant?

25 **A. Yes, that's correct.**

902

1 **MR. CALDWELL:** All right. So plaintiff moves

2 for the admission of Plaintiffs' Trial Exhibit 95.

3 **THE COURT:** Any objection?

4 **MR. DYESS:** No objection.

5 **THE COURT:** It's admitted.

6 (Thereupon, Plaintiffs' Exhibit 95 was

7 admitted.)

8 **BY MR. CALDWELL:**

9 **Q.** I'm showing you this kind of an abbreviated portion

10 of 95.

11 This e-mail to you is confirming with regard to

12 Coletto Creek that they meet the emission limit by injecting

13 activated carbon into the gas stream; right?

14 **A. That's what that says, yes.**

15 **Q.** And there's no question -- I mean, we trimmed this to

16 make it readable. But there's no question they're talking

17 about the Coletto Creek -- same plant, Coletto Creek, that's

18 at issue in this case; right?

19 **A. That -- that is correct.**

20 **Q.** What's interesting about this is I think this is an

21 instance of basically you interacting with the plant to

22 learn information about how they're going to meet compliance

23 standards; right?

24 **A. Yeah. I believe that this was some of the**

25 **information required for the Sargent & Lundy report. The**

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1 **reason for asking those questions were coming from the**

2 **investor, which was JPMorgan.**

3 **Q.** Okay. But you're doing your best to answer the

4 questions and make sure the investor has what they need.

5 And so as I understand, you had asked the plant

6 does the -- does the unit meet its mercury limits, or does

7 it have mercury control equipment? If so, what?

8 And you knew the possibilities would be like

9 calcium bromide injection, activated carbon, et cetera, and

10 he's like, yes, we inject activated carbon in the gas

11 stream; right?

12 **A. Yes. That says that they currently are meeting the**

13 **mercury limits.**

14 **Q.** By injecting activated carbon in the gas stream?

15 **A. Yes, that's what it says.**

16 **Q.** So then real quickly, 685, which is tab 5. Sorry for

17 the sort of tedious process of putting these into the record

18 so the jury can see them, if they're so inclined.

19 **A. Okay. I see 685.**

20 **Q.** What is 685?

21 **A. 685 is an e-mail from me to Leah Schaatt dated**

22 **March of '16.**

23 **Q.** So that's one CERT business partner to another;

24 right?

25 **A. That is correct.**

904

1 MR. CALDWELL: Plaintiff moves for the admission
2 of Plaintiffs' trial Exhibit 685.
3 THE COURT: Any objection?
4 MR. DYESS: No objection.
5 THE COURT: It's admitted.
6 (Thereupon, Plaintiffs' Exhibit 685 was
7 admitted.)
8 BY MR. CALDWELL:
9 Q. I read a line that said, Basin and Ameren are asking
10 something but NRG is not asking yet. Do you remember that
11 parenthetical I pointed to?
12 A. **Yes, I do.**
13 Q. All right. But you also ultimately engaged in some
14 correspondence with NRG about what they would be doing for
15 mercury control; correct?
16 A. **Yes.**
17 Q. Now, is it true that when asked about emissions
18 issues, NRG has indicated that the station has installed
19 activated carbon injection equipment to increase mercury
20 control beyond just -- it says beyond the Chem-Mod process,
21 but, in other words, beyond just the MerSorb and S-Sorb
22 additives?
23 A. **Which is the Chem-Mod process, yes. Yes, that --**
24 **that's what this says.**
25 Q. So they told you they went beyond that and have added

905

1 activated carbon injection equipment; right?
2 A. **That's what this e-mail says.**
3 Q. And that brings to mind a question before -- before I
4 forget. You'll remember this slide from opening that your
5 lawyer put up with a list of things here, a list of things
6 here, and a bunch of red Xs; right?
7 Do you remember that?
8 A. **Yes.**
9 Q. I mean, it certainly wasn't the patent claims like
10 Mr. Nemunaitis went through with Mr. O'Keefe that's proof of
11 infringement. It wasn't patent claims, was it?
12 A. **I recall the slide with the Xs, but I'm not sure**
13 **exactly what it was.**
14 Q. Well, you're not -- as a party, the CERT defendants
15 are not trying to give the impression that if they put Xs on
16 some demonstrative that Mr. Sykes makes, that that means
17 there's noninfringement. You're not trying to give that
18 impression, are you?
19 A. **I'm sorry, I'm not following the question.**
20 Q. Okay. Fair enough. Here's one thing it did say.
21 Let me just focus in on the one thing.
22 It talks about how when you -- or the
23 conversation with the slide talked about how qualified your
24 coal for tax credits, you guys were not looking at activated
25 carbon during that qualification process; correct?

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1 A. **That's a true statement.**
2 Q. Right. But here's the thing. If the coal has been
3 qualified as Section 45 refined coal, you guys absolutely --
4 these entities absolutely claim tax credits, hundreds of
5 millions of dollars of tax credits, on coal -- refined coal
6 that was burned through plants that were using activated
7 carbon; right?
8 A. **We sold -- refined coal that qualified for the**
9 **tax credit was sold to power plants for the expectation of**
10 **being used to generate steam.**
11 Q. At the plants as we discussed earlier; correct?
12 A. **Correct, yes, at those plants.**
13 Q. And my point is that the plan or the system of
14 claiming tax credits was not negated by the fact that the
15 plant used activated carbon; right?
16 A. **I believe every single power plant listed at the**
17 **bottom of your chart over there with the exception of**
18 **Coletto Creek did not use activated carbon for some period of**
19 **time prior to us -- we were there for a number of years**
20 **before they started using activated carbon.**
21 **So I'm not sure the point you're trying to make.**
22 Q. The point I'm trying to make is once those plants
23 were using activated carbon -- even once you knew full well
24 they were using activated carbon, you still claimed tax
25 credits on each ton of refined coal that you sold them;

907

1 right?
2 A. **We did -- we did receive tax credits for coal that**
3 **was sold to those power plants after they installed**
4 **activated carbon.**
5 Q. And after you knew full well that they had installed
6 activated carbon systems?
7 A. **We knew that -- yes, we knew that they were using**
8 **activated carbon, and we were receiving tax credits by**
9 **selling them our fuel.**
10 Q. Thank you. So the fact that they were using
11 activated carbon doesn't negate or prevent tax credits;
12 right?
13 A. **Our fuel is not made to work with activated carbon.**
14 **That has nothing to do with the credit. It doesn't negate**
15 **anything.**
16 Q. I mean, you understand I didn't ask a question about
17 whether your fuel was made to work with activated carbon.
18 That wasn't what I asked you; right?
19 A. **I thought I needed that to clarify what you were**
20 **asking me. But if you'd like to ask your question again,**
21 **I'll try to answer it.**
22 Q. By Thanksgiving 2019 or something after this case is
23 pending and you've seen a bunch of evidence, you guys were
24 aware there were activated carbon injection systems.
25 When you sold a ton of refined coal to

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1 Coletto Creek or Limestone, you claimed your tax credits even
 2 though the system -- that power plant system was going to
 3 burn the coal, and they had their activated carbon system
 4 installed; right?
 5 **A. Yes. We did receive tax credits for coal sold to
 6 them in November of 2019.**
 7 **Q.** So if your lawyers are giving the impression that the
 8 power plant using activated carbon in the exhaust gases
 9 somehow negates the ability to claim tax credits, you're in
 10 a bit of a pickle; right?
 11 **A. No, I don't agree with that statement.**
 12 **Q.** Well, you absolutely claimed tax credits on tons of
 13 coal that went to plants and went through activated carbon
 14 injection systems in the flue gas; right?
 15 **A. That is correct.**
 16 **Q.** Just to kind of wrap up here, at this point we have
 17 seen a lot of documentary evidence that the CERT partners,
 18 various members of them or all of them, whatever, were aware
 19 of activated carbon use at each of the plants in this case
 20 before the filing of the lawsuit; right?
 21 **A. Right.**
 22 **Q.** And so there's more evidence than that, isn't there?
 23 **A. That pretty much covers what I've -- what we had
 24 found in discovery.**
 25 **Q.** All right. There's a tab in your binder that -- it

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1 has a -- one of these Bates numbers or serial numbers on it.
 2 It's going to be maybe third from the end. It's the one
 3 that says CERT-0030761.
 4 **A. Okay. I see it.**
 5 **Q.** It's a presentation; right?
 6 **A. Yes, I prepared that presentation. The one dated
 7 January 2012?**
 8 **Q.** Yes.
 9 **A. Yes.**
 10 **Q.** I think you said you were a presenter on it?
 11 **A. Yes.**
 12 **Q.** It's a presentation that's about key points for site
 13 hosts; correct? I'm sorry; right?
 14 **A. It's a pitch book for presentation to prospective
 15 site hosts, yes.**
 16 **Q.** That would have been a much better way for me to ask.
 17 So what -- what is the purpose of a pitch book to a site
 18 host?
 19 **A. It was typically first -- was used in our first
 20 meeting with a potential site host to get them familiar with
 21 who we are, what our process is, potential benefits for the
 22 plant.**
 23 **At this point, you know, you're trying to sell a
 24 product to a customer, so that's what it was used for.**
 25 **Q.** And then I'd like to have you flip to the page that

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1 ends in 782. Do you see that?
 2 **A. That ends in 782?**
 3 **Q.** There's a slide -- yes, the page -- the Bates number
 4 will end in 782. Let me know once you've found it.
 5 **A. Yes, I'm on it.**
 6 **Q.** So on that page in front of you, sir, can I direct
 7 you to this bullet here that's sort of like the next to the
 8 last bullet? And I'm going to ask you a question first.
 9 **A. Okay.**
 10 **Q.** This is a presentation you were giving to plants in
 11 2012; right?
 12 **A. That's correct.**
 13 **Q.** And even in 2012, you were indicating that the
 14 Chem-Mod process at their plant might be used with activated
 15 carbon; right?
 16 **A. Yeah. This statement states that it would be a
 17 potential benefit to use less carbon.**
 18 **Q.** So it wasn't that you thought, Hey, don't use
 19 activated carbon with our bromine solution, you were telling
 20 them that the bromine solution might make the pollutant
 21 capture so much more effective, they could even cut down on
 22 their activated carbon bill; right?
 23 **A. Yeah. That's pointed out as a potential benefit.**
 24 **Q.** A savings on the sorbent bill. That's the potential
 25 benefit, isn't it?

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1 **A. That is a potential benefit.**
 2 **Q.** And you also talked about other things like maybe you
 3 could get better fly ash or maybe more usable fly ash, that
 4 kind of thing; right?
 5 **A. Really it's a shotgun effect of any potential
 6 benefits that a power plant might see by using our fuel.**
 7 **Q.** And you gave that presentation to every potential
 8 host site?
 9 **A. I would say that's correct.**
 10 **Q.** As I understand your testimony from your deposition
 11 the reason you did that is essentially trying to convince
 12 them to do a deal with you guys. You wanted to tell them
 13 here are all the potential benefit of working with us;
 14 right?
 15 **A. That's correct.**
 16 **Q.** Thank you.
 17 When was your deposition taken?
 18 **A. It's been a year ago. I don't recall the date.**
 19 **Q.** Several years after the lawsuit was filed; right?
 20 **A. Oh, yes, sir.**
 21 **Q.** And as of the time of your deposition, you had not
 22 read the patents-in-suit; right?
 23 **A. I hadn't read them in detail, no.**
 24 **Q.** Did you ever get around to doing that?
 25 **A. I mean, I have an understanding what the patents are.**

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1 Q. Yes. But my specific question was: Did you get
2 around to reading them?
3 **A. I've read the patents, yes. I've read the patents.**
4 Q. Did you guys do any sort of patent search before
5 beginning to provide refined coal?
6 **A. No, we did not.**
7 Q. Do you understand that patents are publicly
8 available?
9 **A. I understand patents are publicly available.**
10 Q. You can check on the Patent Office website. There's
11 patents.google.com, things like that?
12 **A. We looked at the technology's patents that we were**
13 **using to produce refined coal.**
14 Q. That's because your acquaintances at Chem-Mod said
15 hey, look at our Chem-Mod patent. That's what your answer
16 just --
17 **A. No. We knew that we were using a technology that was**
18 **patented. That was our belief up until this lawsuit and**
19 **then we looked at these patents.**
20 Q. There's some disconnect going on or you're answering
21 something that's not what I'm asking you. With respect, I
22 just want to make sure that you're trying to listen to my
23 question and focus your answer.
24 You could have searched, like,
25 patents.google.com or the Patent Office for patents before

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1 releasing your product and you didn't; right?
2 **A. That's correct.**
3 Q. And you said, we just looked at the patent we thought
4 we were using, something along those lines, and you're
5 referring to a Chem-Mod patent; right?
6 **A. Yes.**
7 Q. And it's not a result of your searching for a
8 Chem-Mod patent, it's because your contacts at Chem-Mod,
9 like Sally Batanian and all of these people, gave you that
10 patent and said hey, here's the Chem-Mod patent; right?
11 **A. When we were served with the lawsuit?**
12 Q. Why in the world would we serve you with a lawsuit on
13 Chem-Mod's patents, sir. I'm telling you, you volunteered
14 well, we looked at Chem-Mod's patent. You said it; right?
15 **A. I did say that and I said it in regards to we were**
16 **using a technology that we had looked at the patent for**
17 **prior to the issuance of this lawsuit.**
18 Q. That is precisely my point. You got that Chem-Mod
19 patent because your acquaintances over at Chem-Mod like
20 Sally Batanian gave it to you; right?
21 **A. Chem-Mod did give us their patent.**
22 Q. It's not a result of you actually making an effort to
23 look on these public websites and see are we going to be
24 infringing someone else's patent?
25 **A. We did make and effort --**

914

1 THE COURT: There's an objection.
2 MR. DYESS: He's attempting to mislead the
3 witness into thinking they could search for a patent in 2012
4 that didn't issue until 2019.
5 THE COURT: I'll overrule the objection.
6 Obviously, the defendants' side will have a chance to ask
7 questions of the witness in the future and they can make
8 those calls. But I'll overrule the objection.
9 BY MR. CALDWELL:
10 Q. You guys did not make any effort to search for
11 patents that might apply to what you guys were going to
12 sell; right?
13 **A. To search for patents. I have not done a patent**
14 **search.**
15 Q. And then your counsel makes the point that these
16 particular patents weren't issued prior to the summer of
17 2019, which I agree with, and you understand that; right?
18 **A. I do.**
19 Q. And that means that the patents in this lawsuit
20 couldn't have been infringed prior to the summer of 2019;
21 right?
22 **A. I agree with that.**
23 Q. So what relevance, then, are all these charts your
24 lawyers keep showing us that say we sold a bunch of refined
25 coal prior to the issuance of these patents?

915

1 MR. DYESS: Your Honor, objection. He's asking
2 him to make a legal conclusion on relevance.
3 MR. CALDWELL: He's a corporate representative
4 for the party. He's the only person I can ask about their
5 position.
6 THE COURT: Overruled.
7 THE WITNESS: Can you repeat the question?
8 BY MR. CALDWELL:
9 Q. As your lawyer says, if these patents were issued
10 until the summer of 2019.
11 **A. Correct.**
12 Q. What relevance is there of someone coming in and
13 saying we sold lots and lots of coal that was refined coal
14 prior to July 2019. What relevance is that?
15 **A. I think it's a tremendous amount of relevance.**
16 Q. You think so.
17 **A. Legally yes, I do.**
18 Q. So you're ready to render a legal opinion, the thing
19 your lawyer just objected to.
20 **A. No. I understand after we were served in this**
21 **lawsuit of getting an understanding of these claims and I**
22 **don't believe the claims have any basis. So if you want me**
23 **to explain why, ask me the questions. If you're asking me**
24 **to opine on why there's no basis or why we didn't infringe,**
25 **I think there's a number of reasons.**

916

1 Q. So we'll consider going into that. I think you had
2 an opportunity to disclose if you had noninfringement
3 opinions. So let me ask you this: The opinion you're
4 offering to give us, is that something you came up with on
5 our own or worked out with your lawyers?
6 A. **Well, I can read complaints and I can understand the
7 facts of what we're being accused of and I can form my own
8 opinion. I'm not saying I didn't use legal counsel to
9 explain the claims and explain the patent and to explain
10 patent law because I'm not a patent lawyer. I did have to
11 seek advice, but I do understand the issues of this case and
12 I understand the claims that are being made.**
13 Q. You understand the patent claims?
14 A. **I understand the claims of what we're being accused
15 of doing and I generally understand the requirements to
16 infringe a patent. Yes, sir, I do.**
17 Q. But you didn't even read in detail the patent for the
18 first three years the case was on file, sir.
19 A. **Like I said, you asked if I read the entire patent
20 and I understood the important sections of that patent.**
21 Q. So you didn't read it for the first three years, read
22 it after the refined coal program had stopped because there
23 were no more tax credits; right?
24 A. **That is correct we stopped because the program
25 expired.**

917

1 Q. And now you're here telling me I'm ready to give my
2 legal opinion on why when I read the complaint in 2019 I
3 thought we were okay?
4 A. **I formed an opinion back in 2019.**
5 Q. There's a difference in an opinion and an informed
6 opinion; right?
7 A. **I'm saying it was an informed opinion. Yes, I do.**
8 Q. Who were you relying on to tell you what the patent
9 required?
10 A. **I can read, sir.**
11 Q. But you didn't.
12 A. **I can read the claims, the first amended complaint,
13 second amended complaint, third amended complaint.**
14 Q. So from day one the claim, the '114 patent was in the
15 complaint; right?
16 A. **Yes, it was.**
17 Q. And one of the things that was at issue that your
18 lawyers have made a big deal about is that in the early
19 versions of the complaint there were some different
20 CERT Operations companies that we had named in the original
21 version of the complaint; right?
22 A. **Yeah, probably so.**
23 Q. And your lawyers are saying heck, when we saw that
24 and they were associated with other LLCs that were
25 associated with other power plants we thought this must be

918

1 about those other power plants. They've kind of made that
2 argument; right?
3 A. **I didn't hear that in testimony.**
4 Q. You didn't see them sliding around on a spreadsheet,
5 being Intermountain, let's look at Intermountain. Do you
6 remember that?
7 A. **I do know they showed all of the CERT entities.**
8 Q. And the point was they were trying to say hey, we
9 were confused when we got this complaint because it includes
10 some LLCs that work with some other LLCs that work with some
11 plants that are not in this case. That was the nature of
12 the argument; right?
13 A. **I don't recall the exact nature of that argument.**
14 Q. Before that first complaint was filed where were we
15 supposed to go to figure out which one of these made up LLCs
16 is associated with the right plants?
17 MR. DYESS: Your Honor, objection. He's arguing
18 with the witness and he's disparaging the court order and he
19 can't do that.
20 MR. CALDWELL: He literally said yesterday they
21 just made up the names.
22 THE COURT: I'll sustain that objection and I'll
23 ask counsel to re-ask the question.
24 BY MR. CALDWELL:
25 Q. Sir, when we filed the original complaint how were we

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1 supposed to know which of these investment vehicle LLCs,
2 that you told us have no website and there's nothing to
3 Google on them, are associated with which plants?
4 MR. DYESS: Your Honor, objection. He's asking
5 him to speculate.
6 THE COURT: Hold on one second. I'll overrule
7 the objection.
8 THE WITNESS: I'm sorry. When this happens it
9 gets me where I don't remember the question. Could you
10 repeat it?
11 BY MR. CALDWELL:
12 Q. I can relate. When we filed the first complaint, and
13 you're darn right we named like some CERT Operations
14 companies no longer in the case. I don't disagree with you.
15 How were we supposed to know which investment vehicle LLCs
16 are associated with which operations LLCs and plants?
17 A. **I don't know the extent of how much you guys looked
18 into the companies before we were served. I mean, certainly
19 when that original complaint was filed in 2019 there was
20 some way to contact these companies. If you're claiming
21 that you couldn't reach us on the phone or on the internet,
22 which I don't understand that complaint, why were the
23 entities still named for over a year and a half?**
24 Q. Happy to answer that question. Remember we've had
25 the discussion that we probably don't need to replot about

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1 who does and doesn't have websites and what information is
2 and isn't public; right, we've talked about that?
3 **A. Yes, sir.**
4 **Q.** And your lawyers showed this timeline where it's like
5 original complaint, first amended complaint, second amended
6 complaint, and then some companies get dropped; right?
7 **A. Yes, sir. I saw that timeline.**
8 **Q.** Original complaint was in summer of 2019. Do you
9 know when it was that in all this discovery your lawyer
10 talks about interrogatories, remember that, we can take
11 interrogatories. Do you know when it was you guys answered
12 an interrogatory and told us the nonpublic information about
13 the corporate structure?
14 **A. No, I don't know the date.**
15 **Q.** Does late 2021 sound right?
16 **A. I wouldn't know. I couldn't answer that.**
17 **Q.** You have no personal knowledge and no foundation if
18 these lawyers want to try to use you to say that our side
19 knew that information earlier; fair?
20 **A. I don't have any knowledge that my lawyers wanted**
21 **what?**
22 **Q.** You have -- you're here on the stand testifying under
23 oath you don't know when our side, the ME2C side, was
24 provided with the confidential behind the scenes information
25 on the corporate structure, you don't know?

921

1 **A. I don't recall the date.**
2 **Q.** So you have no idea, then, whether or not the
3 amendments properly streamlining the companies to the ones
4 at plants with activated carbon, you have no way to testify
5 as to whether that was actually very timely, do you?
6 **A. I don't -- I don't know when those were done. I just**
7 **can't answer the question.**
8 **Q.** What other witnesses are going to be presented by
9 your side?
10 **A. I don't know. I think y'all have a list of**
11 **witnesses. I'm not sure.**
12 **Q.** Who are the witnesses you expect to come testify
13 live?
14 **A. Our technical expert and myself and that's the two.**
15 **We had a technical expert and then also -- I don't think we**
16 **have an invalidity person any longer. So I know that I'm**
17 **being called. That's what I've been prepared for.**
18 **Q.** So at this point you think one more witness for your
19 side?
20 **A. I mean I think there's two or three. We've got some**
21 **depositions to play and other things. I'm not sure.**
22 **Q.** And yes, I just don't want this to be confused. You
23 think it's two or three live witnesses after you and then
24 some depositions; correct?
25 **A. Sounds right.**

922

1 **Q.** Is one of these other witnesses going to be the one
2 that you think addresses this timeline of when your side
3 gave my side the confidential corporate structure
4 information?
5 **A. Do I think that a witness is going to be? No. I'm**
6 **the witness for the CERT entities.**
7 **Q.** And you are without information to address the timing
8 of when you finally let us see the facts of the corporate
9 structure; right?
10 **MR. DYESS:** Objection, Your Honor. He's
11 implying that information was available, and complied with
12 the discovery schedule set by the Court.
13 **THE COURT:** Mr. Caldwell.
14 **MR. CALDWELL:** They put up a timeline suggesting
15 we were dilatory. We had a request out for a year and a
16 half.
17 **MR. DYESS:** Your Honor, Mr. Sykes didn't put up
18 a timeline suggesting they were dilatory. He put up a
19 timeline showing when complaints were filed.
20 **THE COURT:** Give me one second. I'll overrule
21 the objection. The issue of knowledge and reaching out to
22 the corporate entities has been at issue and the question
23 relates to that. So I'll overrule the objection.
24 **BY MR. CALDWELL:**
25 **Q.** Do you need to re-ask?

923

1 **A. Please.**
2 **MR. CALDWELL:** May I ask the court reporter to
3 read that, to re-ask that?
4 (Read back.)
5 **THE WITNESS:** I am not certain when the
6 corporate structure was released to you guys. I don't know.
7 **BY MR. CALDWELL:**
8 **Q.** And very shortly after Midwest Energy, our side, got
9 that information, we streamlined the parties to make sure
10 that we were focused on the proper plant with activated
11 carbon; right?
12 **A. I don't know when -- what the timing of when the next**
13 **complaint came. I don't recall the date without looking.**
14 **Q.** I'm sorry if I'm taking a few seconds because I just
15 go through it mentally and ask questions that are coming to
16 mind and I don't want to be duplicative. Let me see if I
17 can streamline things for a second.
18 **Mr. Green,** looking at these parties, the red
19 ones, these LLCs and the operations ones, if we put
20 ourselves back when you guys were getting tax credits, so
21 you were selling refined coal, are you with me, sir?
22 **A. Yes, sir.**
23 **Q.** So let's call it summer 2019, who is the entity for
24 these first five that would have the power to say let's stop
25 doing this process if it infringes the patent?

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1 **A. Senescence Energy Products would. I mean, I'm sorry,**
2 **the project company, Senescence and Springhill and**
3 **Bascobert, all five of those red boxes on those five**
4 **projects, they control the operations at those facilities.**
5 **Q.** The ones with zero employees are the ones who would
6 be in a position to make a decision whether to stop?
7 **A. Yes, sir. They're the ones that own the facility.**
8 **Q.** So didn't you tell us in your deposition that really
9 the people who make a decision to stop, obviously the power
10 plant, they can shut down, but amongst the CERT related
11 companies or contracting companies, the entity that could
12 make a decision would have been the majority partner of the
13 refined coal company that could stop operations at any time?
14 **A. The majority partner for each one of the project**
15 **companies in red. I thought that's what I said.**
16 **Q.** I think you said the project company in red doesn't
17 have employees, but what you're actually saying it's the
18 majority partner, like, in this instance in these first
19 five, is JPMorgan?
20 **A. The majority partners of those first five is**
21 **JPMorgan.**
22 **Q.** That's the company could have decided to stop
23 operations in 2019, 2020, 2021 for Big Cajun, W.A. Parish,
24 Coleto Creek, Limestone, and Labadie; right?
25 **A. I'm sorry. Those project companies are owned as a**

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1 **partnership. We do own a piece of those projects. We**
2 **own -- I can't -- generally one percent of those. There's**
3 **another entity that owns the 99 percent. Those are the two**
4 **partners that would be able to make the decision to stop**
5 **production. I'm trying to answer your question.**
6 **Q.** Sir, in your deposition you said the majority
7 partner, which is not the one percent guy; right? The
8 majority is not the one percent guy?
9 **A. The majority partner is another name between JPMorgan**
10 **and there. I'm not sure exactly what the name is without**
11 **looking at the corporate structure.**
12 **Q.** That's the company that could have made the decision
13 to stop infringing?
14 **A. Yes, sir.**
15 **Q.** A company you literally can't name is the company
16 that would have been the one that could have made a decision
17 to stop infringing?
18 **A. Senescence Energy Products or Springhill Resources**
19 **are the companies that I'm familiar with.**
20 **Q.** I didn't ask you what companies you're familiar with,
21 sir. I'm sorry for getting frustrated but I'm trying to
22 find out because there are issues of things like willful
23 infringement in this case and I'm trying to help the jury
24 with that sort of stuff. Who is the name of the company,
25 the majority partner you told us in the deposition, could

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1 have made the decision to stop infringing?
2 **A. The majority partner of each of the project**
3 **companies.**
4 **Q.** And who are they?
5 **A. JPMorgan, Kiewit, and Mylan is who's on your list**
6 **right there.**
7 **Q.** You're making it sound like I'm being ridiculous for
8 overlooking them. You just told me there was another
9 company somewhere between JPMorgan and the red boxes is that
10 you can't identify; right?
11 **A. I told you that I didn't know the names of the**
12 **companies without looking at the org charts. That's 16**
13 **different names up there.**
14 **Q.** So now are we on the same page that JPMorgan could
15 have decided in late '19 to stop doing this process at Big
16 Cajun, W.A. Parish, Coleto Creek, Limestone, and Labadie?
17 **A. Yes, an affiliate of JPMorgan is.**
18 **Q.** Did you send JPMorgan the patents in this case?
19 **A. JPMorgan has been kept abreast of this case.**
20 **Q.** Are any of those bankers here in court today?
21 **A. No.**
22 **Q.** What about the guys at Kiewit, they would have been
23 the ones that could have made the decision to stop at
24 Laramie and Rush Island; is that right?
25 **A. That is -- that's correct.**

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1 **Q.** Is there another name that you can't remember, some
2 other company squeezed in between Kiewit on top and
3 Buffington and Cottbus below?
4 **A. Each one of those companies are affiliates. Yes,**
5 **there's companies that have the membership, the ownership**
6 **interest in the membership of each one of the project**
7 **companies.**
8 **Q.** So did any of the folks who could have stopped
9 infringing at Laramie and Rush Island make it to court?
10 **A. No, sir.**
11 **Q.** Let's take Powerton out of consideration. That's the
12 Alistar one who paid; correct?
13 **A. That's correct.**
14 **Q.** Speaking of Antelope Valley, that's the one that goes
15 up through Marquis Industrial LLC and eventually to Mylan;
16 right?
17 **A. Yes, sir.**
18 **Q.** Is there some company in between Mylan and Marquis
19 Industrial that you can't remember?
20 **A. I think it's Marquis A or B. I don't recall the**
21 **names, just similar to all the others. Yes, sir.**
22 **Q.** Did you ever send the patents to them?
23 **A. They've been kept abreast of the case as well.**
24 **Q.** Kiewit same thing?
25 **A. Same story.**

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1 Q. Did any of these pharmaceutical guys from Mylan make
2 it here?
3 A. **No, sir.**
4 Q. If JPMorgan, Kiewit, and Mylan or these other unnamed
5 entities right below them had made the decision to stop
6 selling refined coal at these plants, the accused plants,
7 you know what I'm talking about; right?
8 A. **Yes.**
9 Q. When we filed the lawsuit, they would have had to
10 forego something on the order of 300 to \$350 million in tax
11 credits; right?
12 A. **I'd have to do the math.**
13 Q. But it's that 57 million tons we talked about earlier
14 in the case?
15 A. **Okay.**
16 Q. And you told us yesterday it's 5 to \$7 per ton;
17 right?
18 A. **That's correct.**
19 Q. Unless I misadded to the 57 million, we assume that's
20 right, if JPMorgan, Kiewit, Mylan or their associated
21 entities underneath had made the decision to shut down these
22 refined coal processes in July 2019 when we filed the
23 complaint they would have foregone 300 to \$350 million in
24 tax credits; right?
25 A. **That sounds correct.**

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1 Q. 300 or \$350 million in tax credits is a pretty
2 powerful motive to keep going, don't you think?
3 MR. DYESS: Objection. He's asking about the
4 opinion of .
5 THE COURT: Mr. Caldwell.
6 MR. CALDWELL: He's the only person who's a
7 corporate representative.
8 MR. DYESS: Those parties are not defendants in
9 this case.
10 MR. CALDWELL: I'm asking about his corporate
11 rep position for the companies he represents.
12 THE COURT: I'll sustain the objection and ask
13 you to re-ask the question.
14 BY MR. CALDWELL:
15 Q. You told me that the red companies, you started to
16 answer they could have been the ones who made a decision to
17 stop, what I labeled as the investment vehicle LLCs. You
18 started to say that in an answer earlier and I think your
19 point was it's because they're sort of controlled by the
20 majority partner and I think the CERT partners who have a
21 one percent; right?
22 A. **That's correct.**
23 Q. And you are here speaking on behalf of all of those
24 red companies; right?
25 A. **Yes, sir. I am.**

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1 Q. Sir, 300 to \$350 million in tax credits is a powerful
2 motive to keep selling refined coal after receiving the
3 complaint; right?
4 A. **That's a significant amount of money, yes.**
5 Q. To the best of your recollection what is the name of
6 the technical expert that you guys are going to bring in the
7 case?
8 A. **Dr. Connie senior.**
9 Q. And then what are the other witnesses you expect to
10 hear from?
11 A. **The last I knew that we would just have some
12 depositions, but I don't know if Steve Niksa is testifying
13 or not.**
14 Q. Mr. Green, thank you for your time.
15 MR. CALDWELL: I'll pass the witness.
16 THE COURT: All right. Would this be a good
17 time to take our morning break?
18 MR. DYESS: Your Honor, we're going to reserve
19 our time with Mr. Green when we put on the defense case.
20 THE COURT: Okay. All right. So no examination
21 now of Mr. Green?
22 MR. DYESS: Correct.
23 THE COURT: Okay. All right. So then Mr. Green
24 you can step down for now and go back to counsel table.
25 Mr. Caldwell, would this be a good time to take our morning

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1 break?
2 MR. CALDWELL: It would.
3 THE COURT: Why don't we do that and have the
4 jury led out for our morning break.
5 (The jury exited the courtroom.)
6 THE COURT: Yes, counsel, Mr. Dyess.
7 MR. DYESS: Before we go off the record,
8 Your Honor, based on the schedule yesterday Mr. Green is now
9 released from cross-examination, he can confer with his
10 lawyers; correct?
11 THE COURT: He may. It's about 10:40 why don't
12 we come back at 10:55. Before we do, Mr. Caldwell.
13 MR. CALDWELL: We will probably rest at that
14 point. I realize you probably intuited that but I wanted
15 you to know in case that affects how you plan for motions.
16 THE COURT: In terms of what's expected, so the
17 plaintiff will rest their case in chief with regards to
18 infringement and damages at that point and Mr. Dyess, what's
19 your expectation of what your plan is?
20 MR. DYESS: We do have a judgment as a matter of
21 law motion to bring to the Court.
22 THE COURT: Okay. So maybe what we'll do is
23 let's take a break and I guess I'm just trying to think
24 about we need to come back and be on the record for the
25 plaintiff to rest and make your motion. I'm thinking we

<p style="text-align: center;">932</p> <p>1 could take up the motion -- we're going to take up the 2 motion outside of the presence of the jury, in a focused 3 way. And I want to do that in a way that makes best sense 4 and I don't want to break things up in a way that's 5 problematic for you all. I know you have some desire to 6 speak with Mr. Green. 7 MR. DYESS: It's probably better for him to 8 address that, Your Honor. I'm not going to bring the 9 motion. 10 THE COURT: Okay. Well, why don't you all talk 11 amongst yourselves and come up with a proposed plan for the 12 next 30 minutes-ish, and then we'll take a break. 13 I'll come back out and talk with you and we'll 14 get it all right the Court will stand in recess. 15 (A recess was taken, after which the following 16 proceedings were had:) 17 THE COURT: Just to confirm, I think our plan is 18 we're going to bring the jury in in a second, and plaintiff 19 will close its case on infringement and damages. 20 Defendant will then make for the record -- note 21 that they have a motion for the record. I will say I'll 22 hear the motion later, and then we'll go into that 23 defendants' response later. 24 MR. CALDWELL: With one caveat. We will rest, 25 not close. But that kind of matters, and we will -- I mean,</p>	<p style="text-align: center;">934</p> <p>1 right after we rested. 2 THE COURT: Okay. If there's nothing further, 3 we'll have the jury brought in. 4 (The jury entered the courtroom.) 5 THE COURT: Mr. Caldwell? 6 MR. CALDWELL: Thank you. So, Your Honor, just 7 for the record, we will be marking or stickering 8 demonstratives, and I just want to announce into the record 9 demonstrative exhibit numbers, not PTXs, but PDXs. 10 THE COURT: Okay. 11 MR. CALDWELL: And the opening slide deck is 12 PDX 1. Mr. Pavlish's slide deck is PDX 2. Mr. MacPherson's 13 is PDX 3. Mr. O'Keefe's is PDX 4. Mr. Green's is PDX 5. 14 The checkmark claim board that Mr. Nemunaitis 15 made with Mr. O'Keefe for the '517 is PDX 6. The one for 16 the '114 patent is PDX 7. Slides from the adverse call of 17 Mr. Jeff Green are PDX 8. 18 And the org chart board that I created in 19 opening and have used since is PDX 9. Sorry. We'll provide 20 copies according to the Court's preferences on that. 21 THE COURT: Will you actually be stickering 22 these things? 23 MR. CALDWELL: It's a little odd as things that 24 are slide deck, but, yes, we will find a way to kind of 25 unambiguously mark them and get the copies that the Court</p>
<p style="text-align: center;">933</p> <p>1 unless you want to go straight into that. 2 But then the other things is prior to resting, 3 what I'm going to do is for the record, I'm going to 4 identify like demonstrative exhibit numbers, and we might 5 have to sticker them later. 6 But I just want to put on the record 7 demonstrative exhibit numbers for like slide decks and for 8 boards, and I realize demonstratives -- I'm not talking 9 about what goes to the jury box. That's not the issue. 10 At this point I Just want to make sure they're 11 marked as demonstratives. 12 THE COURT: That's fine. And we will work to 13 make sure at the close of all the evidence that the parties 14 and we are on the same page with regard to what exhibits 15 have been admitted to. Counsel will prepare kinds of these 16 things to go back to the jury, et cetera. 17 Yes, Mr. Sykes? 18 MR. SYKES: Your Honor, I just wanted to confirm 19 for the record the discussion with ME2C's counsel, just that 20 we do stipulate for belt and suspenders that our raising the 21 motion after they rest and arguing at lunchtime that there's 22 been no procedural waiver of the JMOL motion. 23 MR. CALDWELL: And we agree. What I told 24 Mr. Sykes was whatever motions they make at lunch will count 25 as if they -- in our minds will count as if they made it</p>	<p style="text-align: center;">935</p> <p>1 wants, and -- if that's okay with Your Honor? 2 THE COURT: It is. 3 MR. CALDWELL: And those I guess are 4 acknowledged as demonstratives. 5 THE COURT: They are so noted. 6 (Thereupon, Demonstrative Exhibits 1 through 9 7 will be marked.) 8 MR. CALDWELL: Then with that, the plaintiff 9 rests. 10 THE COURT: All right. Thank you, Mr. Caldwell. 11 All right. Let me turn to defendants' counsel. 12 MR. DYESS: Your Honor, at this time we move 13 under Rule 50 for judgment as a matter of law. 14 THE COURT: All right. Your motion is noted. 15 As the parties have agreed, I'll hear that motion later 16 today. 17 And so next, Mr. Dyess, I'll turn to you to call 18 your first witness. 19 MR. DYESS: Your Honor, we call Jeff Green to 20 the stand. 21 THE COURT: Mr. Green, please come forward 22 again. 23 MR. DORSNEY: Your Honor, may we approach? 24 THE COURT: You may. Thank you. Mr. Dyess? 25 MR. DYESS: May I proceed, Your Honor?</p>

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1 THE COURT: You may.
 2 JEFF GREEN,
 3 called as a witness on behalf of the
 4 Defendant, was previously sworn, and
 5 testified as follows:
 6 DIRECT EXAMINATION
 7 BY MR. DYESS:
 8 Q. Mr. Green, you've already been introduced to the
 9 jury.
 10 I want to spend a few minutes just following up
 11 on the testimony you just gave to Mr. Caldwell. He seemed
 12 upset that you're here as the corporate representative of
 13 the defendants.
 14 MR. CALDWELL: Objection, Your Honor, that's
 15 argumentative. I literally never indicated I was upset
 16 about him being the corporate representative.
 17 THE COURT: I'll overrule the objection in light
 18 of what's been said to the Court, but I'll allow it, but
 19 let's continue.
 20 BY MR. DYESS:
 21 Q. Mr. Green, speaking of the four CERT partners, I
 22 don't mean to be disrespectful, Mr. Barr Linton recently
 23 passed away; correct?
 24 A. **Correct.**
 25 Q. Mr. Raymond Bean, he currently is not in good health;

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1 correct?
 2 A. **That's correct.**
 3 Q. What is his health situation?
 4 A. **He has terminal leukemia.**
 5 Q. That leaves you and Ms. Schaatt?
 6 A. **Correct.**
 7 Q. Between you and Ms. Schaatt, who knows more about
 8 refined coal?
 9 A. **In my opinion, that would be me.**
 10 Q. And you understand, this -- this is a case at least
 11 as it that relates to infringement -- is about how refined
 12 coal is made, don't you?
 13 A. **I would agree with that, sir.**
 14 Q. So wouldn't it make sense that you would be here as
 15 the person representing the defendants who can testify about
 16 how refined coal is made?
 17 A. **Yes, sir, I believe that's why I'm here.**
 18 Q. You went over with Mr. Caldwell a handful of e-mails,
 19 seven, eight, nine e-mails, something like that. Do you
 20 remember that?
 21 A. **Yes, I do.**
 22 Q. The life of this refined coal program is ten years;
 23 correct?
 24 A. **That is correct.**
 25 Q. Over the life of the refined coal program, about how

938

1 many e-mails did you receive just talking about the refined
 2 coal business?
 3 A. **It was -- it was a lot. I used to joke with folks**
 4 **that I would get a hundred e-mails a day about work that had**
 5 **to be responded to whenever I was asked how much time I was**
 6 **spending just replying to e-mails, but it was -- it was a**
 7 **large number yes, sir.**
 8 Q. Did it -- does it surprise you that when this case
 9 got filed, you couldn't remember any one particular e-mail?
 10 A. **No, that doesn't surprise me.**
 11 Q. Now, if you'd gotten an e-mail about activated
 12 carbon -- let me back up. Do you recall when the CERT
 13 defendants were served with a copy of the patents?
 14 A. **I don't remember exactly, but it was definitely in**
 15 **the second half of July of '19.**
 16 Q. I think the Court's record would show that
 17 defendants -- the CERT Operations defendants were served
 18 with a lawsuit around July 19th of 2019. Does that sound
 19 right?
 20 A. **That would be right, and I would be served**
 21 **July 19th.**
 22 Q. Would it surprise you that on July 19, 2019, you
 23 didn't remember an e-mail from five years prior to that?
 24 A. **That would not surprise me, no, sir.**
 25 Q. All of these e-mails were talking about activated

939

1 carbon. I think Mr. Caldwell went through with you. Do you
 2 recall that?
 3 A. **Yeah.**
 4 Q. Was activated carbon a part of the CERT companies'
 5 business?
 6 A. **No, sir, it was not. It couldn't have been by the**
 7 **statutes or by the -- by the Section 45 code requirements.**
 8 Q. I think we'll -- and we'll explain that a little bit
 9 later but none of the CERT companies ever they weren't the
 10 ones that were supplying activated carbon to the power
 11 plants were they?
 12 A. **No, we didn't supply activated carbon to power**
 13 **plants.**
 14 Q. To your knowledge, did anybody affiliated with the
 15 CERT companies ever suggest to the power plants they ought
 16 to use activated carbon?
 17 A. **No, we did not.**
 18 Q. Would it be fair to characterize these e-mails as the
 19 power plants telling you about activated carbon?
 20 A. **That's how I would characterize all of those e-mails.**
 21 Q. Okay. You've still got the the plaintiffs' notebook
 22 that they provided for you?
 23 A. **No, they just took it. They just took it.**
 24 MR. DYESS: May I approach, Your Honor?
 25 THE COURT: You may.

940

1 BY MR. DYESS:

2 Q. I had a few questions about some of the documents

3 Mr. Caldwell discussed with you.

4 MR. DYESS: Can you pull up Plaintiffs'

5 Exhibit 688?

6 BY MR. DYESS:

7 Q. If you would turn to tab 6 in this notebook,

8 Mr. Green.

9 A. **Okay. I'm here.**

10 Q. There's a sentence that Mr. Caldwell had you focus on

11 that starts right here with Ameren. Do you see that?

12 A. **Yes, I see that.**

13 Q. And this part of the e-mail, this was from Jeff Jones

14 at Ameren to you; correct?

15 A. **Yes, that is correct.**

16 Q. And the sentence I was pointing to you that starts

17 with Ameren, that's them telling you what Ameren's

18 compliance plan was for mercury control; correct?

19 A. **Yes, sir, that's what it appears to say. Yes, that's**

20 **what it says.**

21 Q. Did you ever suggest to Jeff Jones or anybody else at

22 Ameren what their mercury compliance program should be?

23 A. **No, sir. We were never asked to opine on how they**

24 **control mercury.**

25 Q. Were you ever asked to give any advice on what their

941

1 mercury compliance program ought to be?

2 A. **No, never.**

3 MR. DYESS: If you could, Mr. Brown, pull up

4 Plaintiffs' Exhibit 232.

5 BY MR. DYESS:

6 Q. Now, again, this was a 2015 e-mail; correct?

7 A. **Yes, sir.**

8 Q. And the one we looked at before, it was a 2016

9 e-mail; correct?

10 A. **That's correct.**

11 Q. And those are both before this lawsuit got filed?

12 A. **Correct.**

13 Q. And that's before you had notice of any of the

14 patents in this case; correct?

15 A. **That is correct.**

16 Q. Matter of fact, that was before these patents even

17 issued. Weren't they?

18 A. **That is correct.**

19 Q. So we're looking at 232. I think when you discussed

20 this with Mr. Caldwell it was in the context of the power

21 plants were asking you to -- were asking the CERT companies

22 if they could still spray the coal with calcium bromide even

23 if they couldn't make refined coal; is that right?

24 A. **Yes, sir, that's what it says.**

25 Q. And then there were two or three e-mails that were of

942

1 the same variety, can you spray -- the plants are asking if

2 we can spray the coal with calcium bromide if they're not

3 making refined coal; right?

4 A. **Yes, sir.**

5 Q. Did the CERT companies ever actually for any of their

6 power plants spray the coal with calcium bromide if they

7 weren't making refined coal?

8 A. **No, sir. There was no -- there was never an instance**

9 **where we didn't make refined coal and did what these e-mails**

10 **refer to.**

11 MR. DYESS: Let's go -- if you could pull up,

12 Mr. Brown, Plaintiffs' Exhibit 96.

13 BY MR. DYESS:

14 Q. Now, this is another one of those e-mails --

15 MR. DYESS: If you can pull up this paragraph,

16 Mr. Brown. The one that starts with "as you know some

17 utilities."

18 BY MR. DYESS:

19 Q. Now this says: "As you know, some utilities Basin

20 and Dominion but so far not IPA are asking for an agreement

21 with the refined coal project companies."

22 Right?

23 A. **Right.**

24 Q. Were any CERT companies selling refined coal to a

25 Dominion power plant?

943

1 A. **Yes, sir. Two of the project companies were selling**

2 **refined coal to Dominion power plants.**

3 Q. You may need to speak up a little bit.

4 A. **Yes, sir. Two of the CERT refined coal project**

5 **companies were selling refined coal to Dominion power**

6 **plants.**

7 Q. And which power plants were those?

8 A. **That was Mount Storm station which was in**

9 **West Virginia, and Chesterfield station which was just south**

10 **of Richmond, Virginia.**

11 Q. To your knowledge, did Mount Storm or Chesterfield

12 ever use activated carbon?

13 A. **No, sir, to my knowledge they never used activated**

14 **carbon.**

15 Q. Now, IPA, do you know what this reference is to IPA

16 right there?

17 A. **That's Intermountain Power Agency out of Delta, Utah.**

18 **It's a power plant.**

19 Q. Was that a power plant where a CERT company was

20 supplying refined coal back in 2015?

21 A. **Yes, sir. They supplied coal to that power plant,**

22 **Intermountain Power, from 2011 until 2021.**

23 Q. Did Intermountain power plant ever use activated

24 carbon?

25 A. **No, sir, not to my knowledge. They never used**

944

1 **activated carbon.**
 2 Q. Okay.
 3 MR. DYESS: If you would go to page 2 of that
 4 deck.
 5 BY MR. DYESS:
 6 Q. Mr. Green, do you recognize what's in this picture?
 7 A. **Yes, sir, that is the refined coal, a piece of it.**
 8 **It's not all in the picture, but that's a piece of the**
 9 **refined coal facility located as W.A. Parish station phase**
 10 **one.**
 11 Q. And how long was this facility, as it appears in this
 12 picture, at that W.A. Parish facility?
 13 A. **It was installed in December of 2011 and remained**
 14 **there throughout the life of the program.**
 15 Q. 2011 to 2021?
 16 A. **Yes, sir, correct.**
 17 Q. And it pretty much looked just like this?
 18 A. **Exactly like that.**
 19 Q. Okay. So these are big tank silos that hold
 20 chemicals; right?
 21 A. **Yes, those are the S-Sorb silos.**
 22 Q. How tall are those things?
 23 A. **Oh, probably 70 feet tall, 65 to 70 feet.**
 24 Q. What's this building right here?
 25 A. **That is our control room trailer. That building**

945

1 **houses our employees' room and then the control room that**
 2 **contains all the switch gear and PLC equipment for the**
 3 **manufacture of refined coal.**
 4 Q. But no employees are there, right, because these
 5 companies don't have employees?
 6 A. **At that facility there's about 16 employees. We work**
 7 **12 hours -- I'm sorry -- two 12-hour shifts. So there was a**
 8 **staff of about 16 to 18 people that worked at that facility.**
 9 **And, like I said, that's just one of the facilities.**
 10 **There's another one on the site as well.**
 11 Q. On the same W.A. Parish site?
 12 A. **Yes, sir, there's two refined coal facilities there.**
 13 Q. Do both of them have a trailer like this?
 14 A. **Yes, sir, both have -- it's almost identical**
 15 **equipment. Well. It is identical equipment.**
 16 Q. And there would have been CERT Operations Company
 17 personnel in these trailers 24/7; correct?
 18 A. **CERT Operations' employees manned that facility, yes,**
 19 **sir.**
 20 Q. So if somebody needed to find out who was supplying
 21 refined coal through these 70-foot towers that's connected
 22 to the power plant's conveyer belt, they could have knocked
 23 on the door of that trailer and asked, who are you?
 24 A. **Yes, sir, that's correct.**
 25 Q. And somebody would have been there 24/7?

946

1 A. **Yes, sir.**
 2 Q. So you heard Mr. MacPherson's testimony in this case;
 3 right?
 4 A. **Yes, I did.**
 5 Q. It's his allegation that they couldn't find out who
 6 was selling the refined coal to power plants; is that right?
 7 A. **I mean, no, I certainly agree that somebody could**
 8 **have gone to the operation and asked, if they were on that**
 9 **site.**
 10 Q. And if Mr. MacPherson was at the W.A. Parish power
 11 plant trying to sell them the ME2C products, he certainly
 12 could have asked the power plant, hey, where can I go find
 13 out who's making this refined coal; right?
 14 A. **Right. I mean, they would have directed him to us.**
 15 Q. So the CERT Operations' employees that were making
 16 the refined coal, those weren't the only CERT employees,
 17 were they?
 18 A. **No, sir.**
 19 Q. Does CERT -- the CERT Operations' companies are
 20 subsidiaries of another CERT company; correct?
 21 A. **That's correct, Combustion Emission Reduction**
 22 **Technologies LLC.**
 23 Q. Do we call that CERT LLC?
 24 A. **Yes, sir, we do.**
 25 Q. And CERT LLC, it has offices; right?

947

1 A. **We have offices in Birmingham, Alabama.**
 2 Q. And do you have people that work in that office?
 3 A. **We did. There was about 20 staff, accounting, tax**
 4 **work and general accounting folks that were in that office.**
 5 Q. I asked the question at the wrong time I've got to
 6 remember that.
 7 Back from 2011 to 2021, did CERT LLC have people
 8 working in that office in Birmingham?
 9 A. **Yes, sir. Actually from 2009 until 2022, yes, sir.**
 10 Q. Those accounting people, did they come into the
 11 office pretty much every day? Maybe not during COVID, but
 12 pretty much every other day?
 13 A. **That was the only caveat, but, yes, sir they came to**
 14 **the office every day.**
 15 Q. Did you have a receptionist in that office?
 16 A. **Yes, sir, we did.**
 17 Q. Did you have phones installed in that office?
 18 A. **Yes, sir.**
 19 Q. Would she be there to answer the phone if somebody
 20 called and say, "Is this CERT"?
 21 A. **During normal business hours, yes, sir.**
 22 Q. Let's talk about a few things that probably the jury
 23 could use some help understanding. We talked about refined
 24 coal facilities. What is a refined coal facility?
 25 A. **Refined coal facility is a very good example that we**

948

1 **see here. It's a collection of mechanical and electrical**
 2 **equipment, monitoring equipment, weighing equipment,**
 3 **controlled metering equipment that's made specifically to**
 4 **manufacture a product which is refined coal.**
 5 Q. I mean, that's -- all that stuff has to be built and
 6 constructed at the power plant; correct?
 7 A. **That is correct, yes, it has to.**
 8 Q. And that required an investment of upfront money to
 9 build these buildings, to prepare the site to put it on
 10 site, all that kind of stuff?
 11 A. **Yes, it took a substantial capital investment.**
 12 Q. And power plants don't pay for this, do they?
 13 A. **No, sir. The development, the project company -- the**
 14 **project companies pay for the building or installing the**
 15 **assets.**
 16 Q. And what designed these facilities?
 17 A. **I did along with some engineering firms.**
 18 Q. Now, the defendants in this case can be divided into
 19 two groups; correct?
 20 A. **Yes, sir, that's correct.**
 21 Q. We've already talked about that. They're the project
 22 companies and the operations companies; correct?
 23 A. **That is correct.**
 24 Q. Just so the jury understands from you, what's the
 25 difference between project companies and operations

949

1 companies?
 2 A. **The project companies own the assets that are located**
 3 **at the power plants, and the operations companies are**
 4 **contract operators that operate the facilities on behalf of**
 5 **the refined coal project companies.**
 6 Q. When you say "operate on behalf of," what do you
 7 mean?
 8 A. **The day-to-day production, everything that's involved**
 9 **with the production of the fuel.**
 10 Q. They have the boots on the ground that make the
 11 refined coal?
 12 A. **Yes, sir. That's the 16 people that I was referring**
 13 **to. They're the boots on the ground that make it happen.**
 14 Q. Who sells the refined coal to the power plant?
 15 A. **The project company does.**
 16 Q. They own the coal that's turned into refined coal
 17 that's sold to the power plant?
 18 A. **Yes, sir. The project company owns the feedstock**
 19 **coal, the asset, the refined coal company and they sell the**
 20 **production to the power plant.**
 21 Q. Now, I'm not sure you've been asked this question,
 22 but do you have a role with the operations companies?
 23 A. **Yes, sir, I'm also the VP of operations of all the**
 24 **six CERT operation companies.**
 25 Q. Generally speaking, what are some of your job duties

950

1 as VP of operations for the operation companies?
 2 A. **I'm over all of the operations for all of the refined**
 3 **coal companies that CERT Operations Companies operate. So**
 4 **everything, day-to-day operations, staffing. I have**
 5 **management that works under me at each one of the**
 6 **facilities, so I oversee the day-to-day operations.**
 7 Q. Mr. Green, you've been here for all the testimony in
 8 this case; correct?
 9 A. **That's correct.**
 10 Q. Do you have -- we're talking about two patents in
 11 this case; correct?
 12 A. **Yes, sir.**
 13 Q. And I think that they've been referred to as the '114
 14 patent and the '517 patent; correct?
 15 A. **That's correct.**
 16 Q. Do you have an understanding of when the '114 patent
 17 was issued by the Patent Office?
 18 A. **Yes, sir. I believe that was July 9th of 2019.**
 19 Q. And did the '517 patent issue from the Patent Office
 20 sometime after that?
 21 A. **That's my understanding, early 2020 maybe.**
 22 Q. We talked about you getting served with the complaint
 23 in July 2019. That complaint had a copy of the '114 patent
 24 along with the complaint; right?
 25 A. **Yes, sir.**

951

1 Q. You didn't try to avoid finding out about that
 2 patent, it came with the complaint?
 3 A. **That's correct.**
 4 Q. There were some questions that Mr. Caldwell asked you
 5 about doing patent searches before you started selling
 6 refined coal. When did these companies start supplying
 7 refined coal to power plants?
 8 A. **That would have been in the latter half of 2011.**
 9 Q. Do you think you would have been able to do a patent
 10 search in the latter half of 2011 for a patent that didn't
 11 even exist until 2019?
 12 A. **No, sir. I don't think that's possible.**
 13 Q. Let's talk for a minute about the defendants in this
 14 case. CERT Operations V operates the refined coal facility
 15 at the Rush Island power station for Buffington partners; is
 16 that correct?
 17 A. **That is correct.**
 18 Q. And they -- that arrangement was in place from 2011
 19 to 2021; correct?
 20 A. **Yes, sir, that's correct.**
 21 Q. And Buffington Partners is the one selling the
 22 refined coal to Rush Island from 2010 to 2021?
 23 A. **That's correct.**
 24 Q. Just so we're understanding, 2011, I mean, CERT
 25 Operations V and Buffington Partners, they didn't start

952

1 selling refined coal in 2019 when you found out about the
 2 patent; right?
 3 **A. No, sir. We started in 2011.**
 4 **Q.** That was almost eight years before the patent issued?
 5 **A. Yes, sir. That's correct.**
 6 **Q.** That was eight years before you could have possibly
 7 infringed these patents; right?
 8 **A. Yes, sir.**
 9 **Q.** Eight years before you could have possibly known
 10 about these patents?
 11 **A. Yes, sir. That's correct.**
 12 **Q.** Speaking of 2011, is having a refined coal facility
 13 in place before the end of 2011 an important fact in the
 14 refined coal business?
 15 **A. Yes, sir. The IRS code has what we call is a**
 16 **placed-in-service date, and in order to qualify under the**
 17 **code the facility has to be installed and commercially**
 18 **operating prior to the date was December 31, 2011.**
 19 **Q.** What would happen if you wanted to get in the refined
 20 coal business and you didn't have your refined coal facility
 21 installed and commercially operating until January 2, 2012?
 22 **A. That facility wouldn't qualify for the credit so you**
 23 **couldn't do it unless you bought a facility.**
 24 **Q.** Somebody that might want the get into the refined
 25 coal business in 2014, 2015, 2016, they couldn't just jump

953

1 in and start making refined coal with a new facility?
 2 **A. No, sir.**
 3 **Q.** When Rush Island -- was Rush Island, the power plant,
 4 using activated carbon when you started selling -- when you
 5 starting supplying refined coal to them in 2011?
 6 **A. It was not using activated carbon at that time.**
 7 **Q.** If you would, you've got two notebooks up there that
 8 are black, one of them is a skinny notebook, one of them is
 9 a little bit fatter.
 10 **A. I've actually got two skinny notebooks and one fat**
 11 **one. Is it DTX 1514 or the witness binder?**
 12 **Q.** The witness binder.
 13 **A. I have that.**
 14 **Q.** If you would look behind the tab for DTX 1539, it
 15 should be the first one.
 16 **A. I'm there.**
 17 **Q.** Do you recognize what that document is?
 18 **A. Yes, I'm familiar with this document.**
 19 **Q.** What is that document?
 20 **A. This is the operations and maintenance agreement**
 21 **between Buffington Partners LLC and CERT Operations V LLC.**
 22 **Q.** And that's what we were just talking about here.
 23 That's where they were selling the refined coal to the Rush
 24 Island station; correct?
 25 **A. That's correct.**

954

1 **Q.** What is the purpose of this agreement?
 2 **A. It outlined all the operation and maintenance**
 3 **agreements for the CERT Operations V for Buffington**
 4 **Partners.**
 5 **Q.** And that's kind of the operating document that they
 6 would use for that relationship for supplying refined coal
 7 to Rush Island?
 8 **A. Yes, sir. Along with several other documents.**
 9 **MR. DYESS:** I would move to admit defendants'
 10 Exhibit 1539.
 11 **THE COURT:**
 12 Any objection.
 13 **MR. CALDWELL:** No objection.
 14 **THE COURT:** It's admitted.
 15 (Thereupon, Defendants' Exhibit 1539 was
 16 admitted.)
 17 **BY MR. DYESS:**
 18 **Q.** Would there be similar operations and maintenance
 19 agreements in place for the other refined coal facilities?
 20 **A. Yes, sir. All of the refined coal facilities had**
 21 **similar O and M agreements.**
 22 **Q.** What's the date of this document?
 23 **A. That is December 29, 2011.**
 24 **Q.** And is that reflective of the date we just talked
 25 about, the placed-in-service date?

955

1 **A. Yes, sir, it is.**
 2 **Q.** Is there anything in this document that described the
 3 refined coal facility that was owned by Buffington Partners
 4 and operated by CERT Operations V?
 5 **A. Yes, sir. That would be Exhibit A, I believe. Yes,**
 6 **sir. It's Exhibit A.**
 7 **Q.** If this jury when they go back wanted to look at
 8 something that they could reference that kind of described
 9 what a refined coal facility was, could they do that using
 10 that appendix A?
 11 **A. Yes, sir. That gives you all the mechanical and**
 12 **electrical equipment that makes up that facility.**
 13 **Q.** It actually runs over to the next page; is that
 14 correct?
 15 **A. Yes, sir, it does.**
 16 **Q.** Now this description of the refined coal facility
 17 that was at W.A. Parish plant, is that pretty similar to
 18 what's going to make up the refined coal facility at all of
 19 the CERT refined coal facilities?
 20 **A. Yes, sir. All of our equipment was very similar if**
 21 **not identical at all locations.**
 22 **Q.** Now if we can go back to the demonstrative. Go to
 23 the next slide. Now we're back to the pairings. CERT
 24 Operations IV operated the refined coal facility for the Big
 25 Cajun II plant for Springhill Resources; correct?

956

1 A. **That's correct.**

2 Q. For what period of time were they operating that

3 refined coal facility and selling refined coal?

4 A. **Generally the same time, 2011 to 2021.**

5 Q. And who was sell selling the refined coal to the Big

6 Cajun II station?

7 A. **Springhill Resources was.**

8 Q. Now 2011 when CERT Operations IV is making refined

9 coal and Springhill is selling the refined coal to Big Cajun

10 II, was the Big Cajun II station using activated carbon at

11 that time?

12 A. **No, sir, not to my knowledge.**

13 Q. Let's go to the next slide. Now, the pairing of

14 project company and operations company for the Limestone,

15 that was Rutledge Products and CERT Operations RCB; correct?

16 A. **That's correct.**

17 Q. And that operation was preparing and selling refined

18 coal to the Limestone power station in 2011; correct?

19 A. **That's correct.**

20 Q. And they did that 2011 to 2021; correct?

21 A. **Yes, sir.**

22 Q. When Rutledge Products started selling refined coal

23 to the Limestone power station in 2011, was Limestone using

24 activated carbon?

25 A. **No, sir, not to my knowledge.**

957

1 Q. If we could go to the next slide. The pairing at the

2 W.A. Parish power station was CERT Operations RCB preparing

3 the refined coal for Senescence Energy to sell to the W.A.

4 Parish power station; right?

5 A. **Correct.**

6 Q. And that relationship dates back to 2011 and it ran

7 until 2021; correct?

8 A. **Correct.**

9 Q. And when Senescence started selling that refined coal

10 to W.A. Parish in 2011, was the W.A. Parish power station

11 using activated carbon?

12 A. **No, sir, it was not. Not to my knowledge.**

13 Q. Let's go to the next slide. The pairing at Antelope

14 Valley station, that was Marquis Industrial that owned the

15 refined coal facility and CERT Operations II that prepared

16 the refined coal that was sold to the Antelope Valley

17 station; correct?

18 A. **That is correct.**

19 Q. And that relationship ran from 2013 to 2021; correct?

20 A. **Right.**

21 Q. Now, you just told us that the refined coal facility

22 had to be in operation by the end of 2011 to get the

23 tax credit; correct?

24 A. **Yes, sir.**

25 Q. But you just said you weren't at Antelope Valley

958

1 station until 2013?

2 A. **Right. That facility was originally placed in**

3 **service and went into NRG's power plants at Gibson station.**

4 Q. Where is Gibson station?

5 A. **Illinois -- I'm sorry, Indiana.**

6 Q. For what period of time did that -- did CERT

7 Operations II operate that facility for Marquis Gibson

8 station?

9 A. **Yes, it did.**

10 Q. For what period of time?

11 A. **It was the latter part of 2011 into 2012.**

12 Q. When CERT Operations II was operating that facility

13 for Marquis Industrial at Gibson station in 2011, was Gibson

14 station using activated carbon?

15 A. **No, sir. Not to my knowledge.**

16 Q. To your knowledge did Gibson station ever use

17 activated carbon?

18 A. **Not any time we were there. I can't speak to after**

19 **2012.**

20 Q. After you relocated the facility to Antelope Valley

21 station in 2013 -- let me re-ask the question.

22 When you relocated that refined coal facility to

23 Antelope Valley in 2013, was Antelope Valley station using

24 activated carbon?

25 A. **No, sir. Not to my knowledge.**

959

1 Q. Next slide. The pairing of the facility at Laramie

2 River station was CERT Operations RCB preparing the refined

3 coal that Cottbus Associates sold to Laramie River station;

4 correct?

5 A. **That's correct.**

6 Q. What period of time did that occur?

7 A. **That was 2013 to 2021.**

8 Q. When Cottbus started selling refined coal to Laramie

9 River station in 2013, was the Laramie River station using

10 activated carbon?

11 A. **No, sir, it was not.**

12 Q. Had that facility been in service somewhere else

13 prior to starting operations at Laramie River station?

14 A. **It was as it's shown on the screen. Similar story as**

15 **before. That was originally placed in service Cayuga**

16 **generating station as a Duke Energy plant that's in Indiana.**

17 **It operated --**

18 Q. I'm sorry, you kind of trailed off.

19 A. **It operated 2011, 2012.**

20 Q. And when this refined coal facility was in operation

21 at, the Cayuga generating station in Indiana in 2011, was

22 the Cayuga station using activated carbon?

23 A. **No, sir, they were not.**

24 Q. Go to the next slide please. The pairing at the

25 Labadie power station was CERT Operations RCB making the

960

1 refined coal for Larkwood Energy for it to sell to the
 2 Labadie power station; right?
 3 **A. Yes, sir, it was.**
 4 **Q.** For what period of time was that relationship in
 5 effect?
 6 **A. That was 2014 to 2021.**
 7 **Q.** When CERT Operations RCB and Larkwood starting
 8 supplying refined coal to the Labadie power station in 2014,
 9 was the Labadie power station using activated carbon?
 10 **A. No, sir, it was not.**
 11 **Q.** Had that -- was that just one refined coal facility
 12 that was at Labadie?
 13 **A. No. There were actually two refined coal facilities**
 14 **that made up the Larkwood facility at Labadie power station.**
 15 **Q.** And had those two refined coal facilities been
 16 somewhere else prior to the time they were at the Labadie
 17 power station?
 18 **A. Yes, sir. There were originally two plants owned by**
 19 **Marquis Industrial that were at Gibson station and were**
 20 **installed in 2011, we talked about that a couple of slides**
 21 **back. That refined coal facility was sold to Larkwood**
 22 **Energy and relocated to Labadie station and that was**
 23 **installed in what we called that Labadie north and then**
 24 **there was a south location which Larkwood Energy owned the**
 25 **Dolet Hills facility from 2011 to 2012. And there's a**

961

1 **mistake on the slide. It says Dolet Hills station, Utah.**
 2 **That was actually Louisiana. And it was relocated up to,**
 3 **the facility, from Louisiana to the Labadie station.**
 4 **Q.** It's kind of hard to confuse Louisiana and Utah so my
 5 apologies for that.
 6 **A. That's okay. I just saw the mistake.**
 7 **Q.** Now at the Dolet Hills station in Louisiana CERT
 8 Operations RCB was operating that facility for Larkwood
 9 Energy; correct?
 10 **A. That's correct.**
 11 **Q.** And that was in 2011, 2012?
 12 **A. Yes, sir.**
 13 **Q.** When CERT Operations RCB and Larkwood Energy had the
 14 facility in the Dolet Hills station in 2011, 2012, was that
 15 Dolet Hills station using activated carbon?
 16 **A. No, they were not.**
 17 **Q.** Go to the next slide please. The pairing of
 18 operations company and project company at the Coletto Creek
 19 power station was CERT Operations RCB and Bascobert
 20 Holdings; correct?
 21 **A. That's correct.**
 22 **Q.** And CERT Operations RCB made the refined coal and
 23 Bascobert sold the coal to the power plant; is that correct?
 24 **A. Yes, sir. That's correct.**
 25 **Q.** At what period of time were CERT Operations RCB and

962

1 Bascobert making and selling that refined coal at Coletto
 2 Creek?
 3 **A. It started in 2019 through 2021.**
 4 **Q.** Prior to that facility being at the Coletto Creek
 5 power station had it been located somewhere else?
 6 **A. Yes, it was located at Duke Energy's Marshall station**
 7 **in North Carolina.**
 8 **Q.** For what period of time?
 9 **A. From 2011 until 2015.**
 10 **Q.** And did CERT Operations RCB operate the facility at
 11 the Marshall Station for Bascobert during that period of
 12 time?
 13 **A. No, sir. The operator for that facility was**
 14 **CERT Operations II. Yeah, CERT Operations II.**
 15 **Q.** So CERT Operations II operated the facility at
 16 Bascobert when it was at Marshall Station from 2011 to 2015?
 17 **A. Yes, sir, that's correct.**
 18 **Q.** And that's the same CERT Operations II that's a
 19 defendant in the case; right?
 20 **A. Yes, sir.**
 21 **Q.** So some of these operation companies operated
 22 facilities at multiple power plants?
 23 **A. That's correct.**
 24 **Q.** CERT RCB, CERT Operations II?
 25 **A. Correct. That is correct.**

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1 **Q.** So when CERT Operations II was operating the Marshall
 2 Station for Bascobert and selling -- Bascobert was selling
 3 refined coal to the Marshall Station, was the Marshall
 4 Station using activated carbon?
 5 **A. No, sir, not to my knowledge.**
 6 **Q.** So Coletto Creek -- at Coletto Creek, CERT
 7 Operations RCB and Bascobert starting selling that refined
 8 coal in 2019; correct?
 9 **A. Yes, sir, that's correct.**
 10 **Q.** Would there have been agreements in place between
 11 Bascobert and Coletto Creek for the supply of refined coal
 12 before Bascobert started selling refined coal to
 13 Coletto Creek?
 14 **A. Yes, sir. We would have had similar O&M agreements**
 15 **like we've looked at for another project and refined coal**
 16 **sales agreement. There would have been agreements in place.**
 17 **Q.** Do you know when those agreements were signed and in
 18 place for Bascobert to be able to sell that refined coal to
 19 Coletto Creek?
 20 **A. I would say it was probably in April of May of that**
 21 **year.**
 22 **Q.** If you could look in your notebook for tab 1573.
 23 **A. I'm here.**
 24 **Q.** What is that document?
 25 **A. This is the paid up surface use and access agreement**

964

1 **between Coletto Creek Power and BascoBERT (A) Holdings.**
2 Q. That is a very fancy name. Is this document
3 basically a land lease agreement?
4 **A. Yes, sir. We lease -- we lease the area on the site,**
5 **and that's what this covers.**
6 Q. And what's the date of this document?
7 **A. It was effective as of May 10, 2019.**
8 MR. DYESS: Your Honor, we move to admit
9 Defendants' Exhibit 1573.
10 THE COURT: Any objection?
11 MR. CALDWELL: No.
12 THE COURT: It's admitted.
13 (Thereupon, Defendants' Exhibit 1573 was
14 admitted.)
15 BY MR. DYESS:
16 Q. We talked about there would be a number of documents
17 that would be in place before BascoBERT started selling
18 refined coal at Coletto Creek. Do you recall that testimony?
19 **A. Yes, sir.**
20 Q. Is this one of those documents?
21 **A. This is one of those documents.**
22 Q. And would that collection of documents all be signed
23 at the same time?
24 **A. Yes, sir.**
25 Q. So is it fair to say that the agreements in place for

965

1 BascoBERT that -- to sell refined coal to Coletto Creek would
2 have been in place in May of 2019; correct?
3 **A. Yes that's correct.**
4 Q. How long before these contracts were in place had
5 BascoBERT been in discussion with Coletto Creek about
6 supplying refined coal to Coletto Creek?
7 **A. I do -- I don't know. I do know that my initial site**
8 **visit, which I take site visits to meet with folks, occurred**
9 **on Halloween of the prior year, 2018. We had been in**
10 **discussions since probably the summer months, maybe the**
11 **fall, but I was on site in October of '18.**
12 Q. So, I mean, that's several months before initial
13 discussions to having the agreements in place that would let
14 you sell the refined coal to the power plant; correct?
15 **A. That is correct.**
16 Q. Is that typical?
17 **A. It is typical. It's a long, drawn out process trying**
18 **to sell refined coal to a power plant. It takes awhile,**
19 **yes, sir.**
20 Q. So I want to make sure I understand this, looking at
21 these dates. This -- the actual physical assets for this
22 refined coal facility are that -- and we looked at that list
23 in the O&M agreement before, that long list of equipment.
24 **A. Yes.**
25 Q. We looked at the picture, all that big mechanical

966

1 equipment, the trailer, the sprayer for the MerSorb, the
2 other things.
3 All of that's the equipment that was at Marshall
4 Station in 2011 to 2015; right?
5 **A. That's correct.**
6 Q. And it doesn't go back into operation until 2019?
7 **A. That's correct.**
8 Q. Did it go anywhere in between to make refined coal?
9 **A. No, sir. It sat idle at Duke Energy's Marshall**
10 **Station until we found another home for it.**
11 Q. Was that just because you got tired of making refined
12 coal at that facility?
13 **A. No, that happened -- in all the cases where we see a**
14 **relocation and even some of the ones that we didn't see --**
15 **well, it really has nothing to do with relocation.**
16 **But we would have investors exit projects, and**
17 **there's no reason to produce refined coal if you don't have**
18 **an investor in the project.**
19 Q. If you don't have an investor in the project and the
20 asset is not producing anything, I mean, that's a risk you
21 take when you set up these businesses; right?
22 **A. It's probably the single biggest risk.**
23 Q. So an investor could have started with you on
24 January 1, 2012, and it could have pulled the plug on
25 January 2, 2012?

967

1 **A. That's correct.**
2 Q. And at that point -- now we talked about four
3 CERT Operations companies: CERT Operations II, CERT
4 Operations IV, CERT Operations V and CERT Operations RCB.
5 Are those all of the CERT Operations companies?
6 **A. No. There -- there's a total of six CERT Operations**
7 **companies.**
8 Q. Were you also vice president of operations for those
9 two CERT Operations companies?
10 **A. Yes, sir. That was CERT Operations LLC and CERT**
11 **Operations III LLC.**
12 Q. Do you still have the plaintiffs' blue notebook in
13 front of you, the blue binder?
14 **A. Yes, sir.**
15 Q. If you would, turn to tab 12 in that notebook.
16 **A. Okay.**
17 Q. This is the notebook that the plaintiffs prepared and
18 gave to you for your testimony; correct?
19 **A. Yes, sir, that's right.**
20 Q. So what's behind tab 12?
21 **A. It is the original complaint in this case.**
22 MR. DYESS: And, Mr. Brown, if you could pull up
23 the original complaint for the case. It's DI 1. DI 1.
24 BY MR. DYESS:
25 Q. This is -- does this appear to be the original

968

1 complaint that the CERT Operations companies were served
2 with back in July of 2019?
3 A. **Yes, sir, it does.**
4 Q. Can you turn to the second -- can you look at the
5 second page of that document for me?
6 A. **Okay.**
7 Q. Right here out in the middle of the page, it
8 identifies the CERT companies that are defendants in the
9 case; right?
10 A. **Yes, sir, I see that.**
11 Q. And which CERT Operations companies were named as
12 defendants in that original complaint?
13 A. **All six of them. Would you like me to read them.**
14 Q. I would please.
15 A. **CERT Operations LLC, CERT Operations II LLC, CERT
16 Operations III LLC, CERT Operations IV LLC CERT Operations V
17 LLC, and CERT Operations RCB LLC.**
18 Q. Could you turn to page 7 of that original complaint.
19 A. **Okay.**
20 Q. Looking at paragraph 31 -- I mean looking, at
21 paragraph 30, what is the name of the defendant that's
22 identified in paragraph 30?
23 A. **CERT Operations LLC.**
24 Q. What defendant is identified in paragraph 32 of that
25 complaint?

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1 A. **CERT Operations III LLC.**
2 Q. If you would please turn to page 20 of that document.
3 A. **Okay.**
4 Q. Can you read paragraph 152?
5 A. **152: "AJG, DTE, CERT, Chem-Mod, and the RC
6 defendants operate RC facilities that receive coal, add
7 bromine and/or bromide such as CaBr2 to the coal, and then
8 provide that refined coal to the coal-fired power plant that
9 injects a sorbent material comprising activated carbon
10 downstream of the combustion chamber, the accused RC
11 facilities."**
12 Q. Mr. Green, would you look behind tab 13 of the blue
13 notebook?
14 A. **Okay.**
15 MR. DYESS: If you could, Mr. Brown, pull up
16 DI 130.
17 BY MR. DYESS:
18 Q. Are you there, Mr. Green?
19 A. **Yes, sir, I am.**
20 Q. Can you look at page 2 of that document?
21 A. **Okay.**
22 Q. And again kind of in the middle of that page, are all
23 six CERT Operations companies named as defendants in the
24 case?
25 A. **Yes, sir, they are.**

970

1 Q. Let me ask that better. First of all, what is this
2 document behind tab 13?
3 A. **This is the first amended complaint that was filed in
4 this case.**
5 Q. And what date was it filed?
6 A. **July 15th of 2020.**
7 Q. And then on that second page, it still identifies all
8 six of the CERT Operations companies as defendants in the
9 case; correct?
10 A. **Yes, sir, it does.**
11 Q. And that includes CERT Operations LLC?
12 A. **Yes, that's correct.**
13 Q. And it includes CERT Operations III LLC; correct?
14 A. **Yes, sir, it does.**
15 Q. Can you turn to page 7 of that document?
16 A. **I'm there.**
17 Q. Who's identified in paragraph 29 as a defendant in
18 this paragraph?
19 A. **CERT Operations LLC.**
20 Q. And who's identified as a defendant in paragraph 31
21 of the first amended complaint?
22 A. **CERT Operations III LLC.**
23 Q. Could you turn to page 6 of that document?
24 A. **Okay.**
25 Q. I'm sorry, turn to page 31 of that document. My

971

1 apologies.
2 A. **Okay. Give me one second.**
3 Q. Sure.
4 A. **Okay. I'm on page 31.**
5 Q. Can you read paragraph 206 for the jury?
6 A. **206: "AJG, DTE, CERT, Chem-Mod, and the
7 RC defendants operate RC facilities that receive coal add
8 bromine or bromide such as calcium bromide to the coal and
9 then provide that refined coal to a coal-fired power plant
10 that injects a sorbent material comprising activated carbon
11 downstream of the combustion chamber. The accused RC
12 facilities."**
13 Q. Can you like behind tab 14 of the blue notebook?
14 A. **Okay.**
15 Q. What's that document behind tab 14?
16 A. **This is the second amendment complaint in this case,
17 and it's dated May 21st of 2021.**
18 Q. If you could turn to the second page there. Down in
19 the middle, we've still got all six CERT Operations
20 companies named in that complaint as defendants; correct?
21 A. **That is correct.**
22 Q. If you could, turn to page 6 of that complaint, that
23 second amended complaint.
24 A. **Yes, sir.**
25 Q. What is the name of the defendant identified in

972

1 paragraph 23 of the second amended complaint?
2 **A. CERT Operations LLC.**
3 **Q.** And what is the name of the defendant that's the
4 subject of paragraph 25 of the second amended complaint?
5 **A. CERT Operations III LLC.**
6 **Q.** And if you would, turn to page 31 of that document.
7 Could you read paragraph 211 for the jury?
8 **A. 211: "AJG, DTE, CERT, Chem-Mod, and the**
9 **RC defendants operate RC facilities that receive coal, add**
10 **bromine and/or bromide such as CaBr2 to the coal and then**
11 **provide that refined coal to a coal-fired power plant that**
12 **injects a sorbent material comprising activated carbon**
13 **downstream of the combustion chamber.**
14 **Q.** I know this is a tremendous amount of riveting
15 testimony for the jury, but I need you to do it one more
16 time.
17 Can you turn behind tab 15 of the notebook.
18 **A. Yes, sir.**
19 MR. DYESS: This is DI 26.
20 THE WITNESS: Yes, sir. I'm there.
21 BY MR. DYESS:
22 **Q.** This first page -- well, what is this document?
23 **A. This is the third amended complaint for this case,**
24 **and it was filed on October 7, 2021.**
25 **Q.** And again on this first page, we've still got all six

973

1 CERT Operations companies named as defendants in the
2 complaint; correct?
3 **A. Yes, that's correct.**
4 **Q.** Now, if you would turn to page 3 of that document.
5 **A. I'm there.**
6 **Q.** Paragraph 11, who is the named defendant that's the
7 subject of that paragraph?
8 **A. CERT Operations LLC.**
9 **Q.** And if you could, look at paragraph 13 of that second
10 amended complaint. What's the name -- who is the named
11 defendant that's the subject of that paragraph of the
12 complaint?
13 **A. CERT Operations III LLC.**
14 **Q.** Let me just go back just a minute to the first page.
15 Right here in the section where it's identifying the CERT
16 companies, do you see that?
17 **A. Yes, sir.**
18 **Q.** It starts with CERT Holdings LLC, CERT -- CERT --
19 Coal Holdings LLC, CERT Holdings LLC, CERT Holding 2018.
20 Then it gets into all the operation companies.
21 And then this parenthetical right there, it says
22 "individually and collectively as CERT," C-E-R-T. Do you
23 see that?
24 **A. I do see that.**
25 **Q.** That was in the first amended complaint, second

974

1 amended complaint, and the original complaint you looked at?
2 **A. Yes.**
3 **Q.** If you would turn with me to page 31.
4 **A. Okay.**
5 **Q.** And read paragraph 212 to the jury.
6 **A. Okay. I'm sorry, you said turn to paragraph 31?**
7 **Q.** Page 31. My apologies.
8 **A. Page 31, I'm sorry.**
9 **Q.** No, that's on me.
10 **A. Okay. And you asked for 212?**
11 **Q.** Correct.
12 **A. "AJG, DTE, CERT, Chem-Mod, and the RC defendants**
13 **operate RC facilities that receive coal, add bromine, and/or**
14 **bromide such as CaBr2 to the coal and then provide that**
15 **refined coal to a coal-fired power plant that injects a**
16 **sorbent material comprising activated carbon downstream of**
17 **the combustion chamber."**
18 **Q.** Mr. Green, I know we took a lot of time to do that.
19 The CERT entities names as defendants in that original
20 complaint, first amended complaint, second amended
21 complaint, third amended complaint, they got copies of all
22 those documents from the plaintiffs; right?
23 **A. That's correct.**
24 **Q.** Taken together, what did you understand this
25 collection of allegations from the original complaint, the

975

1 first amended complaint, the second amended complaint, and
2 the third amended complaint, to mean as to those names
3 defendants we've been talking about?
4 **A. They were all being accused of infringing the**
5 **patents.**
6 **Q.** How?
7 **A. How were they accused?**
8 **Q.** How were they being accused of infringing the
9 patents?
10 **A. By providing refined coal to a power plant that was**
11 **using activated carbon.**
12 **Q.** Is the date of -- all right. So the third amended
13 complaint, what's the date on that document? That's tab 15.
14 **A. That was dated October 7th of 2021.**
15 **Q.** Is the date of October 2021 significant to you to the
16 infringement claims made against these CERT Operations
17 defendants in this case?
18 **A. Well, it's, you know, two months before the end of**
19 **the refined coal program, which was 12/31 of 2021.**
20 **Q.** Is that the last complaint that the defendants
21 received from the plaintiffs while the refined coal
22 operation was still going on?
23 **A. Yes, sir, it was.**
24 **Q.** Now, we talked about the end of the refined coal
25 program in December of 2021; is that correct?

976

1 A. **That's correct.**

2 Q. Did that mean no refined -- no CERT refined coal

3 facility was selling refined coal to any power plant after

4 December 2021?

5 A. **That is correct.**

6 Q. Which refined coal project companies were under

7 contract with CERT Operations LLC?

8 A. **CERT Operations LLC, that would have been -- it's not**

9 **on that page. Yeah. It's the refined coal companies.**

10 **There were two of them Shermont Industrial and**

11 **Powder Street.**

12 Q. I think we talked about them just a minute ago. Was

13 Shermont Industrial -- I'm sorry. CERT Operations is

14 operating the refined -- let me back up.

15 CERT Operations LLC is operating the refined

16 coal facilities for Shermont Industrial and Powder Street;

17 correct?

18 A. **That's correct.**

19 Q. And for the Shermont piece of it, they're operating

20 that facility at Chesterfield Power Station in Virginia;

21 correct?

22 A. **Yes, sir, that's correct.**

23 Q. What period of time was CERT Operations LLC operating

24 a refined coal facility in Chesterfield Station Virginia?

25 A. **2011 until 2021.**

977

1 Q. Did the Chesterfield Power Station ever use activated

2 carbon?

3 A. **No, sir. Chesterfield never used activated carbon.**

4 Q. The Powder Street CERT Operations was also operating

5 the refined coal facility at Powder Street for the

6 Mount Storm Power Station in West Virginia?

7 A. **That's correct.**

8 Q. In what period of time?

9 A. **In the same time period, 2011 to 2021.**

10 Q. Did the Mount Storm Power Station ever use activated

11 carbon?

12 A. **No, sir, they did not.**

13 Q. But we just read in the original complaint, the first

14 amended complaint, the second amended complaint, and the

15 third amended complaint that the plaintiffs were accusing

16 CERT Operations LLC of providing refined coal, coal treated

17 with bromine, to a power plant that used activated carbon;

18 correct?

19 A. **That's what the complaint said.**

20 Q. So what was in the complaint wasn't factually true,

21 was it?

22 A. **No, it was not.**

23 Q. Now, CERT Operations III, did it operate a refined

24 coal facility?

25 A. **It did.**

978

1 Q. For who?

2 A. **Or Deogun Manufacturing, it was located at the**

3 **Intermountain Power Agency in Delta, Utah.**

4 Q. So we finally get to Utah.

5 A. **Utah, yes, we are there now.**

6 Q. So what period of time was CERT Operations III

7 operating this refined coal facility for Deogun

8 Manufacturing?

9 A. **2011 until 2021.**

10 Q. Did the Intermountain Power facility ever use

11 activated carbon?

12 A. **No, sir, they did not.**

13 Q. But we just read in the complaint, the first amended

14 complaint, the second amended complaint, and the third

15 amended complaint that plaintiffs accuse CERT Operations III

16 of selling or providing refined coal made with calcium

17 bromide to a power plant that used activated carbon;

18 correct?

19 A. **That's what the complaint read.**

20 Q. So that part of the complaint wasn't ever true?

21 A. **No, sir, it wasn't true.**

22 Q. And it wasn't true when it was repeated from the

23 original complaint through the third amended complaint;

24 correct?

25 A. **That's correct.**

979

1 Q. And that third amended complaint was the last set of

2 allegations the CERT companies got from the plaintiffs while

3 they were still making refined coal; right?

4 A. **While they were still operating, yes, that's correct.**

5 Q. Are CERT Operations or CERT Operations III still

6 defendants in the case?

7 A. **No, they are not.**

8 Q. Do you have an understanding of why?

9 A. **They were removed from the case in the fourth amended**

10 **complaint, the next complaint.**

11 Q. Do you know when that got filed?

12 A. **I think it was in 2022.**

13 Q. Do you recall generally when in 2022?

14 A. **I don't remember. I think it was -- I don't recall**

15 **factually the month.**

16 Q. If I told you it was May 2022, does that sound right?

17 A. **Yes.**

18 Q. In May of 2022, when the plaintiffs filed a fourth

19 amended complaint and they drop the claims against CERT

20 Operations and CERT Operations III LLC, does anybody

21 still -- is any CERT company still making refined coal?

22 A. **No, sir, they weren't.**

23 Q. Why is that?

24 A. **Well, the ten-year -- the ten-year life, the**

25 **tax credit program expired at the end of 2021.**

980

1 Q. So refined coal production had stopped in
2 December 2021?

3 A. **That is correct.**

4 MR. DYESS: Your Honor, I'm trying to be
5 courteous. I don't know when you're expecting to take a
6 lunch break. I'm at a transition point.

7 THE COURT: And a sense of how much more do you
8 think you have on direct?

9 MR. DYESS: It's a good bit.

10 THE COURT: Why don't we get another model in or
11 at least part of it and go closer to 12:30.

12 MR. DYESS: That's fine.

13 BY MR. DYESS:

14 Q. And we've mentioned refined coal a few times. What
15 is refined coal -- I'm sorry, go to the next slide -- as it
16 pertains to this case?

17 A. **Well, refined coal is a self -- you know, I'd call it
18 a self-contained fuel that's specifically formulated with a
19 required amount of S-Sorb and MerSorb or M-Sorb to qualify
20 that produced fuel for the Section 45 tax credits.**

21 Q. What do you mean by self-contained fuel?

22 A. **Well, self-contained or fuel inasmuch as that's
23 what's combusted in the power plant's combustion chamber and
24 self-contained in that it's a product that's made. It has
25 two chemicals added to it and blended with it, the MerSorb**

981

1 **and the S-Sorb.**

2 **It's -- when it leaves our facility, it is a
3 product that's fully capable of meeting the Section 45
4 tax credits, and it doesn't require any more additives such
5 as a halogen or a -- or a sorbent.**

6 Q. Now, you talked with Mr. Caldwell for some time about
7 expectations of refined coal.

8 A. **Yes, sir.**

9 Q. Did the power plant ever actually have to burn the
10 refined coal for that coal to qualify for the Section 45 tax
11 credits?

12 A. **No, sir.**

13 Q. But you had to have an expectation that they would;
14 correct?

15 A. **That's correct. We represented that we had that
16 expectation. Yes, sir.**

17 Q. But once -- when did the coal qualify for the
18 tax credit, at what point in the process?

19 A. **It's the moment that it's sold back, and the point in
20 the process where that's done is after it leaves our
21 facility.**

22 Q. So it qualifies for the tax credit whether or not the
23 power plant ever burns it or not; correct?

24 A. **Yes, that's correct.**

25 Q. Speaking of process for making refined coal, and I

982

1 don't know -- can you describe for the jury generally what
2 those steps are of how your companies made the refined coal?

3 A. **Sure at a 50,000-foot level we own the feedstock coal
4 that's in the coal pile. That feedstock coal is delivered
5 by the power plant personnel on a conveyer belt to our
6 system which is inserted into their fuel handling system.
7 The coal enters our facility and prior to entering our
8 facility we have a scale that's installed that weighs the
9 feedstock coal. The feedstock coal is weighed, it enters
10 the facility and we apply two chemicals to the coal, the
11 S-Sorb, it's a powder, and the MerSorb, it's a liquid, is
12 applied to the coal at a given rate and that rate is decided
13 and I think we're going to talk about it later on how that
14 rate is determined, but it's added to the coal, it's mixed
15 in a static mixer and then it exits our facility and is sold
16 to the power plant. Is that general enough?**

17 Q. That works pretty good for me. This process that you
18 just described more making refined coal, was it the same
19 across all of the refined coal project companies?

20 A. **Yes, sir. All of our refined coal project companies
21 made refined coal in the same way.**

22 Q. So CERT Operations LLC, CERT Operations II LLC, CERT
23 Operations III LLC, CERT Operations IV LLC, CERT operations
24 V LLC, CERT Operations RCB LLC, they're all making the
25 refined coal using that very same process you described?

983

1 A. **The same process, yes.**

2 Q. Were they using that same process as you described it
3 back in 2011?

4 A. **Yes, sir. That's correct.**

5 Q. Did that process ever change between with 2011 and
6 2021?

7 A. **No, sir, it did not.**

8 Q. Did it change when these refined coal facilities were
9 moved from one plant to another?

10 A. **No, it did not.**

11 MR. DYESS: If we could go to slide 15,
12 Mr. Brown. I think we've seen pictures similar to this
13 before. And Your Honor, can I approach the witness?

14 THE COURT: You may.

15 BY MR. DYESS:

16 Q. I'm going to hand you this. If you press this
17 button, it's digital.

18 A. **Okay.**

19 Q. What's this picture we're looking at, Mr. Green?

20 A. **This is an aerial photograph of the Coleto Creek
21 power station.**

22 Q. And that's the one -- where is that located again?

23 A. **That's in Fannin, Texas.**

24 Q. If you can using that pointer, can you show the jury
25 where the CERT refined coal companies involvement with coal

984

1 at the power plant starts and stops?

2 **A. Yes. Let's see if I can make -- that right there,**

3 **and we could probably zoom in on it, but that's the**

4 **equipment, and we don't have to zoom in, but if you want to.**

5 **You can see one of the silos right there, so this must have**

6 **been taken during a time that we were operating. And you**

7 **see this box behind it, that's actually a conveyer belt that**

8 **comes out of this. This is a train unloader, so it unloads**

9 **rail cars and dumps it on a conveyer, that ultimately comes**

10 **out and our facility starts and stops -- the area I'm**

11 **showing is about the least area that's spelled out in the**

12 **service use agreement.**

13 MR. DYESS: If we can zoom back out, Mr. Brown.

14 BY MR. DYESS:

15 Q. Do you understand where the furnaces or the

16 combustion facilities are in this picture?

17 **A. This is a guess. It's not a great picture and I'm**

18 **not a power plant expert, but if I can find the button. I'm**

19 **guessing it's this structure right here.**

20 THE COURT: Mr. Dyess, we may just for the

21 record to the extent we have statements like that we need a

22 way to identify where on the document he's referring to if

23 you can do it.

24 BY MR. DYESS:

25 Q. If we could go back. The area that you were

985

1 referring is where your involvement with the refined coal

2 starts and stops in this larger picture, can you describe

3 just for the record what that where that area is in the

4 picture?

5 **A. Right there.**

6 Q. Can you describe. Nobody is going to know where

7 right there is, can you describe where it is in the picture?

8 **A. I'm sorry. It is -- it is north -- you want a**

9 **physical description of that location? I'm sorry.**

10 Q. Let's do it this way, this big black area, what is

11 that in the picture?

12 **A. That would be the raw coal or refined coal storage**

13 **pile out there.**

14 Q. Okay. That's where you store refined coal?

15 **A. There was some refined coal that was stored on that**

16 **pile.**

17 Q. And I'm talking about the really big black area, is

18 that the coal pile?

19 **A. It is the coal pile but some of the refined coal**

20 **that's produced is put into this pile out here.**

21 Q. So the little area that you were referring to is

22 where the refined coal, your involvement with the refined

23 coal starts and stops, that's immediately to the right of

24 the large black coal pile area?

25 **A. Immediately to the right at the base of the**

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1 **conveyer -- immediately to the right of the coal pile at the**

2 **base of the conveyer going up to the transfer house.**

3 Q. And the area that you identified as where you think

4 the coal-fired furnaces and combustion chambers, can you

5 describe give a description for the record where that's

6 located at the plant? Is it the bottom, the lower

7 right-hand quadrant?

8 **A. That is the lower right-hand quadrant of the**

9 **photograph which would be southeast of the refined coal**

10 **facility.**

11 Q. And do you have any judgment about how far away your

12 refined coal facility is from the combustion chamber?

13 **A. I can estimate based on the scale that's in the**

14 **bottom right-hand corner of the diagram that's 700 feet. It**

15 **appears to me to be a thousand feet.**

16 Q. So that's at least the length of three football

17 fields, the difference from where your refined coal facility

18 is to the furnaces; correct?

19 **A. That's correct.**

20 Q. Were the CERT employees restricted on where they

21 could go in a power plant when they came to work in the

22 refined coal facility?

23 **A. Yes, sir. We were -- the specifics are different for**

24 **each power plant, but generally we were only allowed -- when**

25 **I say -- I'll explain the differences, but in our leased**

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1 **area. We had to remain in the leased area. There are**

2 **plants that we could drive into but most of them we required**

3 **an escort, a golf cart to go in. So our on-site management**

4 **would shuttle employees at shift change back and forth to**

5 **the parking lot.**

6 Q. The point is they couldn't just wander wherever they

7 wanted to go in the power plant, could they?

8 **A. No, sir.**

9 Q. Why is that?

10 **A. Safety reasons really. We were -- we had some strict**

11 **mandates, really just safety issues. They didn't want**

12 **vehicles in and out of the inside of their power plant area**

13 **which the coal yard is part of. So safety reasons.**

14 Q. You talked about refined coal and we talked about

15 refined coal facilities. Do any of the CERT refined coal

16 facilities have equipment for injecting activated carbon

17 into the flue gas of a power plant?

18 **A. No, sir.**

19 Q. Has any defendant in this case ever supplied

20 activated carbon to a power plant?

21 **A. No, sir. We've never been in the business of selling**

22 **activated carbon.**

23 Q. Has any defendant in this case ever been involved in

24 injecting activated carbon in the flue gas of a power plant?

25 **A. No, sir, we have not.**

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1 Q. Do you understand that there's equipment that power
2 plants have to use to do that?
3 A. **That's my understanding, yes.**
4 Q. And do any -- and that's -- do we call that activated
5 carbon injection equipment?
6 A. **That's what I've heard it referenced as, yes.**
7 Q. Do any of the CERT defendants in this case, have they
8 ever owned any activated carbon injection equipment?
9 A. **No, sir, we have not.**
10 MR. DYESS: Your Honor, that was another module.
11 I can keep going.
12 THE COURT: A few more minutes. Take it up to
13 12:30 and we'll break.
14 BY MR. DYESS:
15 Q. Mr. Green, there are some facts that the parties have
16 stipulated to in this case that we're allowed to read to you
17 and the jury. The parties have agreed that they're true
18 facts. You can rely on them, you can not rely on them, but
19 the parties agreed that their true. I want to read one of
20 those to you. This is stipulated fact No. 47. "Defendants
21 CERT Operations IV LLC contracted with the EERC to perform
22 Section 45 certification testing for all refined coal sold
23 to the Big Cajun II plant by defendant Springhill
24 Resources." Did you have any problem understanding that as
25 I read it?

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1 A. **No, sir. I understood that.**
2 Q. I need to get you to help me unpack a few things in
3 that sentence. Would it be true that all of the
4 CERT Operations companies contracted with the EERC to
5 perform Section 45 certification testing for their refined
6 coal facilities to then sell the refined coal to the power
7 plant?
8 A. **That is correct.**
9 Q. What is the Section 45 -- I'm sorry. What is the
10 Section 45 certification testing that is referenced in that
11 stipulated fact I just read to you?
12 A. **The certification testing, a description of how it --
13 a general overview or description of how it's done?**
14 Q. Let's back up a little bit further than that. What
15 is it and why do you have to have it?
16 A. **Okay. The testing is to certify our product for the
17 Section 45 tax credits. It is testing that can be done in a
18 pilot scale lab and it's the process we go through to get
19 the formulation for our product to meet the Section 45
20 tax credit.**
21 Q. Thank you. That's what I was looking for. How often
22 do you have to do the Section 45 certification testing?
23 A. **The results of the test are valid for a six-month
24 period. So if you're producing refined coal it has to be
25 qualified, a test has to be done at least every six months.**

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1 Q. We mentioned the EERC did the certification testing.
2 Is that the same EERC that you've heard other witnesses
3 already testify about in this case?
4 A. **Yes, sir. That's then Engineering and Environmental
5 Research Center at the University of North Dakota.**
6 Q. I think it's actually the Energy and Environmental
7 Research Center; is that right?
8 A. **The Energy and Environmental Research Center, that's
9 correct.**
10 Q. And that's at the University of North Dakota?
11 A. **That's correct.**
12 Q. Why did the CERT Operations company use the EERC to
13 do the certification testing?
14 A. **My recollection is that Chem-Mod had been using them
15 for a while, that's our technology provider, and that they
16 were represented as being a lab that was qualified or at
17 least knowledgeable in the testing.**
18 Q. Now, the lab, you just couldn't go to some high
19 school biology lab and do this testing; right? Not
20 everybody has got a pilot scale combustion test facility in
21 their den, do they?
22 A. **No, this is a well respected and renowned lab. Yes,
23 sir.**
24 Q. Do you have an understanding of how the EERC went
25 about doing the Section 45 qualification testing so that you

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1 would have a test that showed your refined coal was
2 qualified under Section 45?
3 A. **Sure. The process of what's done?**
4 Q. Yes.
5 A. **Sure. So CERT Operations, the CERT Operations
6 company that operated the facility at each one of the power
7 plants is responsible for coordinating those tests. So the
8 CERT Operations company collects a feedstock sample of coal,
9 the raw coal from the coal pile, and sends that to the EERC.
10 It's about a ton. I think somebody testified 400 pounds,
11 but we'll deliver about a ton of fuel to the EERC lab. The
12 lab then has to -- they make sure the fuel is mixed well and
13 it's all the same so you can split it into two halves and
14 you're comparing apples to apples. The first sample will be
15 burned and they'll measure the mercury and NOx emissions
16 downstream of the combustion chamber that they're burning
17 the coal in between that -- and then that flue gas passes
18 through a particulate collection device and those emission
19 numbers are measured for mercury and NOx. Then they would
20 take the second half of that coal, treat it with a known
21 amount of S-Sorb and MerSorb, those are the two components
22 that reduce the mercury and the NOx, and they would test
23 that sample and if they achieve at least a 40 percent
24 reduction in mercury and a 20 percent reduction in NOx that
25 fuel is qualified.**

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1 Q. Now, you mentioned reductions in mercury and NOx.

2 Could refined coal qualify for the Section 45 tax credit if

3 it only reduced mercury?

4 A. **No, sir, it wouldn't qualify.**

5 Q. Could refined coal qualify for the tax credit if it

6 only reduced NOx?

7 A. **No, sir.**

8 Q. And we said NOx. I'm not -- I wasn't a chemistry

9 guy. What does NOx stand for?

10 A. **Nitrogen oxide.**

11 Q. And that's a pollutant that power plants need to

12 filter out of the air too; right?

13 A. **Yes, sir, that's right.**

14 Q. Am I clear in understanding that in order to qualify

15 for the tax credit, the refined coal has to reduce both

16 mercury and NOx; correct?

17 A. **That is correct.**

18 Q. And it has to -- whatever amount of MerSorb and

19 S-Sorbs gets put on the coal, it has to show a reduction --

20 this testing you just described -- of at least 40 percent of

21 mercury and 20 percent of NOx; correct?

22 A. **That's correct.**

23 Q. And when the EERC is doing this testing, it puts on a

24 specific amount of MerSorb to get to the mercury reduction;

25 correct?

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1 A. **Correct.**

2 Q. And it puts on a specific amount of S-Sorb to get the

3 NOx reduction; correct?

4 A. **That's correct.**

5 Q. And they measure it and if they hit the 40 percent

6 and 20 percent, you know you've got a formula that will

7 qualify that coal for the next six months for the

8 tax credit; correct?

9 A. **That's correct, yes, sir.**

10 Q. When does the EERC use activated carbon when they're

11 qualifying your refined coal for the tax credit?

12 A. **They don't use activated carbon.**

13 Q. The EERC doesn't use activated carbon when it's

14 qualifying your refined coal for the tax credit?

15 A. **No, it's not allowed to be used.**

16 Q. You're saying it's not used and it's not allowed to

17 be used?

18 A. **Yes, sir, that's correct.**

19 Q. Why is it not allowed to be used?

20 A. **Well, the IRS issues guidance on things such as being**

21 **able to qualify your fuel at a pilot scale lab, and the**

22 **guidance that was issued specifically spells out that**

23 **activated carbon cannot be used in certification testing for**

24 **mercury emission reductions.**

25 Q. There are a lot of government documents out there,

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1 they say a lot of stuff. You could probably put them in a

2 stack and go all the way to the moon.

3 Do you personally know if the EERC does or

4 doesn't use activated carbon in Section 45 qualification

5 testing?

6 A. **Yes, sir, I do.**

7 Q. How do you know that?

8 A. **Well, I've been to the EERC a number of times**

9 **especially in the early years when we were first started**

10 **this testing to witness these tests, and I know that**

11 **activated carbon was never used in the testing that I**

12 **personally witnessed.**

13 Q. So you've witnessed these EERC qualification tests

14 and activated carbon wasn't used; correct?

15 A. **That's correct.**

16 Q. And you understand the government regulations about

17 the qualification of refined coal to say activated carbon

18 can't be used; correct?

19 A. **That's correct.**

20 Q. Are you confident that the refined coal that you had

21 qualified at the EERC never used activated carbon as a part

22 of that qualification process?

23 A. **Yes, sir, a hundred percent.**

24 Q. What would happen if the EERC went rogue on you and

25 said we're going to use some activated carbon in this test,

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1 just for fun?

2 A. **Well, that would disqualify the test as being a valid**

3 **test. It would just invalidate the test, so we'd have to**

4 **redo it.**

5 Q. When you say "redo it," would it be a problem if you

6 had an invalid test that used activated carbon?

7 A. **It would be a -- it would be a -- it would be bad**

8 **because we're required to have a test done every six months,**

9 **and it takes a while to get into the lab. They're very**

10 **busy, so we schedule these tests six months out for the next**

11 **test.**

12 Q. And if you have a test that's disqualified because

13 the EERC used activated carbon and that disqualifies the

14 test, does that mean you're dead in the water because you

15 don't have a Section 45 test that would actually qualify the

16 coal?

17 A. **For that project company, we wouldn't be able to make**

18 **fuel that qualifies until the test was done.**

19 Q. So it's very important to all of the CERT companies

20 that the EERC doesn't use activated carbon in qualification

21 testing; correct?

22 A. **Yes, sir, that's correct.**

23 MR. DYESS: If you could, Mr. Brown, if you

24 look in --

25 BY MR. DYESS:

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1 Q. I'm getting my people confused.
2 If you would, look in the CERT witness notebook,
3 the black one, for Defendants' Exhibit 19A?
4 THE COURT: Mr. Dyess, perhaps after we go
5 through this exhibit, would that be a good time to stop?
6 MR. DYESS: Yes, sir.
7 THE WITNESS: Did you ask me for 1980?
8 BY MR. DYESS:
9 Q. Yes.
10 A. **I'm there.**
11 Q. Do you recollect this document?
12 A. **Yes, sir, this is the one I was referring to.**
13 Q. The one what you were referring to?
14 A. **I'm sorry. It's the IRS notice I was referring to**
15 **earlier.**
16 Q. And what does the IRS notice do?
17 A. **It provides guidance for the refined coal tax credit**
18 **program.**
19 Q. And what aspect of the refined coal tax credit
20 program?
21 A. **Most of it. I mean, it's the complete guidance for**
22 **the production of tax credit for refined coal.**
23 Q. Does it have any section that talks about what you
24 have to do for qualified testing of the refined coal?
25 A. **Yes, sir. That should be back on -- it's I think**

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1 **section 6.03. Yeah, 6.03.**
2 Q. Let me ask you a couple of questions first. Are you
3 familiar with this IRS notice --
4 A. **Yes, sir, I use it.**
5 Q. -- for your work?
6 A. **Yes, sir, I do use it for -- as being responsible for**
7 **operating the facilities that generate the tax credits that**
8 **falls under this procedure.**
9 Q. And you're familiar with its provisions about what
10 can and can't be done as far as the qualification or the
11 certification testing for the qualification of refined coal;
12 correct?
13 A. **Intimately, yes.**
14 MR. DYESS: Your Honor, we'd like to have
15 Exhibit 1980 admitted.
16 THE COURT: Any objection?
17 MR. CALDWELL: I do not have an objection.
18 THE COURT: It's admitted.
19 (Thereupon, Defendants' Exhibit 1980 was
20 admitted.)
21 BY MR. DYESS:
22 Q. If you could, turn to I believe it's page 406.
23 MR. DYESS: And, Mr. Brown, could you highlight
24 the section?
25 BY MR. DYESS:

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1 Q. 406 kind of in the middle -- there are three columns
2 on this page; right?
3 A. **That's correct.**
4 Q. And if you're looking at that middle column, does
5 that have what you understand as the rules for qualification
6 testing at a pilot scale facility?
7 A. **Yes, sir, that's -- that's what I'm familiar with.**
8 Q. If you could, is that what's referenced up here on
9 the screen?
10 A. **Yes, it is.**
11 Q. If you could read through that.
12 A. **[As read] Other testing methods: Methods other than**
13 **CEMS, C-E-M-S, field testing may be used to determine the**
14 **emissions reduction. If a method other than CEMS field**
15 **testing is used, the service may require the taxpayer to**
16 **provide additional proof that the emission reduction has**
17 **been achieved. Permissible methods include the following:**
18 **(a) demonstration pilot scale combustion furnace. A testing**
19 **method using a demonstration pilot scale combustion furnace**
20 **if it is established that the method accurately measures the**
21 **emission reduction that would be achieved in a boiler**
22 **described at 6.031(a)(i) of this notice and a qualified**
23 **individual verifies the test results in a manner that**
24 **satisfies the requirements of section 6.031(c)(ii)(v) and**
25 **(vi) of this notice.**

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1 Q. And I believe these section 6.03 (1)(c)(i)(ii)(v) and
2 (vi) are on the previous page; is that correct?
3 A. **Yes, sir, they are.**
4 MR. DYESS: If you could pull that up,
5 Mr. Brown. Could you highlight that area of this page,
6 Mr. Brown.
7 BY MR. DYESS:
8 Q. And is this that section, little romanette (vi) you
9 referred to?
10 A. **That is correct.**
11 Q. If you could read that for the jury?
12 A. **[As read] Emissions of mercury are measured upstream**
13 **of any SO2 scrubber and Hg control device such as activated**
14 **carbon injection.**
15 Q. Now, what is -- to you, do you have an understanding
16 what it means that the emissions have to be measured
17 upstream of an activated carbon injection?
18 A. **It means that the baseline in refined coal mercury**
19 **measurement numbers that you're comparing have to be**
20 **measured before activated carbon is used.**
21 Q. And is this the restriction you were referring to
22 before of the regulation saying you can't use activated
23 carbon in pilot scale testing?
24 A. **Yes, sir, that's it.**
25 MR. DYESS: Your Honor, this would be a good

<p style="text-align: center;">1000</p> <p>1 time for a break.</p> <p>2 THE COURT: Thank you, Mr. Dyess. Ladies and</p> <p>3 gentlemen of the jury, we're going to take our lunch break.</p> <p>4 It will be a half hour for lunch, but at the end of the half</p> <p>5 hour I'll need to come out here and talk to the lawyers</p> <p>6 about some legal issues. So I'll just say I think lunch</p> <p>7 today is probably going to be more like 45 minutes to an</p> <p>8 hour because I have to deal with some things with them.</p> <p>9 With all that said, let's have the jury led out.</p> <p>10 (The jury exited the courtroom.)</p> <p>11 THE COURT: Just in terms of schedule, everyone,</p> <p>12 it's 12:38 now. So I'll give everybody a half hour for</p> <p>13 lunch. So at 1:08 I'll be ready to come back in and talk to</p> <p>14 the lawyers. What we'll do then is hear the defendants'</p> <p>15 motion for judgment as a matter of law and argument, and</p> <p>16 then I'll resolve that issue and then we'll bring the jury</p> <p>17 back in for the afternoon.</p> <p>18 A couple of other things, I will probably send</p> <p>19 you over lunchtime a draft proposal for that addition to the</p> <p>20 contributory infringement instruction you've been talking</p> <p>21 about just as a way to try to get the parties something that</p> <p>22 they can then be looking at and reacting to. I'm trying to</p> <p>23 make sure our prayer conference flows as smoothly and</p> <p>24 efficiently as possible by trying to get you before we get</p> <p>25 there. And I'll make sure my staff comes out and updates</p>	<p style="text-align: center;">1002</p> <p>1 will be efficient. At some point if we go very long or</p> <p>2 outside the arguments, we'll have to change that, but that</p> <p>3 would be the expectation.</p> <p>4 So I'll call on defendants' counsel to make</p> <p>5 their motion and then we'll hear from the plaintiffs' side</p> <p>6 and you will have a chance to make any rebuttal and take a</p> <p>7 short break and I'll come back and give you my decision.</p> <p>8 MR. DORSNEY: Your Honor, we do have one</p> <p>9 housekeeping matter about exhibits.</p> <p>10 THE COURT: We could address it now, sure.</p> <p>11 MR. DORSNEY: So during the hearing the Court</p> <p>12 asked us to redact PTX 641, 642, and 646. We have the</p> <p>13 redacted copies now, so could have we have them admitted as</p> <p>14 641A, 642A and 646A? Would the Court like us to do that</p> <p>15 or...</p> <p>16 THE COURT: I don't know. Did I admit them</p> <p>17 before on a different numbering scale?</p> <p>18 MR. DORSNEY: That's a good question. That will</p> <p>19 take care of that, Your Honor.</p> <p>20 THE COURT: So they've already been admitted.</p> <p>21 Okay.</p> <p>22 MR. DORSNEY: And then the other issue is we</p> <p>23 have three DTX exhibits, 377, 378, 379, but before -- and</p> <p>24 none of the materials were live. Before they go back to the</p> <p>25 jury, there are footnotes in them that have to be redacted</p>
<p style="text-align: center;">1001</p> <p>1 you on where we stand as to timing so we're all on the same</p> <p>2 page.</p> <p>3 Anything further before we conclude? Seeing</p> <p>4 nothing, we'll recess and come back at 1:08. Thanks</p> <p>5 everybody.</p> <p>6 (A recess was taken, after which the following</p> <p>7 proceedings were had:)</p> <p>8 THE COURT: I hope everybody was able to grab</p> <p>9 lunch and we're all ready to go. I should say I appreciate</p> <p>10 counsel. I know it's got to be a very demanding schedule</p> <p>11 for you all particularly through this week. When I was</p> <p>12 trying cases before I became a judge here, Judge Robinson</p> <p>13 would give us a half hour for lunch. I remember eating a</p> <p>14 banana and trying to get something in in the time that we</p> <p>15 had. And I thought, oh, man, this is rough. Of course, I</p> <p>16 wasn't thinking about as a judge. You think about the jury</p> <p>17 and you don't want them to be here all week.</p> <p>18 So anyway, I just want to say I appreciate what</p> <p>19 you're going through. I've been through it before myself in</p> <p>20 this courtroom for a number of years, and I just wanted to</p> <p>21 note that.</p> <p>22 Okay. So what we'll do now is we'll hear</p> <p>23 argument on defendants' JMOL motion. And what I'd ask -- I</p> <p>24 told the parties I'm not going to charge them the full time</p> <p>25 for arguing the JMOL motions because I'm expecting arguments</p>	<p style="text-align: center;">1003</p> <p>1 in compliance with the Court's pretrial order 63B. So we</p> <p>2 have redacted copies of those to hand out. I don't know how</p> <p>3 you'd like us to hand that out.</p> <p>4 THE COURT: If you're talking about the versions</p> <p>5 that go back to the jury, we don't need those right now.</p> <p>6 We'll work with you to make sure that everybody knows what</p> <p>7 the final admission of the exhibits are, prepare a final</p> <p>8 version of the exhibits that can be taken back to the jury.</p> <p>9 In terms of needing to hand them up now, I don't need to see</p> <p>10 them.</p> <p>11 MR. DORSNEY: Yes, Your Honor, but the exhibits</p> <p>12 were not redacted while they're in the slide deck. The</p> <p>13 material that needs to be redacted was never, you know,</p> <p>14 examined. So the actual physical document would be slightly</p> <p>15 different than what was technically admitted, so we're just</p> <p>16 trying to be as clean as possible.</p> <p>17 THE COURT: Okay. Do I need to admit them? Are</p> <p>18 you making a motion to admit them? What are you asking for?</p> <p>19 MR. DORSNEY: Well, I guess we'd like to admit</p> <p>20 the redacted copies of DX 377, 378 and 379 as 377A, 378A and</p> <p>21 379A. And we have copies to hand up to the Court and</p> <p>22 counsel if necessary.</p> <p>23 THE COURT: Okay. And is there any objection?</p> <p>24 MR. PEARSON: I would love to say no, but we</p> <p>25 haven't been provided with the redactions so I'd like a</p>

<p style="text-align: right;">1004</p> <p>1 chance to review them.</p> <p>2 THE COURT: Why doesn't counsel provide the</p> <p>3 copies to the other side and to us as well, and then before</p> <p>4 the jury comes back out, we can take this up and get them</p> <p>5 admitted if there's no objection.</p> <p>6 MR. DORSNEY: Yes, Your Honor.</p> <p>7 THE COURT: Thank you.</p> <p>8 All right, Mr. Wilson.</p> <p>9 MR. WILSON: Good afternoon, Your Honor.</p> <p>10 THE COURT: Good afternoon.</p> <p>11 MR. WILSON: So preview what we're going to</p> <p>12 cover here right now, defendants are bringing a motion under</p> <p>13 Rule 50(a) for induced infringement and will intend to cover</p> <p>14 any other necessary and appropriate motions after the close</p> <p>15 of all the evidence.</p> <p>16 Defendants move under Federal Rule of Civil</p> <p>17 Procedure 50(a) for finding that plaintiffs have not</p> <p>18 provided legally sufficient evidence that a reasonable juror</p> <p>19 would find by a preponderance of the evidence that</p> <p>20 defendants induced infringement of Claims 25 and 26 of the</p> <p>21 '114 patent or Claims 1 and 2 of the '517 patent and for</p> <p>22 judgment as a matter of law that defendants have not induced</p> <p>23 infringement of those claims.</p> <p>24 On induced infringement, plaintiffs must</p> <p>25 establish, among other things, that a defendant took some</p>	<p style="text-align: right;">1006</p> <p>1 power plant at issue was using an ESP or a baghouse prior to</p> <p>2 its use of refined coal or activated carbon, and that every</p> <p>3 power plant at issue in this case has continued to use an</p> <p>4 ESP or baghouse even after stopping its use of refined coal.</p> <p>5 And that testimony can be found at the 2/28 rough transcript</p> <p>6 at 657 at lines 7 to 18; 658, lines 4 to 11; 702, lines 7 to</p> <p>7 9; 702, lines 20 to 23; and 703, lines 14 to 18.</p> <p>8 He admitted that defendants did nothing to</p> <p>9 encourage or cause any power plant to use any ESP or</p> <p>10 baghouse, and that can be found in yesterday's transcript at</p> <p>11 657, 19 to 24, and 658 at 4 to 17. And I don't know how</p> <p>12 much Your Honor wants to hear citation of the law on this,</p> <p>13 but on this point we would point to the Microsoft -- for</p> <p>14 example, to the <i>Microsoft Corp. v. DataTern, Inc.</i> case which</p> <p>15 is at 755 F.3d 899, and I believe it's been cited in several</p> <p>16 filings before.</p> <p>17 So Federal Circuit from 2014 and on pages 905</p> <p>18 and note three, the decision discusses how if the</p> <p>19 instruction or encouragement to perform any steps of a</p> <p>20 method comes from somebody other than the defendant, then a</p> <p>21 claim of induced infringement has not been stated.</p> <p>22 In addition, both asserted independent Claim 25</p> <p>23 of the '114 patent and asserted independent Claim 1 of the</p> <p>24 '517 patent include a step of injecting a sorbent material</p> <p>25 in the form of activated carbon. Mr. O'Keefe identified no</p>
<p style="text-align: right;">1005</p> <p>1 affirmative action intending to cause a power plant to</p> <p>2 directly infringe an asserted claim, and that he,</p> <p>3 defendants' actions actually caused the power plant to</p> <p>4 perform each and every step of the asserted claim.</p> <p>5 Plaintiffs have not presented sufficient</p> <p>6 evidence to permit a reasonable juror to find by a</p> <p>7 preponderance of the evidence that any defendant took an</p> <p>8 affirmative action intending to cause a power plant to</p> <p>9 directly infringe an asserted claim or that any defendants'</p> <p>10 actions actually caused a power plant to perform each and</p> <p>11 every element of an asserted claim.</p> <p>12 Both asserted independent Claim 25 of the '114</p> <p>13 patent and again independent Claim 1 of the '517 patent</p> <p>14 require the similar steps of separating the mercury sorbent</p> <p>15 composition from the mercury-containing gas to form a</p> <p>16 cleaned gas or collecting mercury into a mercury-containing</p> <p>17 gas with a sorbent added to the mercury-containing gas, the</p> <p>18 sorbent containing activated carbon.</p> <p>19 Plaintiffs' expert, Mr. O'Keefe, identified the</p> <p>20 performance of this step at the power plants that allegedly</p> <p>21 infringe as use of an ESP or baghouse. Mr. O'Keefe,</p> <p>22 however, identified no evidence that any defendant intended</p> <p>23 for a power plant to use an ESP or a baghouse or that any</p> <p>24 defendants' actions actually caused a power plant to use an</p> <p>25 ESP or baghouse. To the contrary, he conceded that every</p>	<p style="text-align: right;">1007</p> <p>1 evidence that any defendant intended for a power plant to</p> <p>2 use activated carbon injection or that any defendants</p> <p>3 actions actually caused a power plant to use activated</p> <p>4 carbon injection.</p> <p>5 With respect to actions taken with intent,</p> <p>6 Mr. O'Keefe identified the sale of refined coal at a loss,</p> <p>7 great optimization of bromine and activated carbon injection</p> <p>8 and fly ash benefits. The sale at a loss evidence is only</p> <p>9 an intent to induce a power plant to use refined coal. The</p> <p>10 evidence of rate optimization only goes to the question of</p> <p>11 whether defendants were aware that activated carbon may have</p> <p>12 been used at some point at a given plant. It doesn't</p> <p>13 evidence an intent that plaintiff use activated carbon</p> <p>14 injection or have taken any action to encourage them to do</p> <p>15 so.</p> <p>16 With regard to the fly ash benefit, again the</p> <p>17 evidence only supports an intent to encourage the use of</p> <p>18 refined coal by touting its benefits for fly ash. It does</p> <p>19 not evidence any intent to encourage the use of activated</p> <p>20 carbon injection.</p> <p>21 Mr. O'Keefe also relied on evidence that</p> <p>22 defendants provided or offered indemnity agreements.</p> <p>23 However, indemnity agreements generally do not evidence an</p> <p>24 intent to induce infringement, and Mr. O'Keefe prove linking</p> <p>25 any indemnity agreement do an intent to cause infringement</p>

<p style="text-align: center;">1008</p> <p>1 of the asserted patents.</p> <p>2 On that point we would point the Court to <i>MEMC</i></p> <p>3 <i>Electronic Materials Inc. v. Mitsubishi Materials Silicon</i></p> <p>4 court 420 F.3d 1369 Federal Circuit 2005, and on pages 1378</p> <p>5 to 1379, the Court stated speaking of another case: As in</p> <p>6 <i>Hewlett Packard</i> the indemnity provision in this case may</p> <p>7 have facilitated the sale of the accused wafers, but there's</p> <p>8 no evidence that the primary purpose of the agreement was to</p> <p>9 induce Samsung Japan to infringe the '302 patent.</p> <p>10 Likewise here, any indemnity provision</p> <p>11 identified by Mr. O'Keefe predated issuance of the patents,</p> <p>12 and that can be seen in yesterday's transcript at 634, lines</p> <p>13 13 to 25 where he's talking about PTX 202 which is dated</p> <p>14 December 2013.</p> <p>15 As a result, the primary purpose of any</p> <p>16 indemnity agreement could not have been to induce a power</p> <p>17 plant to infringe the asserted patents which did not exist.</p> <p>18 With regard to causation, Mr. O'Keefe relied</p> <p>19 only on his claim that power plants had no choice but to</p> <p>20 burn the refined coal after receiving it, and that can be</p> <p>21 found in yesterday's transcript at 636, line 19 to 637, line</p> <p>22 1.</p> <p>23 At most this evidences that a defendant was the</p> <p>24 cause of a power plant's use of refined coal. It is not</p> <p>25 evidence to support the inference that a defendant caused a</p>	<p style="text-align: center;">1010</p> <p>1 injection.</p> <p>2 To the extent Mr. O'Keefe identified any</p> <p>3 evidence indicating that a defendant may have had knowledge</p> <p>4 of activated carbon use at a particular plant, evidence of</p> <p>5 knowledge of a power plant's use of activated carbon is not</p> <p>6 evidence of causation. Moreover, evidence of such knowledge</p> <p>7 prior to July 9, 2019, such as the Sargent & Lundy reports</p> <p>8 he reviewed which are discussed at, for example, yesterday's</p> <p>9 transcript to 668/12 to 16 and 669 to 14, e-mails that he</p> <p>10 identified and relied on which could be found discussed at</p> <p>11 672.2 or any other evidence prior to July 9th, 2019, such as</p> <p>12 the sales agreements that he identified and relied on.</p> <p>13 To the extent Mr. O'Keefe otherwise contends</p> <p>14 this is evidence of an affirmative act to encourage or</p> <p>15 induce use of activated carbon, that evidence is legally</p> <p>16 insufficient to constitute an act of inducement. Acts</p> <p>17 occurring prior to the issuance of a patent or otherwise</p> <p>18 prior to the appropriate damages period cannot constitute</p> <p>19 acts of inducement of infringement. And on that we cite the</p> <p>20 Roche Diagnostics case which we discussed at different times</p> <p>21 and I think Your Honor referred to the other morning as</p> <p>22 well.</p> <p>23 Ultimately, Mr. O'Keefe testified that the only</p> <p>24 act occurring after the issuance of the patents-in-suit that</p> <p>25 he relied on as evidence as an act of inducement was the</p>
<p style="text-align: center;">1009</p> <p>1 power plant to use activated carbon or to employ a</p> <p>2 separation process like an ESP or baghouse to remove that</p> <p>3 activated carbon.</p> <p>4 Mr. O'Keefe testified that at most of the power</p> <p>5 plants at issue, refined coal was used prior to the</p> <p>6 installation of activated carbon and that could be found in</p> <p>7 the transcript at 692/18 to 693/2. He further testified</p> <p>8 that the power plants at issue had continued to use</p> <p>9 activated carbon even after stopping use of refined coal</p> <p>10 because activated carbon injection use was necessary to</p> <p>11 comply with MATS. And that can found in yesterday's</p> <p>12 transcript at 701/25 to 702/6.</p> <p>13 In other words, wholly absent of any action on</p> <p>14 the part of a defendant, power plants used activated carbon</p> <p>15 injection along with their particulate removal to remove</p> <p>16 mercury from a flue gas to comply with MATS. And ultimately</p> <p>17 Mr. O'Keefe testified that MATS compliance was the only</p> <p>18 reason power plants installed activated carbon injection</p> <p>19 systems, and that defendants do not sell activated carbon to</p> <p>20 the power plants at issue. And that is in yesterday's</p> <p>21 transcript at 691/6 to 692/5.</p> <p>22 Mr. O'Keefe offered no competent evidence that</p> <p>23 any defendant acted with an intent that a power plant use</p> <p>24 activated carbon injection or that any defendant was the</p> <p>25 cause of that power plant's use of activated carbon</p>	<p style="text-align: center;">1011</p> <p>1 sale of refined coal. And that's stated at 690 at 16 to 25.</p> <p>2 However, the sale of a product that may be used to infringe</p> <p>3 is not, standing alone, an act of infringement. And that</p> <p>4 can be also found in the Microsoft case that I cited earlier</p> <p>5 775 F.3d at line 5. We'd also point the Court to <i>Takeda</i></p> <p>6 <i>Pharmaceuticals v West-Ward Pharmaceuticals Corp.</i></p> <p>7 785 F.3d 625 and 630, and that is a Federal Circuit case</p> <p>8 from 2015.</p> <p>9 As just discussed, there is not sufficient</p> <p>10 evidence to support an inference that the sale of refined</p> <p>11 coal in this case encouraged or otherwise induced a power</p> <p>12 plant to do anything other than buy refined coal or that the</p> <p>13 sale of refined coal caused anything more than the purchase</p> <p>14 of refined coal.</p> <p>15 There is not sufficient evidence that the sale</p> <p>16 of refined coal, standing alone, encouraged or otherwise</p> <p>17 induced a power plant to use activated carbon injection or</p> <p>18 to employ an ESP or baghouse or that the sale refined coal</p> <p>19 standing alone actually caused a power plant to do so.</p> <p>20 Accordingly, plaintiffs have not presented</p> <p>21 legally sufficient evidence that would permit a reasonable</p> <p>22 juror to find by a preponderance of the evidence that</p> <p>23 defendants induced infringement of any asserted claim.</p> <p>24 So based on the record, no reasonable juror</p> <p>25 could find by a preponderance of the evidence that</p>

<p style="text-align: center;">1012</p> <p>1 defendants induced infringement of Claims 25 and 26 of the 2 '114 patent and Claims 1 and 2 of the '517 patent. 3 THE COURT: Okay. Thank you, Mr. Wilson. 4 MR. WILSON: Thank you. 5 THE COURT: Let's hear from plaintiffs' counsel. 6 MS. HALEY: Thank you, Your Honor. This is 7 Aisha Haley on behalf of plaintiffs. Much of what we heard 8 just now is a rehash of legal arguments that have been made 9 throughout the case in the context of motions to dismiss, in 10 the context of motion of summary judgment and most recently 11 in the context of jury instructions. And just to sort of 12 save time I'm going to incorporate by reference our 13 responses along the way including the authorities that are 14 cited therein. I can address the specific points in the 15 order that they were made. 16 The first one seems to be that because the 17 defendants don't encourage the installation of an ESP or a 18 baghouse, they cannot infringe. That's not an affirmative 19 act. 20 I'm not aware of any requirement that equipment 21 must be specially purchased for infringement or that the 22 freezing of the equipment can constitute part of the 23 evidence for induced infringement, so I'm not sure that 24 that's a requirement. 25 There's also no requirement that the equipment</p>	<p style="text-align: center;">1014</p> <p>1 based on the tonnage that was sold during the damages period 2 and the plans to continue to operate must comply with MATS, 3 and so from that evidence, a jury could infer that the 4 defendants were encouraging the use of ACI, if that's part 5 of the MATS compliance scheme. 6 There was some discussion of an indemnity. The 7 indemnity is related at least to willful blindness. It 8 reflects that there was a known risk, that there could be 9 litigation, particularly patent infringement in this 10 context, coupled with a choice to either not learn more or 11 to avoid learning more. 12 For example, there was evidence today that the 13 defendants were offered a tour of a power plant and chose 14 not to take that tour. So to the extent they were unaware 15 of ACI use, they were willfully blinding themselves to that 16 fact. 17 And then there was some discussion of <i>Roche</i>, and 18 we talked about <i>Roche</i> a fair amount in the context of this 19 case. It is true that acts that are outside of the damages 20 period are not -- cannot be the acts that you point to as 21 affirmative acts for inducement. 22 But evidence outside of the damages period is 23 certainly related to state of mind, and it's not as if the 24 defendant forgets on the first day of the damages period 25 everything they learned prior or everybody they believed</p>
<p style="text-align: center;">1013</p> <p>1 the only be used for the period of infringement and could 2 not be used after the infringement or the accused damages 3 period. So the fact that baghouses existed before and after 4 infringement doesn't seem particularly relevant here. 5 Next, the next point was about ACI. I guess the 6 argument is that -- that providing the coal or that 7 injecting ACI doesn't constitute an affirmative act. I'm 8 not exactly sure how that grabs on to the affirmative act 9 requirement. 10 In any event the evidence has shown in this 11 case, and a reasonable jury could conclude that once the 12 coal was sold by the defendants, it was on the conveyer belt 13 destined to fall into the boiler to combust, and then that 14 everyone understood that the remaining steps necessarily 15 included ACI injection. 16 In that context, there's no failure of causation 17 there. There's no failure of encouragement because there's 18 a break in the causation chain, and so defendants' view of 19 the fact that people do other things but a jury could 20 obviously infer from the evidence that that's not the case. 21 Also point out that defendants are -- there is 22 ample evidence that defendants are motivated to encourage 23 infringement, which is evidence that the jury can rely on 24 for specific intent. 25 For example, the plants generating tax credits</p>	<p style="text-align: center;">1015</p> <p>1 prior. 2 To the extent there's an argument on limitation 3 of what evidence can be considered, there's no limitation on 4 what evidence can be considered for state of mind. Unless 5 the Court has questions. 6 THE COURT: I must say I found your arguments 7 hard to follow, and so maybe I can ask it this way in a way 8 that would be helpful. 9 The two arguments the other side makes is that 10 there isn't sufficient evidence for a reasonable jury to 11 find that each defendant took an action intending to cause a 12 power plant to directly infringe and that that defendants' 13 actions actually caused the power plant to directly 14 infringe. 15 It would be most helpful to me if you would say, 16 Judge, look, so with regard to intent -- 17 MS. HALEY: Yes. 18 THE COURT: -- the intent to cause one of the 19 things at issue, or maybe it's for both. You could say it 20 for intent to cause and for causation. 21 But I think maybe it makes sense to split it 22 out. Look, for intent to cause, what evidence is there that 23 the defendants intended to cause infringement? Well, 24 there's at least four things: A, B, C, D. 25 And what evidence is there that we're pointing</p>

<p style="text-align: center;">1016</p> <p>1 to that demonstrates the defendants' specific intent. Well,</p> <p>2 there's at least five things: A, B, C, D, and E.</p> <p>3 These are all things that are in the record and</p> <p>4 in evidence and could be used by a reasonable juror to find</p> <p>5 for the plaintiff.</p> <p>6 That's what I don't think I got from your</p> <p>7 response so far, but it will be helpful if --</p> <p>8 MS. HALEY: Yeah. I can just go through element</p> <p>9 by element through inducement. So the first element --</p> <p>10 THE COURT: Well I don't know that you need to</p> <p>11 go through element by element. You can if you want, but I</p> <p>12 think there's two specific elements that are being contested</p> <p>13 here. It's the intent element -- intent to cause element</p> <p>14 and causation.</p> <p>15 Those are the ones that I particularly want you</p> <p>16 to go through.</p> <p>17 MS. HALEY: Sure.</p> <p>18 I think intent to -- the intent element and</p> <p>19 affirmative act are a little bit unrelated.</p> <p>20 So we know -- as a component of intent, there's</p> <p>21 a requirement that there's knowledge of the patent. We know</p> <p>22 that because the damages period is post suit. They had</p> <p>23 knowledge of the patent because they were served with a</p> <p>24 lawsuit.</p> <p>25 THE COURT: Again, I don't think knowledge of</p>	<p style="text-align: center;">1018</p> <p>1 The evidence showed that the coal sort of had a</p> <p>2 predetermined path forward, and that included through all of</p> <p>3 the direct infringement steps. It's not like a case like</p> <p>4 <i>HC&P</i> or some of these pharmaceutical cases where they're</p> <p>5 optional steps. The instructions in those cases</p> <p>6 contemplated other potential noninfringement throughout the</p> <p>7 chain.</p> <p>8 Here once that coal is on the conveyer belt</p> <p>9 going towards the boiler, there's no evidence that it's</p> <p>10 removed. And in that sense, they've intended to cause</p> <p>11 infringement because they've intended to start that chain</p> <p>12 reaction.</p> <p>13 THE COURT: You were talking specifically about</p> <p>14 the causation piece of it.</p> <p>15 MS. HALEY: Yes.</p> <p>16 THE COURT: So you're saying, look, part of the</p> <p>17 causation piece is they provided the coal, and by providing</p> <p>18 the coal, they know there's a hundred percent chance it's</p> <p>19 going to lead to infringement.</p> <p>20 MS. HALEY: Right, and that's the actual cause.</p> <p>21 THE COURT: Is there -- beyond the provision of</p> <p>22 sale of the coal that they know is going to lead to</p> <p>23 infringement in your view, were there other record facts</p> <p>24 that you were also pointing to to help demonstrate</p> <p>25 causation, other acts aside from the coal, or that relate to</p>
<p style="text-align: center;">1017</p> <p>1 the patent is contested. Do you disagree? Do you think it</p> <p>2 was contested?</p> <p>3 MS. HALEY: I just think there's two components</p> <p>4 to intent, so I was just trying to be complete. I don't --</p> <p>5 I don't disagree that it's not contested.</p> <p>6 THE COURT: I'm sorry to interrupt.</p> <p>7 MS. HALEY: The defendants knew their actions</p> <p>8 would cause infringement because they knew that providing</p> <p>9 refined coal directly on to a conveyer belt that was headed</p> <p>10 towards the boiler at an infringing power plant and they</p> <p>11 knew that that power plant was using ACI. They knew it</p> <p>12 would be burned in the process, that leads to infringement.</p> <p>13 They knew that by provision of the coal, which</p> <p>14 is the affirmative act for certain of the defendants, that</p> <p>15 the only destiny for that coal was infringement. So that</p> <p>16 that's part of their intent, and that they were obviously</p> <p>17 motivated to maximize the amount of that infringement</p> <p>18 because they stood to gain a pecuniary benefit in the form</p> <p>19 of tax credits that's proportional to the volume of</p> <p>20 infringement.</p> <p>21 THE COURT: Okay.</p> <p>22 MS. HALEY: As for causation specifically, the</p> <p>23 defendants effectively have set off what's a chain reaction.</p> <p>24 They provided the coal on the conveyer belt that rolls into</p> <p>25 the boiler. There are no sort of optional steps here.</p>	<p style="text-align: center;">1019</p> <p>1 intent?</p> <p>2 For example, Mr. Wilson mentioned a number of</p> <p>3 other things in the record, the testimony about the fact</p> <p>4 that the coal was sold at a loss or this fly ash aspect or</p> <p>5 the rate optimization aspect.</p> <p>6 Anything else that you're pointing to?</p> <p>7 MS. HALEY: Yeah. I mean, I would incorporate</p> <p>8 by reference all the testimony that Mr. O'Keefe offered on</p> <p>9 these points, which is to go through those benefits.</p> <p>10 And it might be the case that defendants</p> <p>11 interpreted that testimony differently, but it is the case</p> <p>12 that a jury could infer from those facts that they intended</p> <p>13 and also caused infringement.</p> <p>14 It's just sort of a difference in the view of</p> <p>15 the facts on those issues.</p> <p>16 THE COURT: Anything further, Ms. Haley?</p> <p>17 MS. HALEY: Even after being notified that there</p> <p>18 was an infringement charge here, defendants continued to</p> <p>19 sell the refined coal, and that decision to continue</p> <p>20 infringing is also indicative of their intent.</p> <p>21 There's been no reasons offered for why</p> <p>22 defendants chose to continue infringing other than they were</p> <p>23 completely knowledgeable at that moment, and that's --</p> <p>24 that's deliberate and intentional to continue to infringe at</p> <p>25 that level. That's intentional for the element of</p>

<p style="text-align: right;">1020</p> <p>1 inducement.</p> <p>2 And I'll also point out that defendants knew</p> <p>3 how -- there was ample evidence that defendants knew that</p> <p>4 exhaust treatment required ACI at these power plants, and</p> <p>5 that's part of their -- that completes their intent and</p> <p>6 causation as well.</p> <p>7 THE COURT: Okay. Anything further?</p> <p>8 MS. HALEY: That's it.</p> <p>9 THE COURT: All right. Thank you, counsel.</p> <p>10 Let me take a few minutes to get my thoughts</p> <p>11 together. I'll ask our court reporter.</p> <p>12 (His Honor speaking to court reporter.)</p> <p>13 THE COURT: And then I'll try to come out and</p> <p>14 get you a decision, and hopefully we'll be able to bring the</p> <p>15 jury out and start our afternoon.</p> <p>16 The Court will stand in recess.</p> <p>17 (A recess was taken, after which the following</p> <p>18 proceedings were had:)</p> <p>19 THE COURT: We'll go on the record. And just</p> <p>20 for the record, I have before me the defendants' motion for</p> <p>21 judgment as a matter of law with regard to the claim of</p> <p>22 induced infringement.</p> <p>23 And just briefly with regard to the law at</p> <p>24 issue, as the parties know, judgment as a matter of law may</p> <p>25 be entered against the nonmoving party if the Court finds</p>	<p style="text-align: right;">1022</p> <p>1 intending to cause a power plant to directly infringe one or</p> <p>2 more of the CERT Operations claims.</p> <p>3 And relatedly that the defendants' action --</p> <p>4 there is insufficient evidence for a reasonable jury to</p> <p>5 conclude that defendants' actions actually caused the power</p> <p>6 plants to perform each and every step of the asserted</p> <p>7 claims.</p> <p>8 I'll speak just particularly to the aspect of</p> <p>9 the argument that intents for causation could not be found</p> <p>10 with respect to the application of the activated carbon or</p> <p>11 sorbent limitation in the claims.</p> <p>12 So first I'll say that there is in my view ample</p> <p>13 evidence that's been presented that the defendants made and</p> <p>14 sold refined coal with bromine to the respective power</p> <p>15 plants during the damages periods.</p> <p>16 And additionally ample evidence presented that</p> <p>17 after they did so, each of those power plants used and</p> <p>18 essentially had to use activated carbon on the flue gas at</p> <p>19 those power plants regarding that burned coal in light of</p> <p>20 the nature of the fact that certain activated carbon</p> <p>21 equipment was installed at those plants, and that is, in</p> <p>22 fact, how those power plants processed that burn and refined</p> <p>23 coal.</p> <p>24 And additionally in light of the evidence it</p> <p>25 seems to me that there was a reason why those power plants</p>
<p style="text-align: right;">1021</p> <p>1 that a reasonable jury would not have a legally sufficient</p> <p>2 evidentiary basis to find for the parties on an issue.</p> <p>3 That's found in Federal Rule of Civil Procedure</p> <p>4 50(a), a judgment as a matter of law, or JMOL, is</p> <p>5 appropriate only when viewing the evidence in the light most</p> <p>6 favorable to the nonmovant and giving it the advantage of</p> <p>7 every fair and reasonable inference; there's insufficient</p> <p>8 evidence from which a jury reasonably could find like -- the</p> <p>9 Third Circuit's law tells us that entry of a JMOL is a</p> <p>10 remedy to be practiced sparingly.</p> <p>11 Here I'm going to deny the defendants' motion</p> <p>12 for a JMOL pursuant to Rule 50, of course without prejudice</p> <p>13 to its ability pursuant to Rule 50(b) to renew that motion</p> <p>14 in the future.</p> <p>15 I say that for a few reasons, and first I'll say</p> <p>16 that 50 in general and in light of the evidence presented so</p> <p>17 far by the plaintiff in their case, I believe that evidence</p> <p>18 could, in fact, be sufficient for a reasonable jury to find</p> <p>19 induced infringement. And so I rely on that evidence, and I</p> <p>20 incorporate the arguments additionally that plaintiffs'</p> <p>21 counsel made in responses to the motion.</p> <p>22 I'll just speak additionally briefly with regard</p> <p>23 to the particular aspects of the defendants' arguments, and</p> <p>24 the defendants argued that there is insufficient evidence,</p> <p>25 for example, that the defendant took some affirmative action</p>	<p style="text-align: right;">1023</p> <p>1 used that activated carbon step in order to help meet assert</p> <p>2 environmental regulation.</p> <p>3 Here in this case, I think it is would be</p> <p>4 reasonable for a jury to conclude that the sale of the coal</p> <p>5 and provision of the coal to the power plants in the</p> <p>6 particular circumstances here, that is by certain of these</p> <p>7 defendants on a conveyer belt at the plants at issue under</p> <p>8 the particular circumstances at issue that can be argued to</p> <p>9 be an act that causes the infringement at issue, and that in</p> <p>10 these specific circumstances, there's evidence that could</p> <p>11 lead a reasonable jury to conclude that there was no other</p> <p>12 outcome but for that coal sale to then lead to infringement</p> <p>13 thereafter, including via the use of the sorbent or</p> <p>14 activated carbon step.</p> <p>15 With regard to the intent, there's also evidence</p> <p>16 that defendants, including Mr. Green, that knew of the fact</p> <p>17 that the power plants used activated carbon in the time</p> <p>18 periods at issue.</p> <p>19 And I'll note I've noted in my view that to the</p> <p>20 extent that some of that such as e-mail evidence or other</p> <p>21 documentary evidence from defendants predates the damages</p> <p>22 period.</p> <p>23 I don't believe that the use of that evidence</p> <p>24 would violate the <i>Roche</i> case, for example, because <i>Roche</i></p> <p>25 simply says that the acts of inducement must occur within</p>

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1 the damages period. It doesn't say that no evidence in any
2 way related to the induced infringement can't be relevant,
3 including evidence related from the intent and knowledge.
4 There's also evidence, of course, that after the
5 case began, that the defendants and Mr. Green knew of the
6 fact that the power plants used activated carbon in the
7 damages period.
8 The fact that activated carbon was used at these
9 plants before and after the damages periods at issue doesn't
10 mean in my view that it's impossible for -- or a reasonable
11 jury couldn't find causation that creates a factual dispute
12 that the parties will argue about and present to the jury.
13 Additionally, as has been noted and there's been
14 evidence presented of a potential motive for why the
15 defendant would intend for these alleged acts of
16 infringement to occur, and that includes obtaining -- the
17 ability to obtain the Section 45 tax credits at issue which
18 would flow from the respective plants being open and able to
19 burn coal as a practical matter and the facts put forward
20 suggests that the defendants sold refined coal at a loss to
21 the power plants in order to help incentivize the action.
22 So all these facts I think are relevant to at
23 least further flesh out, why I'm denying the motion for
24 judgment as a matter of law, and so I'll just note that here
25 on the record.

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1 All right. So now, counsel, we are later than I
2 thought we would be, and I don't want to waste the jury's
3 time. I'd like to try to bring the jury out now, unless
4 there's anything further.
5 MR. DORSNEY: Your Honor, we'll do the exhibits,
6 if you want to get that on record real quick.
7 THE COURT: All right. Sure.
8 MR. DORSNEY: I'm pleased to report that
9 plaintiffs do not object to our redactions of admitted
10 Exhibits DTX 377, 378, and 379.
11 So I would propose so that we stay in compliance
12 with the Court's pretrial order that they be admitted as
13 redacted to comply with CFR 6 and 3(b).
14 THE COURT: Any objection?
15 MR. CALDWELL: No objection.
16 THE COURT: So those exhibits will be admitted.
17 (Thereupon, Defendants' Exhibits 378 through 378
18 were admitted.)
19 THE COURT: Let me -- let my law clerk let the
20 courtroom deputy know the jury can be brought in.
21 (The jury entered the courtroom.)
22 THE COURT: Let's have our witness back on the
23 stand.
24 Mr. Green, you remain sworn, and we'll continue
25 with direct examination.

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1 BY MR. DYESS:
2 Q. Mr. Green, welcome back.
3 A. **Thank you.**
4 Q. We talked a little bit about MerSorb and S-Sorb
5 that's put on the coal to make activated carbon. Earlier I
6 think you talked about the CERT defendants put MerSorb on
7 the coal to help with mercury control; is that correct?
8 A. **That's correct.**
9 Q. And they put S-Sorb in the court to help with control
10 of nitrous oxide or NOx; correct?
11 A. **That's correct.**
12 Q. I might have misspoke when I said that. Does the
13 S-Sorb also help with the mercury control?
14 A. **Yes, sir. It's believed to, yes.**
15 Q. How does -- how do the CERT companies know how much
16 MerSorb and S-Sorb to put on feedstock coal at these refined
17 coal facilities so that the refined coal will qualify for
18 the tax credit?
19 A. **That's done in the certification testing at the EERC.**
20 **They provide that information to us.**
21 Q. How do they provide that information to you?
22 A. **It comes in a report that details the report with the**
23 **results.**
24 Q. And what does -- and part of the information that's
25 provided in these reports are MerSorb and S-Sorb rates?

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1 A. **Among other things, but it does include MerSorb and**
2 **S-Sorb rates, yes.**
3 Q. And specifically what MerSorb and S-Sorb rates did
4 these reports include?
5 A. **They include MerSorb and S-Sorb rate to -- that would**
6 **qualify the fuel made at the facility for the next six**
7 **months to qualify for the Section 45 tax credit.**
8 Q. And is that the absolutely required amount or is it a
9 minimum amount required to meet the rate --
10 A. **It's the --**
11 Q. -- I mean, the qualification?
12 A. **Sorry. It's the minimum amount required to achieve**
13 **the qualified emission reductions.**
14 Q. And when you get these reports, do you take that
15 MerSorb and S-Sorb application rate? Is that exactly what
16 you use to make the refined coal at these refined coal
17 facilities?
18 A. **No, sir. We would -- typically we use that for our**
19 **process for that period of time, but we'll add 3 to**
20 **5 percent to that number to make sure that we stay above the**
21 **minimum amount.**
22 Q. And why do you need to add a little bit to make sure
23 you stay above that amount?
24 A. **It's a factor of safety on the equipment. When we're**
25 **dealing with these bulk commodities and these things, we**

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1 **need to make sure we're staying above that rate 24/7 all --**
2 **during all the production that is occurring.**
3 Q. So that's to make sure that when the coal comes out,
4 you've got a little bit of slack in there so that you know
5 for sure that when it comes out, it's going to qualify for
6 the tax credit; right?
7 A. **Yes, sir.**
8 Q. The EERC runs a qualification test, gives you a
9 MerSorb rate that tells you how the -- what to put on it so
10 that the coal will to qualify for the tax credit; correct?
11 A. **That's correct.**
12 Q. And that's what you used for the next six months to
13 prepare the refined coal?
14 A. **That's correct.**
15 Q. And how soon would you get this report from the EERC?
16 A. **That report is fairly substantial. I would say month**
17 **and a half, two months, definitely before three months.**
18 Q. And is that the first indication you get of what the
19 MerSorb rate and the S-Sorb rate is that the EERC is going
20 to recommend to you as the minimum for qualifying coal for
21 the refined coal tax credit?
22 A. **No, sir. The way that it works is I will discuss the**
23 **results with the lab at the end of the day. They will**
24 **verbally give me those results, and then the same day I will**
25 **receive a letter that's been signed by a certified or a**

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1 **qualified individual that spells out the MerSorb rate and**
2 **the S-Sorb rate -- the minimum rates that are required to**
3 **qualify that particular coal or that sample for the 45**
4 **credit.**
5 Q. So what is the role of this report that you've just
6 described?
7 A. **The final report? It is the final report that**
8 **outlines everything about the test, you know, what type of**
9 **coal it was, what the additive rate requirements were, and**
10 **then all of the analytical information that was used to get**
11 **the results at the end, which were -- ultimately what we're**
12 **looking for is the S-Sorb and MerSorb amounts required.**
13 Q. Did that final report include any type of official
14 certification that you needed for the tax credit program?
15 A. **It did. As I mentioned, a qualified individual has**
16 **to sign the report in order to meet the -- I think it's**
17 **2010-54 IRS guidance.**
18 Q. Now, was that qualified person somebody at the EERC
19 or at the CERT companies?
20 A. **No, it was the EERC. That's where they're from.**
21 Q. Okay. If you would look in your notebook at
22 tab 19 -- I'm sorry 1692.
23 A. **Okay.**
24 Q. What is that document?
25 A. **This is a final report from the EERC for a test that**

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1 **was completed on August 12, 2014, on a refined coal --**
2 **refined coal qualification test for Antelope Valley Station**
3 **coal.**
4 MR. DYESS: Your Honor -- let me back up.
5 BY MR. DYESS:
6 Q. Would you -- are you the person that received this
7 document?
8 A. **Yes, sir. I received this in my capacity as vice**
9 **president of operations for CERT operating company.**
10 MR. DYESS: Your Honor, we would ask that 1692
11 be admitted.
12 THE COURT: Any objection?
13 MR. CALDWELL: No, sir.
14 THE COURT: It's admitted.
15 (Thereupon, Defendants' Exhibit 1692 was
16 admitted.)
17 BY MR. DYESS:
18 Q. Now that the jury is able to see this, does this
19 report identify for you the date that the qualification test
20 was done?
21 A. **Yes, it does in a few places. It shows it in the**
22 **subject line on this page, on this, August 12, 2014.**
23 Q. Does it show you anywhere else?
24 A. **Yes. It would be in the conclusion sections, which**
25 **is towards the very end of the report.**

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1 Q. Is this the conclusion section that you were just
2 referring to?
3 A. **Yes, sir, it is.**
4 Q. And again we were talking about it shows you the date
5 that the testing was run; correct?
6 A. **Yes, sir, in the first sentence.**
7 Q. Now, the six-month period that you can use these
8 results to qualify refined coal, does that run from the date
9 of the test or the date of the report?
10 A. **It runs from the date of the test.**
11 Q. So it's important for you to know what the date of
12 the test was?
13 A. **Yes, sir, it is.**
14 Q. Does this report identify for you the rate of MerSorb
15 and S-Sorb that the EERC recommended you use to qualify the
16 lignite and Antelope Valley station for Section 45 tax code?
17 A. **Yes, sir, it does, in the second paragraph of the**
18 **conclusion section.**
19 Q. And what was that recommended MerSorb and S-Sorb
20 application rate?
21 A. **The recommended MerSorb rate was .002 weight percent**
22 **MerSorb, and the S-Sorb was .020 weight percent as I**
23 **understand it.**
24 Q. What does "weight percent" mean?
25 A. **Percent by weight of the sorbent or the oxidizer to**

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1 **the coal. So, for example, 2 weight percent S-Sorb is 4**
2 **pounds of S-Sorb per ton of coal.**
3 Q. Did you receive reports that were similar to this
4 report for the Antelope Valley station on other occasions?
5 A. **Yes, sir, I did for every test that was performed**
6 **there.**
7 Q. And would each one of those tests from the EERC
8 identify the date the testing was done?
9 A. **Yes, sir, it would.**
10 Q. Would each one of those reports received from the
11 EERC identify the rate of MerSorb and S-Sorb that the EERC
12 recommended you use to qualify the refined coal for the
13 Section 45 tax credit?
14 A. **Yes, sir, it would.**
15 Q. Would each one of those reports received from the
16 EERC identify the results of mercury and NOx reduction the
17 EERC achieved in the pilot scale testing that was the
18 subject of the test?
19 A. **It would.**
20 Q. And would each one of those tests received from the
21 EERC show the type of feedstock coal that was used in the
22 qualification test performed at the EERC?
23 A. **It would.**
24 Q. And are you the person who would request the testing
25 be done on each occasion from the EERC and the person who

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1 received the testing report from the EERC?
2 A. **Yes, that's correct.**
3 Q. I want you to look at tab 1968 in your notebook.
4 A. **Okay.**
5 Q. Do you recognize this document?
6 A. **I do.**
7 Q. Now, what is that document?
8 A. **This document -- this document contains test results**
9 **for nine different refined coal facilities, a summary of the**
10 **results for nine different refined coal facilities for all**
11 **testing that was completed at those facilities when the EERC**
12 **had finally settled on an additive rate of .20 percent**
13 **S-Sorb and .002 percent MerSorb.**
14 Q. Now, Mr. Green, did you prepare this document?
15 A. **I did not.**
16 Q. Did you do anything to confirm that the information
17 contained in this 1968 is an accurate summary of those test
18 reports?
19 A. **Yes, sir, I did. I reviewed each report for each**
20 **line item for all nine of the facilities back to the**
21 **original reports and found that those were accurate numbers.**
22 MR. DYESS: Your Honor, we would move to admit
23 Exhibit 1968.
24 THE COURT: Any objection?
25 MR. CALDWELL: No objection.

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1 THE COURT: All right it's admitted.
2 (Thereupon, Defendants' Exhibit 1968 was
3 admitted.)
4 MR. DYESS: If we could publish that document.
5 BY MR. DYESS:
6 Q. Mr. Green, is what's up on the screen -- tell you
7 what. Let's take it off the screen. Let's focus on the
8 board. Is what's up on this board is that accurate for the
9 first page of this document, Defendants' Exhibit 1968?
10 A. **Yes, it is.**
11 Q. All right. Again, what information is summarized on
12 this first page of Defendants' Exhibit 1968?
13 A. **The first page represents all testing that was**
14 **completed between August 12th, 2014, through November 23rd,**
15 **2021, for North Dakota lignite coal that was a feedstock**
16 **coal at the Antelope Valley station. It was owned by**
17 **Marquis Industrial.**
18 Q. And does this -- you said this chart shows all of the
19 testing performed after this August 12th, 2014, date?
20 A. **That is correct.**
21 Q. And does it show -- does this summary show what the
22 recommended EERC additive rate was for each one of those
23 reported test results?
24 A. **Yes, sir, that's the second column.**
25 Q. And what was that for each one of those test results

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1 at Antelope Valley after August 12, 2014?
2 A. **.02 percent S-Sorb, and .002 percent MerSorb.**
3 Q. And does this chart reflect that -- well, let me back
4 up.
5 Was that the rate that was used -- do I have a
6 correct understanding that the rate that was used to make
7 all of the refined coal at the Antelope Valley station after
8 August 12, 2014, was based on that same recommended MerSorb
9 and S-Sorb rate of .2 percent and .002 percent?
10 A. **Yes, that's the basis for our rate of making refined**
11 **coal.**
12 Q. And all of that refined coal after this date would
13 have been used based on that same formula; correct?
14 A. **That is correct.**
15 Q. Does this chart show the results of pilot scale
16 testing as far as reduction in NOx and mercury?
17 A. **Yes, sir. That's the next column.**
18 Q. And does this column in fact show that for each one
19 of these tests using that recommended rate of .002 percent
20 MerSorb and .2 percent S-Sorb, the EERC was able to achieve
21 at least a 40 percent reduction of NOx?
22 A. **Yes, sir, that's what the results are.**
23 Q. Now, Mr. Green, we've talked about at different times
24 in this case the '114 patent, we talked about that before,
25 haven't we?

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1 A. **Yes, sir.**
2 Q. And it's your understanding that that '114 patent
3 issued in July of 2019; correct?
4 A. **Yes, sir.**
5 Q. And that's July 9, 2019; correct?
6 A. **July 9th of 2019.**
7 Q. I'm going to draw a line here between the test
8 performed before and after July 9, 2019, I'm going to write
9 the word -- I'm going to write '114 over here to the side.
10 Using this chart can you tell me what the recommended
11 additive rate was from the EERC for MerSorb and S-Sorb
12 before and after this patent issued on July 9, 2019?
13 A. **It remained the same at .02 percent S-Sorb and**
14 **.002 percent MerSorb.**
15 Q. And as a matter of fact, that same additive rate was
16 used by Marquis Industrial for its refined coal for five
17 years before the patent issued; correct?
18 A. **That's correct.**
19 Q. And that formula didn't change after you found out
20 about the patent, did it?
21 A. **No, it did not.**
22 Q. So all of the refined coal for the period reflected
23 on this chart sold before the patent issued and after the
24 patent issued was the same as far as the additive rate used
25 to prepare that refined coal; correct?

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1 A. **Yes, that's correct.**
2 Q. Okay. Did the process, not the formula, did the
3 process that was used at the refined coal facility to make
4 this coal change after you found out about the patent?
5 A. **No, sir, our process remained the same since the**
6 **facility was placed in service in 2011.**
7 Q. Let's move on to the second page of Exhibit 1968.
8 I'm going to draw that same line for the test before and
9 after.
10 That's a great noise.
11 Have I drawn that line between the tests that
12 were performed before and after July 9th, 2009?
13 A. **Yes, you did.**
14 Q. Okay. Tell me what this page of the chart
15 represents.
16 A. **It's the same information contained on the prior**
17 **chart except this one is all of the testing that was**
18 **completed between November 12, 2015, through July 22nd,**
19 **2021, for refined coal produced and sold -- or sold by**
20 **Springhill Resources to Big Cajun II.**
21 Q. And is it correct that all of the coal -- refined
22 coal sold to Big Cajun II after this test performed on
23 November 12, 2015, was made using that same formula of .2
24 percent S-Sorb and .002 percent MerSorb?
25 A. **Yes, sir, it was.**

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1 Q. And that's the same we saw on the chart for Antelope
2 Valley; correct?
3 A. **Yes, sir.**
4 Q. So all of the coal that was produced after Springhill
5 Resources got this test back showing .2 percent S-Sorb and
6 .002 MerSorb rate, all of it was prepared using that same
7 rate?
8 A. **That is correct.**
9 Q. And that was the same before the patent issued and
10 that was the same after the patent issued?
11 A. **Yes, sir, that's correct.**
12 Q. And the process for how the refined coal was made at
13 Springhill Resources facility in Big Cajun II, that didn't
14 change during that period of time either, did it?
15 A. **No. That is true. It did not change.**
16 Q. Let's go to the third page of Exhibit 1968. What
17 does this third page show?
18 A. **It's the same information from the prior two charts**
19 **with all tests, all certification tests performed between**
20 **February 11, 2019, through July 22nd, 2021, for refined coal**
21 **that Bascobert Holdings sold to Coletto Creek.**
22 Q. And, again, I'm going to draw this squeaky red
23 line -- that's a little better -- between the test performed
24 before and after --
25 A. **I think you missed it by one line.**

1039

1 Q. That's the risk you run when you do this in realtime.
2 But this second line for the '114 all the
3 testing that was done before and after this patent issued
4 showed that you needed to use the same recommended rate of
5 MerSorb .2 percent, 002 percent to prepare the refined coal
6 that was going to be sold to Coletto Creek; right?
7 A. **That's right.**
8 Q. This is a shorter list than the other ones. Why is
9 there a shorter list?
10 A. **If you recall, the Bascobert facility was relocated**
11 **to Coletto Creek in I think May or June of -- I don't recall**
12 **the exact date. I know we signed the contract in May, but**
13 **it was moved in 2019 to Coletto Creek.**
14 Q. So this is the testing for all of the refined coal
15 that was sold to Coletto Creek?
16 A. **That is every test for Coletto Creek.**
17 Q. But the formula didn't change before and after the
18 patent issued; correct?
19 A. **That is correct.**
20 Q. And that process was the same the entire time you
21 were at Coletto Creek?
22 A. **Again, yes, it's the same.**
23 Q. Let's go to the next page. I have to draw the line
24 right this time. So this is the fourth page, and what does
25 this fourth page of 1968 show you?

1040

1 **A. The same information for EERC certification testing**
2 **completed between December 2nd, 2014 through the last test**
3 **that was completed July 22nd, 2021, for all of the refined**
4 **coal testing done for Larkwood Energy.**
5 Q. All right. I'm going to draw my line making sure I'm
6 in the right place this time.
7 Now, that line shows when the patent issued
8 between these two tests. What does this chart show you
9 about the recommended rate that was used to prepare the
10 refined coal that was sold to the Labadie station?
11 **A. It shows that it remained the same before the patent**
12 **issued as it did after the patent issued.**
13 Q. Does that mean that all of the refined coal that was
14 sold at the Labadie power station during this period of time
15 was based on this same recommended rate before and after the
16 patent issued?
17 **A. Yes, sir.**
18 Q. And that process used to prepare the coal at Labadie
19 it didn't change during this period of time reflected on
20 this chart, did it?
21 **A. That's correct.**
22 Q. And this .2 percent S-Sorb and .002 percent MerSorb,
23 that's the same rate that was used at the three other power
24 plants we looked at; correct?
25 **A. That's the same rate, yes.**

1041

1 Q. Go to the next page, I believe the fifth page of
2 Exhibit 1968. Tell me what this chart shows?
3 **A. That's all testing completed for refined coal**
4 **certification that Cottbus Associates sold to Laramie River**
5 **station starting on September 2nd, 2014, through June 1st of**
6 **2021.**
7 Q. Now, I'm going to draw my line again. That's the
8 line on when the patent was issued, was the recommended rate
9 that the EERC gave you for making refined coal that's going
10 to be sold to Laramie River the same before and after the
11 patent issued?
12 **A. Yes, it remained the same.**
13 Q. So this means that all the refined coal that was sold
14 to the Laramie River station was prepared based on that same
15 recommended formula; correct?
16 **A. For the dates shown, yes.**
17 Q. And that's September 2014 through June 1st -- or to
18 the end of the program; right?
19 **A. Yes, sir, to the end of the program.**
20 Q. And that rate was the same before and after the
21 patent issued?
22 **A. Yes, that's correct.**
23 Q. And it was the same rate .2 percent S-Sorb and
24 .002 percent MerSorb as these other charts we looked at?
25 **A. Yes, sir.**

1042

1 Q. And it wasn't affected at all by when you found out
2 about the patents; correct?
3 **A. That is correct.**
4 Q. Let's turn to the next page of 1968. What does this
5 sixth page of this document show?
6 **A. That's all of the EERC qualification test results for**
7 **starting on August 13th, 2018, through July 22nd, 2021, for**
8 **refined coal sold by Rutledge Products.**
9 Q. I'll draw my red line again for July 9, 2019.
10 What was the recommended rate from the EERC for
11 S-Sorb and MerSorb for this period of time between
12 August 13, 2018, through the end of the program?
13 **A. .20 percent S-Sorb and .002 percent MerSorb.**
14 Q. So all of the refined coal that was made by Rutledge
15 and sold to Limestone for the period reflected on this chart
16 was based upon the same rate .20 S-Sorb and .002 percent
17 MerSorb; correct?
18 **A. That's correct.**
19 Q. And that didn't change when you-all found out about
20 the patent that issued July 2019; correct?
21 **A. That is correct.**
22 Q. And the process for making this refined coal that was
23 being sold to Limestone, that didn't change during this
24 period either, did it?
25 **A. No, it did not.**

1043

1 Q. Let's go to the seventh page of this document. This
2 may -- yeah, it's the seventh. What does this seventh page
3 of the document show you?
4 **A. Again, it's the same information contained that we've**
5 **looked at. This is all testing completed between**
6 **December 20th of 2016 through July 22nd of 2021 for EERC**
7 **testing -- qualification testing results for refined coal**
8 **Buffington Partners which sell to Rush Island.**
9 Q. My red line again. That's terrible.
10 Does this chart reflect that the recommended
11 rate provided by the EERC for refined coal to be sold to
12 Rush Island was the same after this December 20th, 2016,
13 test?
14 **A. Yes, that's correct.**
15 Q. And that formula was .2 percent S-Sorb, 002 percent
16 MerSorb?
17 **A. That's correct.**
18 Q. So all of the refined coal that was prepared after
19 this December 20, 2016, test was prepared using the same
20 formula -- based on the same formula recommended by the
21 EERC; correct?
22 **A. Correct.**
23 Q. And that's the same recommended formula that we've
24 seen in all these other tests, all these other charts?
25 **A. That is correct.**

1044

1 Q. And it was the same before the patent issued and the
 2 same after the patent issued; correct?
 3 A. **Yes, sir, correct.**
 4 Q. And the process for making refined coal at Rush
 5 Island didn't change during this period?
 6 A. **That is correct.**
 7 Q. A couple more of these. Let's go to the eighth page
 8 of 1968. What do we see on this eight page of 1968?
 9 A. **These are all of the test results for refined coal
 10 that would be produced based on the test results on this
 11 page which is August 11, 2014, through July 22nd, 2021.**
 12 Q. And I'm going to draw my line again for when the
 13 patent issued on July 9th, 2019.
 14 Was the recommended rate that Senescence
 15 received from the EERC for this entire period of time the
 16 same, the .2 percent S-Sorb and .002 percent MerSorb?
 17 A. **Yes, sir.**
 18 Q. Does that mean that all the refined coal for the
 19 period reflected on this chart is based on this same formula
 20 .20 percent S-Sorb and .002 percent MerSorb?
 21 A. **That's correct.**
 22 Q. And that didn't change when the patent issued on
 23 July 9th, 2019?
 24 A. **That's correct.**
 25 Q. And the process that was used to make this refined

1045

1 coal didn't change during this period; correct?
 2 A. **That's correct.**
 3 Q. One more. I know you're excited about that. Last
 4 one of these charts.
 5 What does this chart show us?
 6 A. **That shows all of the EERC testing results from each
 7 of the tests starting on September 15th, 2014, through
 8 June 15th of 2021 for all the -- for Deogun Manufacturing,
 9 the coal that they sold to Intermountain Power Agency.**
 10 Q. Now, interestingly enough, one of those tests was run
 11 on July 9th, 2019, the same day the patent issued; correct?
 12 A. **Correct.**
 13 Q. I'm going to draw my line. Let's put it right there.
 14 What was the recommended rate for S-Sorb and
 15 MerSorb that the EERC provided in all of the tests reflected
 16 on this chart?
 17 A. **.2 percent S-Sorb and .002 percent MerSorb.**
 18 Q. And does that mean all of the refined coal that was
 19 prepared during the period reflected on this chart was based
 20 on that recommended rate of .2 percent S-Sorb and
 21 .002 percent MerSorb?
 22 A. **That is correct.**
 23 Q. And this Deogun Manufacturing, it used a different
 24 kind of coal than was reflected in all these other charts,
 25 didn't it?

1046

1 A. **It did. Deogun/Intermountain Power had a blend of
 2 coals. It was a bituminous sub-bituminous coal.**
 3 Q. And the Antelope Valley was lignite coal; correct?
 4 A. **That's correct.**
 5 Q. And the other set of plants, they were burning Powder
 6 River Basin coal, PRB coal; correct?
 7 A. **That's correct.**
 8 Q. But the additive rate recommended by the EERC
 9 qualified the coal for the refined coal at Intermountain
 10 Power was the same rate for this blended coal as it was for
 11 PRB coal and lignite coal; correct?
 12 A. **That's right.**
 13 Q. And that didn't change at Intermountain before and
 14 after the patent issued; correct?
 15 A. **Correct.**
 16 Q. And do you know if Intermountain Power ever used
 17 activated carbon?
 18 A. **No, they never used activated carbon at their plant.**
 19 Q. Now, before we leave these charts, these charts don't
 20 show all of the certification testing that the EERC did for
 21 the refined coal facilities at these plants; correct?
 22 A. **No, it does not. It only shows the test dates shown
 23 which are -- well, it shows everything after the top test
 24 date was completed for the facility. There are tests before
 25 those.**

1047

1 Q. So for these -- except for Coletto Creek. That was
 2 actually all of the tests; correct?
 3 A. **You're correct, Coletto Creek was all the tests.**
 4 Q. For the other eight pages -- I want to make sure
 5 nobody thinks we're trying to pull a fast one on anybody.
 6 Like for this one, there would have been tests prior to
 7 September 15, 2014; correct?
 8 A. **That is correct.**
 9 Q. But why are we summarizing just this information and
 10 the information that's in these charts?
 11 A. **What these charts -- each one of these nine charts
 12 shows is what the additive rate when the additive rate that
 13 was optimized by the EERC, when it was started at .2 percent
 14 S-Sorb and .002 percent S-Sorb when they got to that rate
 15 and what it was after that rate.**
 16 Q. And it didn't change after it settled on this rate?
 17 A. **That is correct.**
 18 Q. It didn't change for any of these nine plants once
 19 the EERC settled on that additive rate to make the refined
 20 coal at each one of the plants; correct?
 21 A. **That is correct.**
 22 Q. Now, Mr. Green, do you still have the plaintiffs'
 23 blue binder for your testimony in front of you?
 24 A. **Yes, sir.**
 25 Q. If you could pull that out again. If you could --

1048

1 well, we discussed earlier the amended complaints that have
 2 been filed in this case; correct?
 3 A. **Yes, we have.**
 4 Q. I want to take another minute to look at a different
 5 provision of those. Could you look at tab 13 in plaintiffs'
 6 notebook they prepared for you?
 7 A. **I'm at tab 13.**
 8 Q. And this is the first amended complaint document
 9 entry 130; correct?
 10 A. **Yes.**
 11 Q. And that was filed on July 15, 2020; is that correct?
 12 A. **That is correct.**
 13 Q. And remind me, were all six of the CERT operation
 14 companies named as defendants in this case?
 15 A. **Yes, they were.**
 16 Q. And that included CERT Operations company that
 17 supplied refined coal to Intermountain, Mount Storm and
 18 Chesterfield that never used activated carbon; correct?
 19 A. **Correct, that's correct.**
 20 Q. If you would turn to page 14 of this document for me.
 21 MR. DYESS: And, Mr. Brown, if you could pull
 22 up -- there we go, page 14 and 15.
 23 BY MR. DYESS:
 24 Q. Could you read paragraph 87 for us?
 25 A. **Sure.**

1049

1 **[As read] On information and belief when AJG,**
 2 **DTE, CERT, Chem-Mod and the RC defendants perform**
 3 **certification testing for a particular plant, they must be**
 4 **aware of the other mercury control equipment in the plant**
 5 **including activated carbon injections. Because AJG, DTE,**
 6 **CERT, Chem-Mod and the RC defendants make refined coal by**
 7 **adding chemicals to the coal, not by removing atoms of**
 8 **mercury, the mercury present in the coal will also be**
 9 **present in the gas emitted from the combustion chamber.**
 10 **Indeed, according to Chem-Mod the additives**
 11 **applied to the coal do not destroy or remove the mercury**
 12 **atoms. They merely result in the mercury being converted**
 13 **into a different form of mercury, e.g., molecular mercury**
 14 **versus oxidized mercury. Thus, if these defendants**
 15 **attempted to perform a certification test by merely**
 16 **combusting refined coal and measuring the amount of emitted**
 17 **mercury leaving the combustion chamber, i.e., disregarding**
 18 **the plant's activated carbon injection and other mercury**
 19 **control equipment, they would be unable to demonstrate the**
 20 **required reduction in mercury.**
 21 Q. Mr. Green, as far as the CERT Operations company, go
 22 what do they have wrong in this paragraph?
 23 A. **Well, biggest problem is the last sentence. It talks**
 24 **about using activated carbon injection in the certification**
 25 **testing which we do not do.**

1050

1 Q. Have you ever done that?
 2 A. **No, never.**
 3 Q. Was it a correct statement that you would have to use
 4 activated carbon during the qualification testing in order
 5 to meet the required reduction in mercury required by
 6 Section 45?
 7 A. **No, it would not.**
 8 Q. As a matter of fact, these charts showed that you
 9 actually did achieve that without using activated carbon in
 10 the testing; correct?
 11 A. **That's true.**
 12 Q. Because all you had to do was show a 40 percent
 13 reduction in mercury; correct?
 14 A. **That's correct.**
 15 Q. And all of those -- every line of every one of these
 16 charts showed that that was achieved with this .2 percent
 17 S-Sorb rate and .002 percent MerSorb rate; correct?
 18 A. **That's correct.**
 19 Q. All right. Let's go on to the next paragraph,
 20 paragraph 88. It's a long paragraph and here's what I'd
 21 like you to do for the jury. I'd like you to take it
 22 sentence by sentence and if you see a problem with what
 23 they've alleged against the CERT companies in that sentence,
 24 I'd like you to stop and tell me about it.
 25 A. **Okay.**

1051

1 **88: On information and belief for coal-fired**
 2 **power plants that use activated carbon injection, AJG, DTE,**
 3 **CERT, Chem-Mod and the RC defendants demonstrate qualified**
 4 **emission reductions for those plants by adding activated**
 5 **carbon sorbent downstream of the combustion chamber during**
 6 **the certification testing.**
 7 Q. Tell me what's wrong with that sentence.
 8 A. **The claim that we do, the CERT defendants do their**
 9 **certification testing by adding activated carbon sorbent**
 10 **downstream of the combustion chamber. It's just wrong.**
 11 Q. Is that correct?
 12 A. **No, that would actually disqualify the test.**
 13 Q. Could you please read the next sentence?
 14 A. **For example, these defendants can establish a**
 15 **baseline mercury rate by combusting nonrefined coal in a**
 16 **combustion chamber and then using the mercury control**
 17 **equipment employed at the plant under test, for example,**
 18 **activated carbon injection and electrostatic precipitator.**
 19 **I'm a little confused on they talk about -- I'm**
 20 **a little confused. It does say we're using activated carbon**
 21 **again, but it states "and then using mercury control**
 22 **equipment employed at the plant under test." I'm assuming**
 23 **they mean the test facility at the EERC, but that's --**
 24 **that's just full of errors. We -- the biggest thing is we**
 25 **do not use activated carbon in this testing.**

1052

1 Q. And then you're talking about the certification
2 testing?
3 A. **In the certification testing.**
4 Q. And you understand that's what this paragraph refers
5 to as well?
6 A. **Yes, I understand that. It just -- it refers to
7 employed at the plant under test, so it's a little unclear,
8 are they talking about at the test or at the power plant? I
9 assume that it's.**
10 Q. Well if you could read the next two sentences of this
11 paragraph, maybe that clears that up.
12 A. **Maybe. "This could be a test at the plant or a test
13 at a pilot scale facility that simulates the plant's
14 equipment."
15 So that -- that clears it up, that it could be a
16 test at the actual power plant or a test at the pilot scale
17 facility that simulates the plant's equipment, which is
18 where we do our testing at the pilot scale.
19 "In either case, mercury from the coal will be
20 emitted from the combustion chamber mixed with the activated
21 carbon and at least some will be captured in the
22 electrostatic precipitator."
23 Again the reference to activated carbon and
24 measuring downstream of the activated carbon is incorrect.**
25 Q. If you could read the next sentence?

1053

1 A. **"The gas downstream of the electrostatic precipitator
2 can then be measured for mercury content to establish a
3 baseline for mercury emissions."
4 Well, that is where we measure our mercury
5 emissions downstream of the baghouse or ESP.**
6 Q. Now, what about this next sentence?
7 MR. CALDWELL: Your Honor, may we approach?
8 THE COURT: Okay. I'll see counsel at sidebar.
9 (Thereupon, a discussion was held at sidebar.)
10 THE COURT: Okay. Mr. Caldwell?
11 MR. CALDWELL: Thank you. My concern is that
12 we've actually gone back into that same motion in limine
13 that we've looked at before.
14 These are dropped claims and defenses. He's in
15 the first amended complaint. It's an information and belief
16 allegation. It's not even a live complaint and there are
17 separate paragraphs that are for the contributory and
18 induced infringement of the patent that are still at issue.
19 Those are live claims that are still through.
20 We're making a scene of information and belief pleading.
21 They don't understand the way pleading works and admitting
22 and denying.
23 At this point I think counsel should have
24 approached before making a big scene out of something that
25 is really a dropped claim, and what it is at this point and

1054

1 just the fact that he's dragging it out.
2 I think if he'd have just hinted were they
3 confuses about how the test is run, that's fine. That's
4 consistent with his last point, but this point is making a
5 comic scene out of something that's not a live issue in the
6 case.
7 THE COURT: Can I ask, Mr. Dyess: I'm not sure
8 I totally follow I see what you're doing the witness -- the
9 pointing out allegations in the complaint that you think
10 turned out to be mistaken and wrong.
11 Why are you doing that? How is it relevant to
12 the claim?
13 MR. DYESS: Your Honor, again we've got to
14 demonstrate what our state of mind was for the contributory
15 infringement claim. These allegations and the evidence is
16 going to reflect that they were repeated again in the second
17 amended complaint and the third amended complaint, which is
18 the entire period of infringement here for the entire period
19 of infringement them alleging that we do something with
20 activated carbon at the EERC.
21 And that's the basis for their tailoring
22 argument against us, and this evidence shows our state of
23 mind is going to be we didn't do the thing they accused us
24 of doing during the infringement period.
25 THE COURT: Right. But I guess just to tie that

1055

1 though: How are these particular mistakes the one that
2 you're going into like right now we've been talking about --
3 these allegations about what happens when the certification
4 testing is done at the EERC and there are certain
5 allegations about the use of activated carbon and you say
6 that's not true, that's not what happens when you do that
7 testing, in what ways?
8 I'm trying to get the link -- what way is it
9 going to be asserted, we saw that allegation and we knew it
10 was wrong, but whether they used activated carbon at the
11 EERC testing stage, and so what's the "and so"?
12 MR. DYESS: Well, the "and so" is not only do we
13 have to do -- we get to though what our state of mind was.
14 It is not a dropped claim that they've accused us of.
15 THE COURT: That's a separate question. We'll
16 talk about the dropped claim issue in a second. We haven't
17 gotten there.
18 I'm trying to understand the way you're
19 linking -- you're going through the complaints and doing it
20 for a reason. I'm trying to understand why you're doing it.
21 MR. DYESS: They've accused us of willful
22 infringement and -- willful infringement and specific as to
23 state of mind, and this shows the errors in the complaint,
24 whether information and belief or not were allegations that
25 you did the specific thing and that caused the infringement,

1056

1 and we in fact didn't do the thing.
2 THE COURT: I'm not getting the thing. We're
3 talking about now whether activated carbon was used at the
4 EERC certification test process how that relates to
5 knowledge about whether you infringe the elements of the
6 claims.
7 We know in the elements of claims the activated
8 carbon is downstream of the boiler; right? So what does it
9 have to do with that?
10 MR. DYESS: They've alleged that we used it as
11 part of our certification testing. Our response is we
12 didn't use activated carbon at all and it also goes to,
13 Your Honor --
14 THE COURT: How is that responsive to my
15 question? I'm asking to link the questioning. You're
16 asking to knowledge about practicing the claims.
17 MR. DYESS: Sure. The other part on the
18 contributory infringement is -- claim is that they have to
19 show our coal was specially made and adapted for -- and
20 infringes use that is the allegation they carried forward in
21 the complaint to show that we used activated carbon with our
22 testing.
23 And therefore it was especially made and adapted
24 for use with activated carbon.
25 THE COURT: You used activated carbon with our

1057

1 testing, and therefore it was --
2 MR. DYESS: Especially made and adapted for use
3 with activated carbon in an infringement. They have to
4 prove it. They have to prove that we knew that our coal was
5 especially made and adapted for an infringing use which here
6 means with activated carbon.
7 THE WITNESS: I know the allegation is that the
8 activated carbon was used at the plant downstream.
9 MR. DYESS: I'm sorry, you know what I'm
10 pointing out is in this complaint. They're alleging we used
11 it in the qualification testing at the EERC.
12 THE COURT: That's not the allegation at this
13 trial; right?
14 MR. DYESS: For the infringement period when
15 they're accusing us of knowingly.
16 THE COURT: I think -- tell me if this is what
17 you're saying: That you at the time may have misunderstood
18 what the allegations were and thought that they were
19 accusing you of infringing because you use activated carbon
20 at the EERC qualification test.
21 MR. DYESS: Yes. And that was during the entire
22 period of infringement. That's what the evidence shows when
23 these complaints were in force, and they have to prove that
24 we knew our coal was specially made and adapted for use with
25 activated carbon.

1058

1 And they're alleging that's true because we used
2 it in certification testing and our state of mind was that
3 can't be true.
4 THE COURT: We know sitting here today at this
5 trial that is not their argument. They are not alleging
6 that at this trial, but I think what you're saying is that's
7 what you thought they were alleging or Mr. Green is saying
8 he thought were the allegations at the time he's reviewing
9 the complaints.
10 MR. DYESS: That's what he understood the
11 allegations to be.
12 THE COURT: Am I wrong you don't believe that
13 the allegation at this trial before the jury is that the
14 sorbent that counts for the claims is somehow used in the
15 testing you're talking about, what your state of mind was
16 about, what you thought the allegations were?
17 MR. DYESS: Correct, and that's all this period
18 of time they're accusing us. They're accusing us now of
19 willfully infringing the patents. When that period of
20 infringement occurred, the allegation was you're using
21 activated carbon in your certification testing.
22 THE COURT: I think I understand that. I speak
23 to Mr. Caldwell's argument about how raising the issues
24 about dropped claims, how is this issue related to the
25 claims that still remain.

1059

1 MR. DYESS: It's relevant to the willful
2 infringement claim during the infringement period when
3 they're accusing us of infringement. They're saying we
4 willfully infringed, and they're basing -- they base that
5 during the period of time on this allegation that we used
6 activated carbon in the certification testing.
7 Therefore, we would have known our refined coal
8 was especially made and adapted for use with activated
9 carbon.
10 THE COURT: But dropped claims talking about
11 claims of patents, you're saying in the allegations these
12 still apply to the remaining CERT Operations claims of two
13 patents in suit.
14 MR. DYESS: Yes, sir.
15 THE COURT: I assume we're not talking about
16 looking at parts of the complaint for other patents that are
17 no longer at issue here.
18 Mr. Caldwell, anything further?
19 MR. CALDWELL: This allegation is no longer in
20 the live pleading. That's my point is this allegation sort
21 of -- this theory isn't in the live pleading, and I think
22 the other problem is this 402 and 403 problem that he's
23 just -- he's making a big scene about information and
24 belief, pleading what we had was the sequence of times when
25 Your Honor was working with us when we were trying to

1060

1 replead because it was a black box trying to figure out
 2 who's doing what in these organizations.
 3 This is not a live allegation, and it's not from
 4 the original complaint, to this extent. He's making the
 5 argument about mental state, he's jumping forward to
 6 amended.
 7 THE COURT: The period of infringement that they
 8 have to have the -- the mental state is 2019 and 2021, and
 9 these pleadings we're talking about were at issue -- I think
 10 that's the challenge for plaintiff is that the whole case --
 11 the whole damages period is after the first complaint was
 12 filed.
 13 So it's necessarily -- I think the way we are in
 14 terms of allegations that still remain is necessarily going
 15 to have to provide to defendants the discussion of what the
 16 pleadings were and what the mental state was. It could get
 17 to a place where we start getting so far into the complaints
 18 that it unfairly traipses over the MIL. We haven't gotten
 19 there yet.
 20 For that reason, I'm going to overrule the
 21 objection, and I'll let you continue.
 22 MR. DYESS: We're just about done with this,
 23 Your Honor.
 24 THE COURT: Okay. Thank you.
 25 (The discussion at sidebar ended.)

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1 THE COURT: Mr. Dyess, you can continue when
 2 ready.
 3 BY MR. DYESS:
 4 Q. Mr. Green, if you could look with me to behind tab 14
 5 of that same complaint.
 6 A. **I'm there.**
 7 Q. Now, this should be the second amended complaint;
 8 correct?
 9 A. **That is correct.**
 10 Q. If you would turn to pages 13 and 14 if you can look
 11 at two pages at once.
 12 A. **Okay.**
 13 Q. Have you read -- you've read paragraphs 85 and 86 of
 14 this second amended complaint; correct?
 15 A. **Yes, I have.**
 16 Q. Do you have an understanding how they compare to
 17 paragraphs 87 and 88 from the first amended complaint we
 18 just looked at?
 19 A. **It seemed to be word for word.**
 20 Q. So the problems that you just discussed with your
 21 understanding of the claims of paragraphs 87 and 88 of the
 22 first amended complaint would be the same here; correct?
 23 A. **Yes, sir, that's correct.**
 24 Q. And this second amended complaint was filed on
 25 May 21, 2021; correct?

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1 A. **That's right.**
 2 Q. And at this point in time, all of the CERT Operations
 3 companies who were named in the second amended complaint are
 4 still selling prepared refined coal to be sold to power
 5 plants; correct?
 6 A. **That's correct.**
 7 Q. If you would look behind tab 15 with me. Are you
 8 there?
 9 A. **I'm there.**
 10 Q. And this is the third amended complaint; correct?
 11 A. **That is correct.**
 12 Q. And in this third amended complaint, all six CERT
 13 operation companies are still named as defendants; correct?
 14 A. **Correct.**
 15 Q. Now, this complaint was filed on October seven third
 16 amended complaint was filed on October 7, 2021; correct?
 17 A. **That is correct.**
 18 Q. Was the refined coal program for the CERT companies
 19 still ongoing at this point?
 20 A. **Yes, it was.**
 21 Q. For how much longer would it be ongoing?
 22 A. **At the longest until December 31st of the same year,**
 23 **so a month and a half, a month and 20 days.**
 24 Q. By your way of understanding, was this the last
 25 amended complaint that the CERT defendants received while

1063

1 they were still making refined coal?
 2 A. **While we were still making refined coal yes.**
 3 Q. If you would turn to page 13 of this third amended
 4 complaint.
 5 A. **Okay.**
 6 Q. Have you read paragraphs 83 and 84 of this third
 7 amended complaint?
 8 A. **I was.**
 9 Q. And do those paragraphs appear to be similar to
 10 paragraphs 87 and 88 from the first amended complaint we
 11 just read and discussed?
 12 A. **Yes, they do.**
 13 Q. And how do they compare?
 14 A. **They just seem -- it looks like a cut and paste. It**
 15 **looks like identical language.**
 16 Q. Word for word?
 17 A. **Yes, sir.**
 18 Q. Would the discussion and the problems you had with
 19 paragraphs 83 and 84 of this third amended complaint be the
 20 same ones that you just told us about in paragraphs 87 and
 21 88 of the first amended complaint?
 22 A. **Yes, they would.**
 23 Q. Now, do these paragraphs of the first, second, and
 24 third amended complaint that we just talked about have any
 25 impact on the defendants' understanding of the infringement

1064

1 they were being accused of?

2 **A. Well, they did a great deal. I mean, these**

3 **inaccurate statements seemed very important to the**

4 **plaintiffs' case against the CERT defendants that they were**

5 **infringing.**

6 **We -- you know, they kept repeating these for a**

7 **year and a half, really all the way up until the end of the**

8 **refined coal program, and we knew that we weren't using**

9 **activated carbon in our certification testing.**

10 **And because we knew that, we didn't have any**

11 **reason to believe that these claims had any merit and then**

12 **because we weren't doing the main thing they were saying we**

13 **were doing or claiming that we were doing, which was**

14 **specially formulating our coal to be used with the power**

15 **plant and using the activated carbon to do that, by the time**

16 **October 7th got around and through the entire rest of the**

17 **year, we didn't know that there was anything for us to**

18 **change at that point.**

19 Q. Now, up through the time of this third amended

20 complaint, were all six of the CERT Operations companies

21 supplying refined coal that was made with calcium bromide to

22 a power plant?

23 **A. Yes, they were.**

24 Q. And up through the time this third amended complaint

25 was filed, were all six of the CERT Operations companies

1065

1 supplying refined coal made with calcium bromide to a power

2 plant that used activated carbon?

3 **A. No, sir, they were not.**

4 Q. And which power plants that a CERT Operations company

5 was supplying refined coal to during this period that

6 weren't using activated carbon?

7 **A. That would have been the Mount Storm power plant, the**

8 **Chesterfield power plant, and the Intermountain Power power**

9 **plant.**

10 Q. Now, up through this -- the time of this third

11 amended complaint, did you have any understanding of what

12 the patent you were accused of infringing required a power

13 plant to do in addition to burning your refined coal?

14 **A. I'm sorry, could you repeat that?**

15 Q. I can. I'll try to slow down.

16 Up through the time this third amended complaint

17 was filed, what did you understand the patents you were

18 accused of infringing required a power plant to do in

19 addition to burning your refined coal?

20 **A. The power plant had to use activated carbon in order**

21 **to infringe these patents.**

22 Q. But as you've just testified up through the time of

23 this third amended complaint, you understood that not all of

24 the power plants these CERT Operations companies were

25 selling refined coal to were using activated carbon;

1066

1 correct?

2 **A. That's correct, 3 of the 11 were not.**

3 Q. Now, Mr. Green, you've heard the phrase in this trial

4 substantial non-infringing use; correct?

5 **A. Yes, sir.**

6 Q. And you've heard Mr. O'Keefe testify yesterday that

7 he gave testimony in this case that it was his opinion on

8 March 23, 2022, that for those plants that didn't use

9 refined coal before they installed activated carbon, that

10 those would be substantial non-infringing uses of refined

11 coal.

12 Do you remember that testimony?

13 **A. Yes, I understand -- I remember that testimony.**

14 Q. Now, if you could look at this first amended

15 complaint one more time. I've just got a couple of times I

16 need you to do that.

17 If you would look page 204 -- that can't be

18 right. Turn to -- let's try 24. How about 20? Let's try

19 20. Page 20.

20 **A. This is first amended complaint; right?**

21 Q. Right.

22 **A. Okay. I'm on page 20.**

23 Q. And if you could read paragraph 107.

24 **A. 107: "Thus when, AJG, DTE, CERT, Chem-Mod, and/or**

25 **one of the RC defendants provides refined coal on the**

1067

1 **conveyance leading to the combustion chamber of a coal-fired**

2 **power plant with an activated carbon injection system, AJG,**

3 **DTE, CERT, Chem-Mod, and the RC defendants know that this**

4 **refined coal has been specifically tailored and certified**

5 **for that plant and that the provided refined coal has no**

6 **substantial non-infringing use, i.e. it cannot reasonably be**

7 **used for purpose other than to be combusted at the plant**

8 **where sorbent comprising activated carbon would later be**

9 **injected."**

10 Q. If you look at tab 14, paragraph 106, for me, please,

11 and that's the second amended complaint; correct?

12 **A. Yes. This is the second amended complaint, paragraph**

13 **106.**

14 Q. Do you see that?

15 **A. I see that.**

16 Q. This paragraph 106 repeats the same allegation you

17 just read from the first amended complaint; correct?

18 **A. Yes. It appears to. Yes, it does.**

19 Q. If you could look at tab 13, that's the third amended

20 complaint, look at paragraph 104.

21 **A. I'm looking at it.**

22 Q. Again the plaintiff repeats the allegation from the

23 first amended complaint?

24 **A. Yes, sir, that's correct.**

25 Q. Mr. Green, at the time you were -- received these

1068

1 amended complaints, did you understand that the plaintiffs
2 were accusing all of the refined coal that had been made and
3 supplied by all six CERT Operations companies who were
4 defendants in the case at that time of having no use except
5 to be used with the plant that used activated carbon?
6 **A. No. I knew that three of the refined coal plants,
7 the named defendants were accused of, didn't infringe and
8 didn't use activated carbon.**
9 Q. But you understood these allegations to say that all
10 of the plants where these CERT Operations companies were
11 selling refined coal used activated carbon; correct?
12 **A. Yes. All six of our CERT Operations companies were
13 named in the case.**
14 Q. Mr. Green, at the time you received these three
15 amended complaints, you had an understanding that at least
16 three of those -- two of this operation companies were
17 selling refined coal to three plants that never used
18 activated carbon; correct?
19 **A. That's correct.**
20 Q. And at that time when you received these amended
21 complaints was the amount of refined coal that two
22 operations companies sold in those three power plants
23 without activated carbon -- was that a substantial amount of
24 refined coal that the CERT Operations defendants had
25 supplied?

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1 **A. Yes, sir.**
2 MR. CALDWELL: Objection, Your Honor. He is
3 leading. He's leading the witness. I'm trying not to
4 interrupt.
5 THE COURT: Sustained. The question will be
6 struck and may be restated.
7 BY MR. DYESS:
8 Q. Mr. Green, at the time you received these three
9 amended complaints, did you have any understanding about the
10 amount of refined coal that had been supplied by the CERT
11 Operations companies to these three power plants that didn't
12 use activated carbon?
13 **A. Yes. I mean, we had been operating there since 2011,
14 so up until 2019, I knew that it had to be a substantial
15 amount.**
16 Q. And at the time the plaintiff filed all of these
17 three amended complaints -- let me withdraw that. Let me
18 rephrase it.
19 Did you have any understanding at the time you
20 received these three amended complaints that there were any
21 particular reason that the refined coal that all of the six
22 CERT Operations companies were supplying had non-infringing
23 uses?
24 **A. Well, my understanding from the patent is that a
25 power can't -- a power plant cannot infringe if they don't**

1070

1 **use activated carbon. And my understanding from the claims
2 were that -- well, I'm trying to follow your question.**
3 Q. Sure.
4 **A. You had cut off and back on. I'm trying to
5 understand.**
6 Q. Right.
7 Did you have any understanding when you got
8 these -- the first amended complaint, second amended
9 complaint, and third amended complaint, that the
10 non-infringing uses of refined coal might have been
11 substantial?
12 **A. Yes, I knew that if -- our understanding is that if a
13 power plant is not using activated carbon, that they're not
14 infringing the patents, and we knew that with these three
15 facilities that had been in operation since 2011 up until
16 July 21, I think, the date we received the complaint. They
17 had been in operation a long time.**
18 **So we definitely knew that we had a substantial
19 amount of coal that was sold to power plants in a
20 non-infringing -- for a non-infringing use.**
21 Q. And did you have any understanding when you received
22 these first -- these first three amended complaints filed by
23 plaintiffs whether refined coal having a non-infringing use
24 might impact the claims against you?
25 **A. Yes, I did.**

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1 Q. What was that understanding?
2 **A. My understanding was that if you have a
3 non-infringing use -- a substantial non-infringing use, that
4 you can't be infringing the patents.**
5 Q. And is that what you thought when you read these
6 allegations that we just went through in the first amended
7 complaint, second amended complaint, and third amended
8 complaint?
9 **A. Regarding the CERT Operations companies being in --
10 all six CERT Operations companies being in the suit?**
11 Q. Yes.
12 **A. Yes, I mean, that's exactly what we thought.**
13 Q. Did you know -- were you able to quantify how much
14 refined coal at this point in time had been sold by the
15 these two CERT Operations company defendants to power plants
16 that didn't use activated carbon?
17 **A. Just the two power plants or three power plants?**
18 Q. The two CERT Operations companies.
19 **A. Oh, gotcha. Was I able to quantify that?**
20 Q. Yes.
21 **A. Yes, sir.**
22 Q. Do you know how much from a quantitative
23 standpoint -- well, do you know how much refined coal was
24 sold to those three power plants at the time you received
25 these first amended complaint, second amended complaint, and

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1 third amended complaint?

2 **A. Yeah, it was -- and I'm just trying to think what**

3 **date you're asking me. I know we sold those power plants**

4 **about 70 million tons of refined coal over the life of the**

5 **project.**

6 **Q.** And about what percentage of that was the total

7 amount of refined coal CERT operation companies sold to

8 power plants?

9 **A. That was around 20 percent.**

10 **Q.** In your mind was that a substantial amount of the

11 refined coal the CERT Operations companies sold?

12 **A. Certainly. Certainly it was a substantial amount.**

13 **Q.** In your mind did you make any connection whether that

14 was a substantial non-infringing use of refined coal?

15 **A. Absolutely.**

16 **Q.** As part of your job as the vice president of

17 operations for the CERT Operations companies, did you have

18 any role in tracking the volume of refined coal that the

19 refined coal facilities produced and sold at the power

20 plants?

21 **A. I did. I would receive production reports.**

22 **Q.** Do you know how -- what were these production

23 reports?

24 **A. I would receive a production report from each power**

25 **plant. One of our power plant operator -- at each one of**

1073

1 **our project, companies would send me the CERT Operations**

2 **company that was operating there would send a production**

3 **report in on a daily basis.**

4 **Q.** Do you know how the tonnage of refined coal that was

5 produced by each operations company that was reported to you

6 was collected by each facility?

7 **A. I do. It was -- so we have two shifts that operate**

8 **at each plant that's two 12-hour shifts, the day shift and**

9 **the night shift. The day shift operator would record all**

10 **the information from the PLC, which is the process logic**

11 **controller, that controls and monitors the production.**

12 **The night shift would do the same thing. The**

13 **following day the plant manager would come in and verify**

14 **those numbers and put them into what we call a production**

15 **summary that contains all the necessary and pertinent**

16 **information and that would be e-mailed to the office**

17 **accounting folks and myself on a daily basis.**

18 **Q.** And for what reason are you provided that production

19 summary information for each refined coal plant?

20 **A. Well, I need it for several reasons. One, we had to**

21 **replenish our coal feedstock on a daily basis. We maintain**

22 **a two-day inventory, so we had to buy feedstock on a daily**

23 **basis, so I had to have that -- I directed that to be done.**

24 **Our sorbents, our MerSorb and S-Sorb, the inventories are**

25 **recorded on that sheet, so I had to, you know, keep on top**

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1 **of that. And lastly, we would also -- I would also use**

2 **those numbers to, you know, make sure that we were going to**

3 **meet our monthly forecasted projections to be able to make**

4 **reports to investors.**

5 **Q.** What did you do with that information you got from

6 each facility?

7 **A. Each of the -- I think it was 11 reports I would put**

8 **into a spreadsheet that I called a flash report.**

9 **Q.** If you could I want you to look at Defendants'

10 Exhibit 1514. I think that's actually in a separate

11 notebook that you have up there.

12 **A. Okay. I'm looking at it.**

13 **Q.** What is this Document 1514?

14 **A. This is a printed copy of my flash report.**

15 **MR. DYESS:** Your Honor, we move to admit

16 Defendants' Exhibit 1514.

17 **THE COURT:** Any objection?

18 **MR. CALDWELL:** No objection.

19 **THE COURT:** It's admitted.

20 (Thereupon, Defendants' Exhibit 1514 was

21 admitted.)

22 **BY MR. DYESS:**

23 **Q.** AA with regard to refined coal tonnage, what

24 information is contained in the flash report?

25 **A. The flash report contains the daily total refined**

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1 **coal production. It's monthly totals for each one of the**

2 **facilities listed at the top.**

3 **Q.** And is it possible from this flash report that you

4 could total up the refined coal that was produced at each

5 facility throughout the entire time of this program?

6 **A. You can use it to get that information, yes.**

7 **Q.** And it's totaled at least on a monthly basis

8 throughout that report; correct?

9 **A. It is.**

10 **Q.** And the headings across each one of the boxes in that

11 report, what does that information show?

12 **A. The headings across, those are the power plants that**

13 **each one of the refined coal facilities are located at.**

14 **Q.** And you've given us the time frame when each refined

15 coal facility was at each plant before?

16 **A. That's correct.**

17 **Q.** Now, we talked about the three plants that you knew

18 about where refined coal was made with calcium bromide,

19 where refined coal made with calcium bromide was sold

20 without the power plant using activated carbon, we covered

21 that; correct?

22 **A. That's correct.**

23 **Q.** Mr. Green, at the time the CERT Operations defendants

24 received the three amended complaints that we talked about,

25 did you know whether up to that point in time any of the

1076

1 other four CERT Operations companies defendants had supplied
2 refined coal to power plants when those power plants were
3 not using activated carbon?
4 **A. Yes, you know, all of the power plants that we were**
5 **operating didn't use refined coal in the early years 2011 up**
6 **until some point in time.**
7 **Q.** We talked a minute ago about substantial
8 non-infringing use. Did this information you had about the
9 selling refined coal to power plants at a time when you
10 weren't aware they were using activated carbon, did that
11 impact your understanding of substantial non-infringing use
12 as we've discussed it?
13 **A. Yes, sir, I mean how.**
14 **Q.** How did it impact it?
15 **A. Well, we knew -- when we were served in the lawsuit,**
16 **we, you know, we understood that if the lawsuit explained**
17 **that MATS compliance was going to come in sometime around**
18 **2014, 2015, 2016 so we reached out and started discussing --**
19 **started trying to drill down on that information and find**
20 **out when power plants actually installed activated carbon,**
21 **and we were able to look at that and decipher and see how**
22 **much production was sold to those power plants before they**
23 **used activated carbon, and it was a substantial number.**
24 **Q.** Mr. Green, I want to read to you a couple more of the
25 stipulations that the parties agreed to in this case that

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1 are undisputed facts, and we can give them to you and the
2 jury.
3 First one of those is number 44: The following
4 power plants first used activated carbon injection in one or
5 more of their coal-fire units in 2015: Antelope Valley, Big
6 Cajun II, Laramie River, Rush Island.
7 Number 45: The following power plants first
8 used activated carbon injection in one of more of their
9 coal-fired power units in 2016: Coletto Creek, Labadie,
10 Limestone and W.A. Parish.
11 Mr. Green, what do you understand those
12 stipulations to mean?
13 **A. I understand the stipulations to mean if we know the**
14 **year that a power plant started using activated carbon, all**
15 **the preceding years they didn't.**
16 **Q.** Now, when you got this first amended complaint, the
17 second amended complaint and third amended complaint, did
18 you have any understanding or sense of how much refined coal
19 would have been sold to those power plants during a period
20 when they didn't use activated carbon?
21 **A. Yes, I did.**
22 **Q.** In your mind was that a substantial amount of refined
23 coal?
24 **A. Well, sure it was a substantial amount. We had been**
25 **operating for all the way up until 2014 to 2015, so four or**

1078

1 **five years of production.**
2 **Q.** Now, does this -- your understanding that that would
3 be a substantial amount of refined coal without activated
4 carbon, did that affect your understanding of how these
5 allegations of infringement have been made against you in
6 this complaint, in these amended complaints?
7 **A. Well, certainly. If these were -- if these were uses**
8 **without infringing the patent because the power plants**
9 **weren't using activated carbon, these were substantial**
10 **non-infringing uses.**
11 **Q.** Mr. Green, I want to skip to a different subject and
12 then I want to wrap up with you.
13 Have the defendants -- let me do it this way.
14 Have any of the defendants ever known or
15 understood that the refined coal made with calcium bromide
16 that was sold to a power plant was especially made or
17 adapted for use in a method that would infringe either the
18 '114 or '517 patent?
19 **A. Absolute. You know, that's what I really don't**
20 **understand. We don't use activated carbon in the**
21 **formulation of our coal. We don't use it in the testing.**
22 **You know, we've -- we're not -- you know, sorry. I'm trying**
23 **to gather myself.**
24 **We've always -- we don't use activated carbon in**
25 **our testing. We're not allowed to use activated carbon in**

1079

1 **our testing. We have always relied on the formula from the**
2 **EERC to set our MerSorb requirements and our S-Sorb**
3 **requirements. I just don't see how we can be accused of**
4 **formulating our coal when we can't use activated carbon in**
5 **the lab testing to certify the results. You know, and also**
6 **we've never worked with a power plant, we've never**
7 **coordinated with a power plant to even look from our side at**
8 **how our fuel reacts or behaves in a system that has**
9 **activated carbon in it. It just hasn't been done.**
10 **And furthermore, if you go back and look at the**
11 **results you threw up on the screen or the board over here,**
12 **our additive rates have remained constant over that entire**
13 **period from before when the patent was issued and after the**
14 **patent was issued.**
15 **So it's hard for me to understand the logic that**
16 **you can have to say that our refined coal was specially made**
17 **and adapted to be used with activated carbon when that plays**
18 **absolutely no role in the way we formulate our coal.**
19 **Q.** Was the refined coal that the defendants sold to
20 power plant customers especially made for any particular
21 thing?
22 **A. Yes, sir, it was.**
23 **Q.** And what was that?
24 **A. It was to qualify for the section -- the technical**
25 **requirements of the Section 45 tax credit. We have**

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1 **always -- we have always formulated our coal the same way,**
2 **we have always processed the coal in the same way. It's**
3 **always been done with activated carbon specifically for the**
4 **objective of qualifying the fuel for the Section 45**
5 **tax credit.**
6 Q. You just said it was always done with activated
7 carbon to qualify the fuel, did you misspeak?
8 A. **I'm sorry. It is always -- we have never used**
9 **activated carbon to qualify our fuel for the tax credit**
10 **program. And, you know, using activated carbon to formulate**
11 **that code is against the code and would disqualify our fuel.**
12 Q. Mr. Green, did the CERT companies do anything to
13 cause a power plant in using activated carbon?
14 A. **No, sir, it did not.**
15 Q. Did the CERT companies ever do anything that you're
16 aware of that caused a power plant to continue to use
17 activated carbon?
18 A. **No, sir.**
19 Q. Mr. Green, did the CERT companies ever do anything
20 that you're aware of that prevailed on a power plant to use
21 activated carbon?
22 A. **No, sir.**
23 Q. Mr. Green, did the CERT companies do anything that
24 you're aware of that persuaded a power plant to use
25 activated carbon?

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1 A. **No.**
2 MR. DYESS: Your Honor, we tender the witness.
3 THE COURT: Okay. Cross-examination.
4 MR. CALDWELL: Thank you, Your Honor. If I can
5 get my timer.
6 CROSS-EXAMINATION
7 BY MR. CALDWELL:
8 Q. Good afternoon. Mr. Green, are you comfortable,
9 ready to go?
10 A. **I'm ready.**
11 Q. You understand that we are on sort of a chess clock
12 in this case; right?
13 A. **Yes, I understand.**
14 Q. So can I have an agreement that you will please help
15 me by trying to focus on what I ask so we can just move
16 through this quickly?
17 A. **I'll do the best I can.**
18 Q. You know how we were just talking about the
19 complaints and there was a series of amended complaints?
20 A. **Yes, sir.**
21 Q. Do you understand that none of those complaints that
22 you've shown are the live complaint in this case?
23 A. **They're the only complaints that what?**
24 Q. You understand that none of the complaints you've
25 shown are the live complaint in the case?

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1 A. **Live complaint?**
2 Q. Yes, the active complaint.
3 A. **The active complaint, I understand that.**
4 Q. So you know how a lot of paragraphs you showed and I
5 don't want to take 45 minutes going through them, but you
6 understand how a lot of paragraphs you showed said something
7 was pled on information and belief. Did you see that?
8 A. **I did see that.**
9 Q. So since you've given us kind of your thoughts on how
10 to interpret complaints, I would like to back up and say you
11 had legal counsel at all times in this case; right?
12 A. **Correct.**
13 Q. And do you believe you got good legal advice from
14 your lawyers from the beginning?
15 A. **I believe so.**
16 Q. Okay. Do you understand that allegations like on
17 information and belief, that is what a party is supposed to
18 do if they think there's some -- maybe some merit to
19 something but they don't know for sure, they can lodge an
20 allegation so they can investigate it with discovery. Are
21 you kind of familiar with that?
22 A. **Sure.**
23 Q. Now, who's the party that would have the confidential
24 information about how things work inside CERT? Was it ME2C
25 or was it CERT?

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1 A. **It was CERT.**
2 Q. So are you trying to mislead the jury when you show
3 them, like, for 45 minutes information and belief
4 allegations?
5 MR. DYESS: Your Honor, objection. This is
6 inflammatory argument.
7 THE COURT: Sustained. Please restate the
8 question.
9 BY MR. CALDWELL:
10 Q. Mr. Green, you understand there is nothing
11 inappropriate about Midwest Energy lodging information and
12 belief allegations when we can't know what's going on inside
13 the CERT companies; right?
14 A. **I understand that.**
15 Q. Now, you kept showing complaints. First amended or
16 second amended, third amended complaint; right?
17 A. **That's correct.**
18 Q. Did you guys ever file something that's a responsive
19 pleading to a complaint that was called an answer?
20 A. **I don't believe so. I don't know.**
21 Q. Let's just jump to the third amended complaint. And
22 I would like to pull up as a demonstrative, as you have
23 done, your company's answer to the third amended complaint.
24 A. **Okay.**
25 Q. Now, would it surprise you that a party is supposed

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1 to go through the numbered paragraphs and provide a response
2 to the allegation so the parties can make progress because
3 either they may maybe agree on the allegations in a
4 complaint -- or paragraph or they partially agree or they
5 disagree, do you understand that there's an admission and
6 denial role?
7 MR. DYESS: Your Honor, objection. He hasn't
8 laid a foundation that this witness knows any of those
9 things. Certainly doesn't know about the answer.
10 THE COURT: I'll overrule the objection. That's
11 the premise for the question.
12 THE WITNESS: I'm sorry. Your question again
13 was...?
14 BY MR. CALDWELL:
15 Q. Do you have any sense that there is a document where
16 your side goes paragraph by paragraph and says whether you
17 admit or deny the allegations?
18 A. **That's what this document is.**
19 Q. Now, Mr. Diaz [sic], just cut right to it. You
20 understand you were shown a bunch of paragraphs that are
21 about information and belief pleadings that perhaps you guys
22 used activated carbon in testing, you showed those; right?
23 A. **The document said that we did use activated carbon in**
24 **testing under your belief.**
25 Q. And that's not even an allegation in this trial, is

1085

1 it?
2 A. **It's one of the claims in the trial.**
3 Q. You think that's a claim in this trial?
4 A. **It is an allegation against the defendants that were**
5 **listed.**
6 Q. Sir, that's not even in a live pleading in this case,
7 is it?
8 A. **Our understanding is those are the things we were**
9 **being accused of doing.**
10 Q. Sir, it's not even in a live pleading in this case,
11 is it?
12 A. **No, it's not in this case.**
13 MR. CALDWELL: Now, Mr. Diaz, will you show me
14 the allegations of paragraph 212 I think they're on page 50
15 of the document. Just the allegations.
16 BY MR. CALDWELL:
17 Q. So let's talk about something that's in the complaint
18 that is at issue in this case for this jury. Okay?
19 A. **Sure.**
20 Q. Now, there's multiple parties here. Do you
21 understand that originally in this case A.J. Gallagher, DTE
22 were other refined coal-type companies that were in the
23 case; right?
24 A. **I understand that.**
25 Q. And throughout your direct, I think it was probably

1086

1 before lunch you were showing these long timelines for a
2 very long time. There was no carbon at this plant and
3 things like that. Do you remember?
4 A. **Yes, I saw that. I remember.**
5 Q. A.J. Gallagher and DTE can make charts just like
6 that; right?
7 A. **I'm sure they can.**
8 Q. Right. In fact, it's A.J. Gallagher that has an
9 interest in the Chem-Mod company that invited you guys to
10 get involved in this tax credit program; right?
11 A. **I have no idea how AJG and DTE run their business.**
12 Q. I never mentioned DTE in their question, sir.
13 A. **AJG.**
14 Q. I said it was A.J. Gallagher and Chem-Mod that
15 invited you guys to get involved in this business; right?
16 A. **That is correct.**
17 Q. They were doing it before you were; right?
18 A. **Correct.**
19 Q. And they can show -- they can show timelines like
20 that that back in the day we were supplying refined coal
21 either before the patents issued or to different plants or
22 to plants that didn't use activated carbon; right?
23 A. **I'm sure they could.**
24 Q. And you also know that they have paid \$27 and a half
25 million to ME2C for the patent license; correct?

1087

1 A. **I do know that they did, yes.**
2 Q. All right. Now, let's look at this paragraph and
3 understand it because they were all in the complaint
4 together. There are some additional parties. So what I
5 want to focus on is the extent to which the allegations
6 relate to CERT. Are you with me so far?
7 A. **I am.**
8 Q. So I'm not trying to make you answer as to what A.J.
9 Gallagher knew, that's not my question. But it says these
10 parties including CERT operate refined coal facilities that
11 receive coal, add bromine or bromide such as calcium bromide
12 to the coal and then provide that refined coal to a
13 coal-fired power plant that injects a sorbent material
14 comprising activated carbon downstream of the combustion
15 chamber.
16 Do you see that?
17 A. **I do see that.**
18 Q. Those are the acts of infringement that we're talking
19 about in this trial; correct?
20 A. **That's correct.**
21 Q. And remember this is your answer to the third amended
22 complaint. So you pointed out that that was late 2021;
23 right?
24 A. **Right.**
25 Q. And so by late 2021 you had collected your documents,

1088

1 you had reviewed your old e-mails, but not only that you had
2 called the plants; right?
3 **A. Yes.**
4 **Q.** So you knew obviously that you guys were making
5 refined coal with like a bromide; correct?
6 **A. Correct.**
7 **Q.** But you also knew that the seven plants -- excuse
8 me -- the eight plants at issue in this case were injecting
9 a sorbent material, an activated carbon sorbent material
10 downstream of the combustion chamber; correct?
11 **A. Yes, we knew that.**
12 **Q.** And so by this point in time you guys would need to
13 admit that you were injecting or you were using -- I'm
14 sorry.
15 By this point in time, late 2021, you would need
16 to admit that you were using a bromide solution on the coal
17 and that there were plants you guys were working with that
18 were using activated carbon; right?
19 **A. There were, yes.**
20 **Q.** Okay.
21 MR. CALDWELL: Now, let's see what they said in
22 response to this, Mr. Diaz.
23 BY MR. CALDWELL:
24 **Q.** The defendants, and this is CERT's answer, lack
25 information sufficient to form the belief as to the truth of

1089

1 the allegations that do not pertain to them. So that's the
2 part about Gallagher, DTE that I told you we're not talking
3 about. So therefore they deny those. Understood, no
4 problem.
5 MR. CALDWELL: Let's remove that highlighting,
6 Mr. Diaz, so there's no -- no question. I want to start
7 with the word "the" three lines up from the bottom or two
8 lines up.
9 BY MR. CALDWELL:
10 **Q.** It says: "The CERT defendants admit that they
11 operate refined coal facilities. The defendants otherwise
12 deny any allegations in this paragraph that pertain to
13 them."
14 Do you see that?
15 **A. I do see that.**
16 **Q.** So after going through this tedious examination about
17 how ME2C has had to file multiple complaints to try to
18 figure out the nature of your business and you're saying,
19 gosh, this is the last one we saw when we were operating
20 refined coal business, you were still telling us your
21 customers weren't doing activated carbon; right?
22 **A. That's what this document says.**
23 **Q.** Is this the first time you've ever seen this?
24 **A. I don't recall seeing it.**
25 **Q.** Now, there's been this repeated commentary that ME2C

1090

1 for a while had some CERT Operations companies in the case
2 that were not associated with plants using activated carbon.
3 Are you with me?
4 **A. Yes.**
5 **Q.** And it's like Intermountain; right? What were the
6 other two plants?
7 **A. Mount Storm and Chesterfield.**
8 **Q.** Do you understand that a year and a half after we
9 asked you on December 22nd, 2021, so nine days before the
10 refined coal program shut down is when you guys finally gave
11 us discovery indicating which of the plants you were working
12 with were using activated carbon?
13 **A. I didn't know that date.**
14 **Q.** So while you're sitting up here saying that they just
15 kept on leaving in these parties that are working with
16 plants without activated carbon, you realize, though, even
17 if you didn't know the date, that for at this point two and
18 a half years we hadn't been told which one of your plant
19 that you were working with used activated carbon? Did you
20 realize that?
21 **A. No, I did not realize that. But yeah -- excuse me.**
22 MR. CALDWELL: So do you have interrogatory
23 answer, Mr. Diaz? We could start with interrogatory number
24 one or number two.
25 BY MR. CALDWELL:

1091

1 **Q.** So what I want to direct you to here and we'll just
2 kind of do this quickly. We sent an interrogatory asking --
3 asking with regard to each facility help us identify
4 basically the parties that are involved.
5 MR. CALDWELL: And if we can flip to the next
6 page, Mr. Diaz.
7 BY MR. CALDWELL:
8 **Q.** At this point in December of 2021, you guys -- this
9 is when you guys told us the information about CERT
10 Operations IV, V, RCB -- scroll down -- and explained to us
11 Senescence, Rutledge, Alistar -- keep going -- and then we
12 got a supplement that had Bascobert, Buffinton, Cottbus,
13 Larkwood, Springhill --
14 MR. CALDWELL: Keep going. Thank you.
15 BY MR. CALDWELL:
16 **Q.** And then do you understand that ME2C amended its
17 complaint to conform it to the parties that we now knew were
18 associated with plants using activated carbon; right?
19 **A. I understand what you're saying.**
20 **Q.** Then we also at the same time, year and a half
21 earlier had sent you Interrogatory No. 2. This is when we
22 got an answer to Interrogatory No. 2 that helped us identify
23 which plants used activated carbon.
24 MR. CALDWELL: Can we just scroll through that
25 very quickly, Mr. Diaz.

1092

1 BY MR. CALDWELL:
2 Q. And we hear about Big Cajun, Rush Island, W.A.
3 Parish, Coletto Creek, Limestone, Labadie, Laramie River,
4 Powerton. Do you see that?
5 A. **I see that.**
6 Q. And Midwest Energy narrowed its allegations to
7 conform to the information we had finally learned. Do you
8 see that?
9 A. **I see that.**
10 MR. CALDWELL: Thank you, Mr. Diaz.
11 BY MR. CALDWELL:
12 Q. But as we discussed earlier this morning, you had
13 known which plants were using activated carbon going back
14 before the complaint; right?
15 A. **Yes, that is correct.**
16 Q. So you knew which ones when you read a paragraph that
17 says we're accusing infringement that involves treating with
18 bromine and a plant using activated carbon, you had that
19 information available to you even from the time we filed the
20 original complaint; right?
21 A. **90 percent of it, yeah.**
22 Q. Well, you had that information available to you;
23 right? You had all the same e-mails talking about who
24 had --
25 A. **Yes. I -- I could say yes.**

1093

1 Q. And you would understand that when we're considering
2 what coal matters for whether it has a substantial
3 non-infringing use, we're looking at the coal of the accused
4 power plants in this damages period of this case; right?
5 A. **Yes.**
6 Q. So now do we understand after seeing in the discovery
7 that you also told us I think, it's further down that
8 Mount Storm, Chesterfield, and Intermountain don't use
9 activated carbon.
10 Does it now make sense why they were dismissed
11 from the suit or no longer at issue?
12 A. **In 2022?**
13 Q. Yes.
14 A. **It makes sense why they have been dismissed.**
15 Q. It seems like hours ago at this point, but when your
16 direct started, do you remember being asked a question, Why
17 didn't they just come over here and knock on the door, why
18 did -- why didn't Mr. MacPherson just knock on the door and
19 talk to you guys?
20 A. **Sure, I remember that.**
21 Q. But you saw what was wrong with that question; right?
22 A. **Getting into a power plant?**
23 Q. Yeah. That's kind of a big problem with that
24 question, isn't it?
25 A. **Yeah. I mean, it's -- there's security. You have to**

1094

1 **have access to get into a power plant just like we do, so...**
2 Q. And not only that, once you're on the power plant,
3 they kind of won't let you just start going to different
4 parts of the plant; right?
5 A. **That's true.**
6 Q. So you can't be over here working on this thing and
7 say, I'm going to go knock on that door on that trailer
8 that's clear over there on the other side of the plant;
9 right?
10 A. **I think that's true.**
11 Q. Sir, just in case there's any doubt, you guys have
12 made the commentary that we should have reached out to you
13 or whatever, but you understand there is literally
14 nothing -- not at all legally improper for Midwest Energy to
15 file a lawsuit when it believes there's been a patent
16 infringement; correct?
17 A. **I don't believe there's anything wrong with that.**
18 Q. All right. Sir, you understand the plants we're
19 talking about, the ones at issue, the eight?
20 A. **Yes.**
21 Q. Those are all Powder River Basin, PRB, and in one
22 instance a lignite plant; correct?
23 A. **Correct.**
24 Q. And you understand that those coals have different
25 chemistry. They have anthracite or bituminous coals;

1095

1 correct?
2 A. **I understand.**
3 Q. And I would assume you're familiar with the fact that
4 because bituminous coals have sort of a higher BTU and you
5 maybe burn at different rates, that the mercury profiles are
6 a little different; right?
7 A. **Right.**
8 Q. So you would agree with me that there are bituminous
9 plants that can meet MATS standards without having to have
10 necessarily the same emission equipment that you would need
11 for sub-bituminous like PRB or lignite coals; right?
12 A. **I'm not an expert in that area. I can't say I know**
13 **that or not.**
14 Q. But you guys have worked with bituminous plants that
15 didn't need activated carbon. You know that; right?
16 A. **We do work with plants that have bituminous coals.**
17 Q. And you know that these plants, the ones that are at
18 issue in this case, many of them, if not all of them, have
19 indicated to you and Mr. Linton that they are going to need
20 ACI activated carbon to meet MATS; right?
21 A. **Yes.**
22 Q. So if the defendants later are playing deposition
23 videos about somebody not needing activated carbon in a
24 bituminous plant, it's not really the same thing, is it?
25 A. **I can't answer that.**

1096

1 Q. You also understand, don't you, that these plants do
 2 use bromine with the coal and activated carbon; right?
 3 A. **These plants being?**
 4 Q. The plants at issue in the case, all the same ones
 5 from the boards. So I'm sorry, I'm gesturing generally to
 6 the left.
 7 But these boards all relate to the accused
 8 plants; right?
 9 A. **All but one, yes.**
 10 Q. Okay. Now, you understand that all of the eight
 11 accused plants do you bromine and activated carbon; right?
 12 A. **Yes.**
 13 Q. So if the defendants want to play a deposition clip
 14 of a guy who says, I don't think you'd ever use bromine on a
 15 coal and also use activated carbon, you know that doesn't
 16 apply to the power plants we're talking about in this case;
 17 right?
 18 A. **During the time -- I don't know what they're doing at**
 19 **this point in time, but, yes, these power plants used --**
 20 **they burned refined coal and used activated carbon.**
 21 MR. CALDWELL: I'll tell you what, I think
 22 that's it. So I will pass the witness thank you.
 23 THE COURT: Okay.
 24 MR. DYESS: Your Honor, I have a very brief
 25 redirect if you want to take a break.

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1 THE COURT: How much do you have? How many
 2 minutes?
 3 MR. DYESS: Should only be two or three minutes.
 4 THE COURT: Why don't you do that now and take a
 5 shorter break than normal because you had a long lunch and
 6 try to get the rest of the testimony in today of Mr. Green.
 7 REDIRECT EXAMINATION
 8 BY MR. DYESS:
 9 Q. Mr. Green, Mr. Caldwell, just talked about them
 10 making allegations on information and belief. You heard
 11 that; correct?
 12 A. **Yes, sir.**
 13 Q. Was there ever any basis for plaintiffs to allege
 14 that you -- any of the CERT companies used activated carbon
 15 in Section 45 qualification testing? Any basis for that?
 16 MR. CALDWELL: Objection, Your Honor.
 17 THE COURT: What's the objection?
 18 MR. CALDWELL: Obviously there's no way this
 19 witness could testify about the materials that ME2C or its
 20 counsel saw when attempting to figure out these companies.
 21 THE COURT: Let me sustain the objection and ask
 22 Mr. Dyess to ask him in a way that would be more directed to
 23 Mr. Green's knowledge.
 24 BY MR. DYESS:
 25 Q. Mr. Green, are you aware of any information that

1098

1 exists that would show someone that the CERT Operations
 2 companies ever used activated carbon in Section 45
 3 qualification tests?
 4 A. **There wouldn't be any.**
 5 Q. Now, as far as which power plants use activated
 6 carbon and don't use activated carbon, there are public
 7 databases and records which show which power plants use
 8 activated carbon; right?
 9 A. **Yes, sir, there are.**
 10 Q. And some of those are permits that the power plants
 11 have to get that the plaintiffs have put in this case;
 12 right?
 13 A. **That would be contained in their permit applications.**
 14 Q. So the plaintiffs got permits for some plants, but
 15 they didn't go get permits for the plants they accused of
 16 using activated carbon -- that didn't use activated carbon;
 17 correct?
 18 A. **It would appear so.**
 19 Q. Are you aware of any reason they couldn't have gotten
 20 information? That's public information; right?
 21 A. **It is public information.**
 22 Q. There are public databases the Department of Energy
 23 of the United States keeps that shows records of the mercury
 24 control equipment power plants use; correct?
 25 A. **That is correct.**

1099

1 Q. And that information includes which plants use
 2 activated carbon; right?
 3 A. **Yes, sir.**
 4 Q. And you're not aware of any deficiencies that the
 5 will plaintiffs or their lawyers might have had accessing
 6 that publicly available that would have shown
 7 that Intermountain -- I mean, Mount Storm, Intermountain,
 8 and Chesterfield didn't use activated carbon; correct?
 9 THE COURT: Mr. Caldwell?
 10 MR. CALDWELL: Objection, Your Honor. He
 11 really -- I'm objection to all the leading.
 12 THE COURT: Sustained. It's a leading question.
 13 So the question will be stricken.
 14 BY MR. DYESS:
 15 Q. That information is publicly available; correct?
 16 A. **Yes, sir. It is.**
 17 MR. DYESS: We don't have anything further for
 18 this witness.
 19 THE COURT: Thank you, Mr. Green. You may step
 20 down.
 21 Let's take just a ten-minute afternoon break,
 22 and we'll have our jury led out.
 23 (The jury exited the courtroom.)
 24 THE COURT: We'll be in recess.
 25 (A recess was taken, after which the following

1100

1 proceedings were had:)

2 (The jury entered the courtroom.)

3 THE COURT: Defense will call its next witness.

4 MR. DYESS: Your Honor, and ladies and gentlemen

5 of the jury, we're going to play a deposition for you now of

6 Jay Gunderson. He's the principle engineer at the EERC who

7 conducted the refined coal testing for the CERT companies.

8 (A video was played.)

9 DIRECT EXAMINATION

10 BY THE ATTORNEY:

11 Q. Would you please state and spell your name for the

12 record?

13 A. **My name is Jay Gunderson. That's J-A-Y,**

14 **G-U-N-G-D-E-R-S-O-N.**

15 Q. And you're currently employed; is that correct?

16 A. **That's correct.**

17 Q. Who is your employer?

18 A. **The University of North Dakota Energy and**

19 **Environmental Research Center.**

20 Q. What is your position there?

21 A. **I'm a principal engineer.**

22 Q. How long have you been a principle engineer at EERC?

23 A. **Just a few years. Before that I was a senior**

24 **engineer.**

25 Q. Is principal engineer a promoted title over senior

1101

1 engineer?

2 A. **Yeah. I -- yes.**

3 Q. Okay. Congratulations then.

4 How long have you been at EERC?

5 A. **I was doing the math. It's got to be 33, 34 years.**

6 Q. And could you describe your responsibilities at EERC?

7 A. **Well, I run the test furnace for the most part, and**

8 **so I set up the tests. I run the tests.**

9 Q. Mr. Gunderson, are you familiar with the term refined

10 coal?

11 A. **Yes, I am.**

12 Q. And are you familiar with the Chem-Mod process for

13 prepared refined coal?

14 A. **Yes, I aim.**

15 Q. In the course of your work at EERC, did you supervise

16 or conduct tests of refined coal for compliance with the

17 requirements of Section 45 of the tax code?

18 A. **Yes, I did.**

19 Q. And did you supervise or conduct such tests on

20 refined coal that was prepared using Chem-Mod -- I'm sorry,

21 using MerSorb and S-Sorb pursuant to the Chem-Mod process?

22 A. **Yes.**

23 Q. You -- you performed tests on refined coal that was

24 prepared pursuant to that Chem-Mod process for purposes of

25 qualifying the refined coal for Section 45 tax credits based

1102

1 on the use of the additives, MerSorb and S-Sorb; is that

2 right?

3 A. **That's correct.**

4 Q. Did you ever use activated carbon injection in a

5 Section 45 qualification test for refined coal prepared

6 using MerSorb and S-Sorb according to the come med process?

7 A. **We did not.**

8 (The video ended.)

9 MR. DYESS: Your Honor, ladies and gentlemen of

10 the jury, we're now going to play a short deposition for you

11 of Mr. Larry Kuennen. Mr. Kuennen was a consulting engineer

12 with Dominion Energy where he assisted the Mount Storm and

13 Chesterfield power plants.

14 (A video was played.)

15 DIRECT EXAMINATION

16 BY MR. DYESS:

17 Q. Let me get some background information on you. Are

18 you presently employed, Mr. Kuennen?

19 A. **Yeah.**

20 Q. Who is your employer?

21 A. **Dominion Energy.**

22 Q. And how long have you been employed by Dominion

23 Energy?

24 A. **16 years.**

25 Q. So roughly going back to the 2006 time frame?

1103

1 A. **That is correct.**

2 Q. Do you have a job title presently with Dominion

3 Energy?

4 A. **Yes, consulting engineer.**

5 Q. And how long have you been a consulting engineer with

6 Dominion Energy?

7 A. **For 16 years.**

8 Q. Generally at present, what are your job

9 responsibilities as a consulting engineer for Dominion

10 Energy?

11 A. **I assist the power plants, support the power plants**

12 **and specifically measure the sold fuel for the coal-fire**

13 **plants help them with the entire process of combusting coal**

14 **and all the air pollution control equipment associated with**

15 **the machinery.**

16 Q. Are you familiar with the term activated carbon in

17 the context of operating coal-fired boilers for the purpose

18 of generating electricity?

19 A. **Yes.**

20 Q. And what is activated carbon in that context?

21 A. **For a utility boilers it's utilized to help on the**

22 **mercury capture.**

23 Q. Talking about the Mount Storm facility first from

24 July 2011 through the end of December 2021 do you know if

25 the use of activated carbon for mercury control was ever

1104

1 considered for use at the Mount Storm facility?

2 **A. Yeah.**

3 **Q.** And when -- let me -- let me ask it this way: Was

4 activated carbon ever used for mercury control at the

5 Mount Storm facility during that period of time?

6 **A. Activated carbon was used on a short-term basis when**

7 **we had very high mercury in the fuel. It was used from fall**

8 **of 2016 through June of 2017. It was not an activated**

9 **carbon injection system. It was just activated carbon**

10 **utilized.**

11 **Q.** Do you know if the Chesterfield facility has ever

12 used activated carbon at the -- for pollution control?

13 **A. No.**

14 **Q.** Do you know if the Chesterfield facility has ever

15 considered using activated carbon for pollution control?

16 **A. We considered it again back in 2014, 2015. We**

17 **elected not to. We felt we could control it with the clean**

18 **scrub system, and mercury in the fuel was not nearly as high**

19 **as what Mount Storm was.**

20 **Q.** So at the Chesterfield facility, the evaluation was

21 done that the pollution control facilities already in place

22 were sufficient to control mercury emission for MATS

23 compliance without the use of activated carbon?

24 **A. Correct.**

25 **Q.** What rank of fuel do you burn at Mount Storm and

1105

1 Chesterfield?

2 **A. The rank? It's going to be eastern bituminous.**

3 **Q.** Are the Mount Storm or Chesterfield power plants

4 permitted to burn sub-bituminous or lignite coals?

5 **A. I don't believe, you know, it's in our Title V**

6 **permit. We could test and ask for it, but, no. We may be.**

7 **I'm not sure on that answer.**

8 **Q.** During the time that Mount Storm or Chesterfield were

9 using refined coal, did you ever do any work to test or to

10 prove up whether or not you could burn sub-bituminous or

11 lignite coal during that time?

12 **A. No, because lignite coming from the southwest or out**

13 **west, you're hauling a lot of ash, you know, a very low BTU**

14 **product, and we have small furnaces, and so we would take a**

15 **load reduction, megawatt reduction and try to burn lignite,**

16 **and the same with PRB.**

17 **PRB is considerably lower, and so we would have**

18 **to try to limit our megawatt output to try to burn that**

19 **fuel.**

20 **Q.** And when you say PRB, is that another way of

21 referring to sub-bituminous coal?

22 **A. Yeah, that's your Powder River Basin, sub-bituminous.**

23 **Q.** Do you know if any testing or work was done to

24 determine whether or not the pollution control systems at

25 Mount Storm and Chesterfield were available to meet their

1106

1 emission limits if you were burning sub-bituminous and

2 lignite coals?

3 **A. Well, again we would have to limit the loads, so it's**

4 **not an option.**

5 **Q.** What do you mean it's not an option?

6 **A. The fire in the furnace, the boiler, you burn coal to**

7 **make the steam, and there's a certain capacity for the**

8 **furnace for heat absorption and the mills.**

9 **And my eastern bituminous fuel is 12,000 or**

10 **13,000 BTUs. PRB sub-bituminous is 9,000, lignite is 7,000,**

11 **so our mills are not sized anywhere close to being able to**

12 **handle such a low BTU fuel.**

13 **Therefore, our -- the 580 megawatt unit would**

14 **become a 450 or 350 with lignite, so it's not an option,**

15 **never considered it because of that.**

16 **Q.** Do you know if any changes would need to be made to

17 the pollution control systems at Mount Storm and

18 Chesterfield if you were burning sub-bituminous or lignite

19 coals?

20 **A. Everything would have to be expanded on the fuel**

21 **delivery, the mill especially the burners because again, if**

22 **you have a higher volume, you're burning more dirt, you**

23 **know. That's what lignite is, high ash, 40 percent ash.**

24 **Our ESPs are undersized. All the equipment is**

25 **undersized, so again, it would be catastrophic expenditures**

1107

1 **to try to burn that fuel.**

2 (The video ended.)

3 MR. DYESS: Next we're going to play a

4 deposition for you of John Finlinson. He's the president

5 and chief operations officer at Intermountain Power Service

6 Corporation which operates the Intermountain Power plant.

7 (A video was played.)

8 UNIDENTIFIED SPEAKER: Please state and spell

9 your first and last name for the record.

10 THE WITNESS: Jon Finlinson, J-O-N,

11 F-I-N-L-I-N-S-O-N.

12 BY THE ATTORNEY:

13 **Q.** Are you presently employed?

14 **A. Yes.**

15 **Q.** Who is your employer?

16 **A. Intermountain Power Service Corporation.**

17 **Q.** Do you have a job title with Intermountain Power

18 Service Corporation?

19 **A. Yes.**

20 **Q.** What is that title?

21 **A. President and COO.**

22 **Q.** How long have you been employed by Intermountain

23 Power Service Corporation?

24 **A. 39 years.**

25 **Q.** How long have you been president and COO or

1108

1 Intermountain Power Service Corporation?

2 **A. 12 years.**

3 **Q.** I mentioned it earlier, the power plant -- the

4 Intermountain Power project. Do you have any operational

5 responsibilities for the operations of Intermountain Power

6 project?

7 **A. Yes. My company has a hundred percent responsibility**

8 **for operating the power plant.**

9 **Q.** And in your role as president and COO of

10 Intermountain Power Service Corporation, are you -- is it

11 your responsibility -- is it your overall responsibility to

12 manage the operations of Intermountain Power project?

13 **A. Yes.**

14 **Q.** To the extent that Intermountain Power --

15 Intermountain Power project did anything from the end of

16 November -- I mean, the end of 2011 through November 2021

17 for mercury control for MATS compliance, it was the use of

18 refined coal at that facility; correct?

19 **A. The refined coal is the only mercury control**

20 **technology that we used in that time period.**

21 **Q.** Are you familiar with the term activated carbon in

22 the context of the operation of coal-fired boilers?

23 **A. Yes.**

24 **Q.** What is your understanding of what that term means in

25 the context of the operation of coal-fired boilers?

1109

1 **A. Activated carbon has been used at some facilities to**

2 **help them control mercury.**

3 **Q.** And from your previous answer to a previous question,

4 is it correct that at no time from November 2011 through

5 November 2021 Intermountain Power did not use activated

6 carbon as a mercury control -- at any time from

7 November 2011 through the end of 2021, did Intermountain

8 Power project consider the use of activated carbon as an

9 emission control technology?

10 **A. No.**

11 **Q.** Do you know why Intermountain Power never considered

12 activated carbon as an emission control technology?

13 **A. We didn't need it was the main reason.**

14 (The video ended.)

15 **MR. DYESS:** Ladies and gentlemen of the jury,

16 Your Honor, we're going to play you one more deposition.

17 This is the deposition of Thomas Erickson. He's the chief

18 operations officer and s vice president for intellectual

19 property at the EERC.

20 (A video was played.)

21 **BY THE ATTORNEY:**

22 **Q.** Good afternoon, Mr. Erikson. How are you today?

23 **A. Doing very good.**

24 **Q.** Do you have a title at EERC?

25 **A. My title is -- at this moment is the chief operations**

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1 **officer and the vice president for intellectual property. I**

2 **denote that title just took effect 21 days ago.**

3 **Q.** That being the title vice president of intellectual

4 property?

5 **A. Yeah, and chief operations officer, both. I've held**

6 **many titles at EERC over the years.**

7 **Q.** What titles did you hold immediately prior to

8 becoming the chief operating officer and vice president for

9 IP?

10 **A. I was -- immediate to it I was the -- sorry if I**

11 **don't get the names correct. I believe it was called the**

12 **director for exploratory research, intellectual property,**

13 **and technology commercialization, and the prior to that, I**

14 **was the CEO of the EERC.**

15 **Q.** Have you heard of an entity called the

16 EERC Foundation?

17 **A. Yes. The EERC Foundation is a 501(c)3 organized by**

18 **the EERC to help with the -- originally designed to help**

19 **with the commercialization of intellectual property.**

20 **It has -- within the last two years it underwent**

21 **a modification or enhancement in which we -- we changed the**

22 **way it's structured, still a 501(c)3, but we've expanded the**

23 **foundation's focus to be -- still dealing with intellectual**

24 **property protection and commercialization, but also dealing**

25 **with actual contracting and research activities.**

1111

1 **Q.** You said that the EERC Foundation was founded in

2 connection with commercializing intellectual property; is

3 that correct?

4 **A. That is correct.**

5 **Q.** What does that mean to commercialize intellectual

6 property?

7 **A. It means to advance it into the marketplace.**

8 **Q.** Could that include licensing intellectual property to

9 entities that want to use that intellectual property in the

10 market?

11 **A. Yes.**

12 **Q.** Could it also include selling patents or other

13 intellectual property to private for-profit enterprises?

14 **Tell me about your are professional background.**

15 **Do you have any advanced degrees beyond high school?**

16 **A. Yes, I have a bachelor's degree in chemical**

17 **engineering from the University of North Dakota. I have a**

18 **master's degree in chemical engineering, also from the**

19 **University of North Dakota, which also has a business**

20 **management cognate, and then I do have -- I'm one class**

21 **short of a Ph.D. in chemical engineer.**

22 **Q.** Do you consider yourself an engineer?

23 **A. Yes.**

24 **Q.** What kind of engineer do you consider yourself?

25 **A. Chemical engineer.**

<p style="text-align: right;">1112</p> <p>1 Q. You're aware of a company called Midwest Energy 2 Emissions Corporation; correct? 3 A. Correct. 4 Q. Is that company sometimes referred to as ME2C? 5 A. Yes. 6 Q. Has ME2C been a client of the EERC at any point? 7 A. Yes. 8 Q. What products or services has EERC provided to the 9 ME2C? 10 A. Mercury control testing and testing of other 11 environmental technologies. 12 Q. Yes. Does EERC know which ME2C products or services 13 EERC has tested at operating coal-fired power plants? 14 A. Yes. 15 Q. What are the products and services? 16 A. The primary technology is the technology that was 17 licensed to them by the EERC Foundation. 18 Q. That technology is related to the reduction of 19 mercury emissions from coal-fired power plants; correct? 20 A. Correct. 21 Q. Do you understand the technology that the 22 EERC Foundation licensed and then sold to ME2C to be a 23 portfolio of patents on mercury control? 24 A. Yes. 25 Q. Okay. Other than being a client of EERC for certain</p>	<p style="text-align: right;">1114</p> <p>1 A. Yes, correct. 2 Q. And at some point in time EERC became aware that the 3 refined coal made using the Chem-Mod solution often was made 4 using calcium bromide; correct? 5 A. Correct. 6 Q. At some point in time EERC came to know that 7 Chem-Mod's licensees were selling refined coal made with 8 calcium bromide to power plants that also use an activated 9 carbon at their facilities; correct? 10 A. No. 11 Q. The EERC never became aware of that? 12 A. Never have I been aware nor has anybody else been 13 aware to the best of my knowledge that anything we were 14 doing with Chem-Mod was also including activated carbon. 15 Q. Would your answer to that question be the same for 16 EERC's knowledge? 17 A. Yes. 18 Q. You were aware that in the 2011 to '12 time frame 19 that the EPA announced a set of rules that would be going 20 into effect to require the reduction of mercury emissions at 21 coal-fired power plants; is that right? 22 A. I'm certain at the time I was, yes. 23 Q. And the testing of activated carbon and controlling 24 mercury emissions had been conducted for many years at the 25 EERC by that time; right?</p>
<p style="text-align: right;">1113</p> <p>1 testing, does ME2C have any other relationship with the 2 EERC? 3 A. No. 4 Q. Prior to being called ME2C, ME2C was known by the 5 name RLP; is that correct? 6 A. Correct. 7 Q. Are you familiar with what is sometimes called a 8 Section 45 tax credit program? 9 A. Yes. 10 Q. What is that? 11 A. It is one such incentive for the control of mercury 12 and NOx and/or SOx emissions. 13 Q. So just to summarize, is it fair to say that the U.S. 14 government issued regulations regarding mercury control 15 invested in mercury control technologies and created a tax 16 credit to incentivize the control of mercury? 17 A. Yes. 18 Q. Has EERC ever told anyone that the use of bromine and 19 activated carbon simultaneously in a coal-fired power plant 20 constitutes an infringement of one or more EERC mercury 21 control patents? 22 A. Not that I am aware of. 23 Q. At some point in time EERC became aware that Chem-Mod 24 and its licensees were selling refined coal to power plants 25 in the United States; correct?</p>	<p style="text-align: right;">1115</p> <p>1 A. Yes. 2 Q. And the EERC had conducted testing on behalf of its 3 clients involved in the use of activated carbon to reduce 4 mercury emissions; is that fair? 5 A. Yes. 6 Q. So after these EPA regulations on mercury emissions 7 were released and, you know, the EERC being perhaps the 8 premier research entity if the field in this area, the EERC 9 was aware that coal-fired power plants would be using 10 activated carbon as a part of their emissions strategy to 11 reduce mercury to comply with these regulations; right? 12 A. Yeah, I would think we assume that that would be the 13 primary method. 14 Q. So wouldn't it be reasonable that at least some of 15 the refined coal certified by the EERC and Section 45 16 testing would be combusted at power plants using activated 17 carbon? 18 A. No. 19 Q. And why would that not be reasonable? 20 A. Because Section 45 provides mercury control in the 21 absence of activated carbon, not with activated carbon. 22 So you I don't know why anybody would assume 23 that the intent of refined coal and Section 45 is to provide 24 mercury control and NOx and/or SOx with the sole reason of 25 treating the coal. Activated carbon injection is not</p>

1116

1 treating the coal.
2 Q. But if, you know, the primary means being adopted in
3 the industry for mercury control was using activated carbon
4 wouldn't it be reasonable that at least some of that coal
5 would be -- some of the refined coal would be burned at
6 plants that also were using activated carbon?
7 A. **It seems contrary to my thinking. If you were doing**
8 that, there would be no reason to modify the coal. So no, I
9 don't agree with that.
10 Q. Okay. So based on your answer, you must believe that
11 there are substantial uses of refined coal that do not
12 involve the use of activated carbon?
13 A. **That is my belief and that's why we tested here**
14 without injecting activated carbon.
15 Q. Do you have any reason to believe that refined coal
16 can only be used with activated carbon?
17 A. **No.**
18 (The video ended.)
19 MR. SYKES: Your Honor, with that defense rests
20 its case.
21 THE COURT: Okay. All right. Mr. Caldwell,
22 plaintiffs' side, is there anything rebuttal?
23 MR. CALDWELL: Your Honor, may we approach.
24 THE COURT: Yes.
25 (Thereupon, a discussion was held at sidebar.)

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1 THE COURT: Okay. Mr. Caldwell.
2 MR. CALDWELL: It's just our intent to move for
3 JMOL and, of course, certainly on invalidity, which, of
4 course, they've done nothing with. I needed to make that
5 motion. I think otherwise we would close, but I want to
6 make sure we haven't waived anything and make our motion
7 timely. Ms. Haley, who is far smarter than me, will do
8 that.
9 THE COURT: So I think what you're saying is you
10 don't have any further evidence to present, you wanted to
11 make a motion for JMOL with regard to the invalidity issue
12 which I understand won't be contested.
13 MR. CALDWELL: Won't be.
14 THE COURT: Will not be.
15 MR. CALDWELL: And there may be something else.
16 I want to take a minute. We think they're going to call the
17 next witness, and she was on call at the time. I was mostly
18 giving myself an opportunity.
19 THE COURT: So other than making that motion and
20 then outside the presence of the jury we'll be granting it
21 with no objection, really all that's left to do is remarks
22 to close; is that right?
23 MR. CALDWELL: Yes. And he's already rested.
24 What's left is for me to close.
25 THE COURT: So we'll do that and you can say

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1 that I've already said -- you have the motion, so you can
2 say that again, and then I guess what we'll do is I'll tell
3 the jury that we'll be done today, plan tomorrow to come
4 back and have closing arguments and then final jury
5 instructions and things. It will be good for them to know.
6 I don't think they fully know right now it's going to be
7 closed, and they'll be deliberating as of tomorrow. I'm
8 sure they'll be happy to hear that.
9 (The discussion at sidebar ended.)
10 THE COURT: So the defendants have closed their
11 case. Mr. Caldwell, let me call on you to confirm whether
12 the plaintiffs have any more evidence to present.
13 MR. CALDWELL: Thank you, Your Honor. To note
14 for the record, as you said, we'll make our motion still
15 being timely, but do it once we're able to dismiss the jury.
16 With that, the plaintiff closes.
17 THE COURT: Thank you.
18 So ladies and gentlemen of the jury, here's some
19 news for you which is we're going to end the day a little
20 bit early because the only thing we have left is for each
21 side to make their closing arguments. It's going to make
22 sense to do it first thing tomorrow and we can prepare for
23 you. And after that we'll have final jury instructions that
24 I'm giving you. And then you'll be deliberating tomorrow.
25 So I think we expect all those things to happen in the

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1 morning and you begin deliberations.
2 With all that said, unless there's anything
3 further, we can have our jury let out for the evening and go
4 from there.
5 (The jury exited the courtroom.)
6 THE COURT: Everyone may be seated.
7 Mr. Caldwell, do you want to -- you have made --
8 do you want to make your motion officially in regard to the
9 invalidity issue?
10 MR. CALDWELL: Yes, sir. Ms. Haley is preparing
11 for that. I was handed a note which I assume I'm supposed
12 to read for the time split for depositions that were played.
13 THE COURT: You can read that out and our court
14 clerk will take care of it. That's correct.
15 MR. CALDWELL: For the defendants what we have
16 is 20 minutes and 43 seconds on the defendants' side. And
17 for our side on the plaintiffs, we have 3 minutes and
18 23 seconds.
19 THE COURT: And my clerk will kind of compare
20 that and she has to get back to -- we have to get back to
21 you to confirm the numbers. We will.
22 All right. Ms. Haley, the motion?
23 MS. HALEY: Aisha Haley on behalf of plaintiffs.
24 Plaintiffs move for judgment as a matter of law on all of
25 defendants' invalidity defenses. There was not enough

<p style="text-align: center;">1120</p> <p>1 evidence on this record for a reasonable jury to find 2 invalidity. 3 THE COURT: I believe I understand that 4 objection. With regard to that motion not to be disputed; 5 is that correct? 6 MR. SYKES: Yes, Your Honor. 7 THE COURT: So I'll grant plaintiffs' motion in 8 that regard. 9 All right, counsel. So I think from there we'll 10 have our prayer conference and we can perhaps get started a 11 little earlier than we might. We will take a few minutes 12 and try to get together the most recent versions we sent you 13 on our end of the proposed final jury instructions as to 14 which I have, as the parties know, have reviewed the 15 parties' arguments and made determinations as to how I would 16 presumptively finalize the final jury instructions as well 17 as determinations after the parties provided the helpful 18 letter summarizing the differences about how I believe I was 19 to resolve the form of the final verdict form, but I'll come 20 out and we'll -- I'll give each side a chance to raise any 21 issues that they have still that they maybe want to still 22 raise with regard to my presumptive decisions. I may have a 23 couple things I noticed since then and I'll mention them to 24 you and then we'll try to get to a point logistically where 25 we know we're good in terms of how we're going to get to</p>	<p style="text-align: center;">1122</p> <p>1 patent or Claims 1 and 2 of the '517 patent and for judgment 2 as a matter of law that defendants have not contributed to 3 infringement of these claims. Plaintiff must establish 4 among other things thinks that refined coal sold by a 5 defendant is not a staple or commodity capable of 6 substantial non-infringing use and that the defendant knew 7 refined coal was specially made or adapted for use in an 8 infringing method and the plaintiffs cannot show the 9 requisite knowledge of infringement. 10 On my first point here, Your Honor, I will 11 concede at the beginning this doesn't square with the 12 current jury instructions. For sake of preservation both 13 evidentiary and instruction side, we'll make the point I 14 wanted to preview that the evidence shows that refined coal 15 has substantial non-infringing uses claimed by the power 16 plants involved in this case. Without ACI the sale of 17 refined coal to power plants that never used ACI and the use 18 of refined coal before the asserted patents issued with and 19 without activated carbon. This was evidenced in Mr. Green's 20 testimony today. 21 Nor is there sufficient evidence that refined 22 coal was essentially made or admitted to be used and 23 Plaintiffs presented no evidence that Defendants knew the 24 refined coal they sold was especially made or adapted for 25 use in the infringing method. The evidence shows that if</p>
<p style="text-align: center;">1121</p> <p>1 final versions we can have for the jury. 2 Mr. Caldwell? 3 MR. CALDWELL: May I and others be excused from 4 this process if we want to work on closing? 5 THE COURT: Sure. Whenever I come out here, 6 whoever the team from each side that's going to stay to deal 7 with the prayer conference issues, that's great. If anyone 8 else needs to go back to prep for tomorrow they can be 9 excused. 10 MR. SYKES: We do want to move for judgment as a 11 matter of law as the close of evidence to get that on 12 record. 13 THE COURT: Do you want to do that now? 14 MR. WILSON: Good afternoon, Your Honor. 15 THE COURT: Mr. Wilson, good afternoon. 16 MR. WILSON: I believe if I remember my civil 17 procedure correctly that our motion on induced infringement 18 would be preserved at this point, but to the extent it's not 19 we would reassert it for the grounds stated earlier. 20 THE COURT: Understood. Moving on. 21 MR. WILSON: Defendants move for under Federal 22 Rule of Civil Procedure 50(a) for finding that plaintiffs 23 have not provided evidence by which a reasonable jury can 24 find by a preponderance of the evidence that defendants 25 contributed to infringement of Claims 25 and 26 of the '414</p>	<p style="text-align: center;">1123</p> <p>1 refined coal was especially made for anything it was to 2 qualify for Section 45 tax credits. As Mr. Green explained 3 today, the formulation of MerSorb and S-Sorb to be added to 4 the refined coal was determined based on testing from the 5 EERC to certify the refined coal to qualify for the tax 6 credits. The formulation was not changed in relation to the 7 patents and the formulation was not made or designed to work 8 with or accommodate ACI use by the power plants. The plant 9 could use or not use ACI in accordance with its overall 10 operations. Refined coal was compatible for use with or 11 without ACI. 12 The record does not support any assertion that 13 refined coal was specially made or especially adapted for 14 use in identify or similarly plaintiffs preponderated no 15 evidence that defendants actually knew its acts were 16 infringing. 17 The record evidence establishes that each 18 defendant reasonably believed it was not engaging in 19 infringing activity. As discussed, it's undisputed that a 20 substantial amount of refined coal was sold and subsequently 21 burned without activated carbon injection. Defendants would 22 reasonably even if mistakenly believe these known uses of 23 refined coal without adding activated carbon sorbent 24 injections constituted substantial non-infringing use of 25 refined coal. Plaintiffs have developed no evidence that</p>

<p style="text-align: center;">1124</p> <p>1 defendants did not believe this to be the case. 2 Moreover, Mr. Green testified that in complaints 3 operative to the damages period plaintiffs allegations 4 defendants believed and in fact knew to be incorrect 5 allegations regarding the defendants' operations. 6 Accordingly, plaintiffs have not presented legal sufficient 7 evidence that would let a reasonable jury to find by a 8 preponderance of the evidence that the defendants 9 contributed to infringement of the asserted claim. Based on 10 the foregoing, no reasonable juror could find by a 11 preponderance of the evidence that contributed to the 12 infringement of any accused product and Claims 1 and 2 of 13 the '517 patent. 14 Moving on now to willful infringement. 15 Defendants move under Federal Rule of Civil Procedure 50(a) 16 for finding that plaintiffs have not provided legally 17 sufficient evidence that a reasonable juror could find that 18 Claims 25 and 26 of the '414 or Claims 1 and 2 of the '517 19 and for judgment as a matter of law that defendants have not 20 willfully infringed these claims on willful infringement. 21 Plaintiffs must establish that a defendant deliberately or 22 intentionally infringed a certain patent for the reasons 23 stated with respect to induced and contributory 24 infringement. There also is not sufficient evidence to 25 establish that a defendant deliberately or intentionally</p>	<p style="text-align: center;">1126</p> <p>1 reflect the -- do not separate out the value of unpatented 2 features or values artificially accruing to the asserted 3 patents including specifically the licenses which will go 4 treated as comparable includes tax and that's discussed at 5 in yesterday's transcript at 798:12 to 799:17 and they did 6 nothing to apportion that artificial value out of the rates. 7 They deviated from the license. 8 In addition to Mr. Green's calculations on 9 unpatented features, Mr. Green testified that Section 45 10 requires refined coal to reduce mercury and NOx. It's in 11 yesterday's transcript at 747:21 770:29 to 770 to 701:10. 12 None of plaintiffs' witnesses offered any evidence that 13 practicing the CERT Operations patents use -- 14 THE COURT: If you could slow down for our court 15 reporter. 16 MR. WILSON: Sorry. Thus, Mr. Green also failed 17 by treating the value of asserted patents as technologically 18 compatible when the two are not technologically compatible. 19 The evidence also shows that Mr. Green's reasonable royalty 20 is based predominantly or solely on licenses that are not 21 technologically comparable with respect to Nalco, ADI ES and 22 Chem-Mod licenses. The patents included in those licenses 23 cover mercury control, NOx control, SOx control, refined 24 coal brominated refined coal prepared and various business 25 methods.</p>
<p style="text-align: center;">1125</p> <p>1 infringed a certain patent in particular. As discussed in 2 Dex contributory infringement, the record evidence 3 establishes that defendants reasonably believed it was not 4 engaging in infringing activity and further that in 5 compliance operated during the damages period plaintiffs' 6 allegations against the defendants were based off acts that 7 defendants reasonably believed and in fact knew to be 8 incorrect allegations. So based on the record, no 9 reasonable juror could find by a preponderance of the 10 evidence that defendants willfully infringed Claims 25 and 11 26 of the '414 patent and Claims 1 and 2 of the '517 and 12 briefly we'd like to -- defendants move under Federal Rule 13 of Civil Procedure 50(a) for a finding plaintiffs have not 14 provided evidence for a reasonable juror to find by a 15 preponderance of the evidence that plaintiffs are entitled 16 to the requested damages plaintiffs seek. 17 Any damages award must reflect the incremental 18 value of the patented technology and must demonstrate how 19 the value of unpatented features and any value that 20 artificially accrues to the patents based on existing 21 permitted factors. 22 In addition, when basing a reasonable royalty on 23 rates and other agreements the proper licenses must be 24 technically and economically comparable. The plaintiffs 25 show plaintiffs' expert Mr. Green's calculations do not</p>	<p style="text-align: center;">1127</p> <p>1 Mr. O'Keefe admitted that these patents were not 2 actually comparable, and that's in yesterday's transcript at 3 671:23 to 672:12. At most, these licenses shared the same 4 general technological field as the asserted patents, but 5 when relying on licenses to prove reasonable royalty, a 6 comparability between different technologies and licenses 7 does not show whether I with respect to the AJG DTE 8 agreement. I believe that license runs afoul of the Federal 9 Circuit's longstanding of relying on settlement agreements 10 to accomplish reasonable royalty damages which is discussed 11 in <i>Laser Dynamics</i>, which we briefed several times. 12 The AJG DTE agreement which was at PTX 766 has 13 every hallmark of a license with low probative value. It 14 was entered on the eve of trial. Its lump sum fee is 15 disproportionately large compared to plaintiffs' other 16 licenses, and the agreement was entered into roughly four 17 and a half years after the hypothetical negotiation date. 18 In addition, the evidence shows that Mr. Green 19 ignored a vast quantity of coal that was licensed and 20 released by that agreement which if counted for would 21 drastically reduce the apparent royalty rate represented by 22 the agreement, and that was discussed yesterday at 806:12 to 23 809:12 and then 810:5 to 813:5. And primarily with respect 24 to the Alistar agreement, the evidence shows that 25 Mr. Green's calculation of a royalty rate from this license</p>

<p style="text-align: center;">1128</p> <p>1 was unsupported and not credible. The amount licensed and 2 released of coal was an order of magnitude higher than 3 Mr. Sykes accounted for in his calculation of the royalty 4 rate, and that was discussed at yesterday's transcript 721:4 5 to 792.</p> <p>6 So based on the foregoing, no reasonable juror 7 could find by a preponderance of the evidence that 8 plaintiffs are entitled to Mr. Green's calculation of 9 damages as a reasonable royalty. Thank you, Your Honor.</p> <p>10 THE COURT: Thank you, Mr. Wilson. 11 All right, Ms. Haley.</p> <p>12 MS. HALEY: Thank you. I'll address the 13 infringement piece and willfulness piece, and Mr. Pearson 14 will address the damages piece.</p> <p>15 As to contributory infringement there is ample 16 evidence from which a jury could conclude that defendants 17 were liable for contributory infringement. I don't think 18 all of the elements are disputed here. It seems like the 19 first one is element 3 which is whether the coal as sold and 20 delivered -- sorry -- whether the refined coal supplied to 21 that power plant as sold and delivered during the damages 22 period is not a staple article or commodity of commerce 23 capable of substantial non-infringing use, and I understand 24 defendants' argument to be intention is the contributory 25 infringement under the --</p>	<p style="text-align: center;">1130</p> <p>1 ACI equipment particularly based on the type of coal. 2 Another issue in the accused plants there's also 3 ample evidence that the defendants knew that the sited used 4 activated carbon. This includes the testimony and exhibits 5 introduced by Mr. O'Keefe. To the extent the jury would not 6 be able to infer from this record that defendants had 7 specific intent to infringe a jury could equally find 8 willful blindness. Willful blindness evidence includes that 9 the defendants purposefully positioned their operations with 10 locations designed to keep them in ignorance of the power 11 plant's operations. It also includes that the defendants 12 declined to read reports or grapple with information in 13 reports that were commissioned in the process of their 14 soliciting of investments in their LLCs.</p> <p>15 As to willfulness, willfulness requires only 16 deliberate and intentional infringement. The evidence for 17 inducement and contributory infringement in this case far 18 exceeds the minimum requirements for a jury to find willful 19 infringement, particularly the defendants were motivated by 20 significant pecuniary benefit from their infringement in the 21 form of tax credits, and in the alternative the defendants 22 were willfully blind or were acting deliberately recklessly 23 and indifferently. With that, I'll turn it over to 24 Mr. Pearson unless there's questions. 25 THE COURT: No, thank you.</p>
<p style="text-align: center;">1129</p> <p>1 THE COURT: I should just say for the parties I 2 think I made a mistake earlier which is that it turns out 3 the pretrial order says, I think it's paragraph 69, that 4 time would be charged to the parties for JMOL motions. In 5 light of the fact I told you earlier I would not do so, I 6 have not done so. I want you to know that you have been 7 such -- my point is you have time.</p> <p>8 MS. HALEY: So the first issue would be 9 substantial non-infringing use. Plaintiffs are -- 10 plaintiffs agree with the Court's reading or the Court's 11 ruling on the jury instruction for contributory infringement 12 as to this element and under that formulation of the rule 13 there is ample evidence that the coal as sold and delivered 14 in this case is destined for infringement, nothing else can 15 happen to it. The uses that defendants point to are not 16 relevant to the contributory infringement question. 17 Defendants, for example, point to refined coal outside of 18 the damages period and outside of accused power plants. 19 Those are also not relevant.</p> <p>20 As to element 5 which is the only element of 21 contributory infringement with a scienter requirement there 22 is ample evidence that defendants knew that the coal would 23 be burned at the power plants, that they had the expectation 24 that it would be burned to comply with the Section 45 tax 25 credits requirements it had to be used in power plants with</p>	<p style="text-align: center;">1131</p> <p>1 Mr. Pearson. 2 MR. PEARSON: Thank you, Your Honor. Briefly I 3 believe there is sufficient evidence to support an award of 4 damages in this case by the jury. The JMOL was largely a 5 repetition of the Daubert motion against Mr. Green that the 6 Court has ruled on twice and we incorporate by reference all 7 of the responses and all the papers filed with respect to 8 the motions specifically with respect to the trial. The 9 jury heard sufficient evidence to support damages based on 10 the comparable analysis of ME2C's own patents done by 11 Mr. MacPherson himself. Further the jury heard a full 12 <i>Georgia-Pacific</i> analysis from Mr. Green. The I tried to 13 take notes on the argument to the best of my abilities and 14 it seemed to largely focus on Mr. Green's treatment of 15 comparable licenses. I'll go through the arguments very 16 briefly with respect to whether the licenses were properly 17 apportioned which Mr. Green's analysis showed they certainly 18 were.</p> <p>19 First, there was an argument that the licenses 20 improperly reflected the artificial value of tax credits. 21 That was not demonstrated in Mr. Green's direct testimony. 22 It was not demonstrated to the jury. On Mr. Green's 23 cross-examination, counsel attempted to create a double 24 point on cross-examination and was not allowed to. With 25 respect to whether the licenses capture the value of</p>

<p style="text-align: center;">1132</p> <p>1 unpatented features I do not recall that this argument was 2 presented to the jury but in any event to the extent this is 3 even arguably true with respect to certain technologically 4 similar licenses it is not true with respect to the ME2C 5 patent licenses which don't have unpatented features they're 6 about ME2C's patents there's an argument that ME2C's don't 7 entitled them to tax credits I believe that was the argument 8 and because of that can't rely on licenses that might touch 9 on tax credits.</p> <p>10 I submit that's incorrect. Mr. Green read into 11 the record section 5.3 of the Alistar Chem-Mod license. 12 Similar provision is in all the Chem-Mod licenses that says, 13 regardless of whether or not you get tax credits or don't 14 get tax credits, you have to pay these royalty amounts, 15 which were for the technology.</p> <p>16 And even if you don't get the tax credits, you 17 don't get a rebate, so those licenses are not directed to 18 tax credits. They are directed to technology.</p> <p>19 There's an argument the licenses that he relied 20 on were not technologically comparable. That's incorrect. 21 A jury heard from both Mr. Green and Mr. O'Keefe that they 22 are comparable.</p> <p>23 To the extent there was some misstatement made 24 by Mr. O'Keefe in cross-examination, that was clarified in 25 redirect, and it's very clear that he testified that the</p>	<p style="text-align: center;">1134</p> <p>1 And considering the standard that I raised 2 earlier with regard to Rule 50 JMOL motions like these, 3 which I take into account and in light of both prior rulings 4 that the Court has made, but particularly all of the 5 arguments that plaintiffs' counsel made here, I will deny 6 the motions pursuant to Rule 50.</p> <p>7 To the extent that the motions aren't premised 8 on a legal theory that's incompatible with the Court's legal 9 instructions to the jury, they present classic fact 10 questions that no doubt the parties will argue about before 11 the jury tomorrow in closing argument.</p> <p>12 And certainly a reasonable jury could find for 13 the plaintiff on these issues, and both sides will have 14 their evidence.</p> <p>15 All right. So with that said -- why don't we 16 take a -- it is 4:58, so why don't we take just a couple of 17 minutes to get our bearings.</p> <p>18 We'll get the materials we need to go over the 19 proposed final jury instructions with you and the final 20 verdict form, talk about a logistical plan to make all that 21 happen as well after we hear further arguments.</p> <p>22 I may also just because it will be helpful for 23 me to have it. Before we go back on the record, I may have 24 a law clerk ask come out and ask counsel, look, can you just 25 let me know like which, if any, of these instructions is</p>
<p style="text-align: center;">1133</p> <p>1 technology of the Chem-Mod and Nalco patents are directed to 2 the same field and to the same type of solutions.</p> <p>3 With respect to whether the AJG license is 4 relevant between ME2C and AJG for being a settlement 5 agreement, that argument was certainly not presented to the 6 jury, but I would note that was not one of the key licenses 7 that Mr. Green relied on on the chart, the table that had 8 all the royalty rates filled in.</p> <p>9 There was a blank for AJG, and it was explained 10 extensively as why that was, and there was some level of 11 uncertainty and that Mr. Green suggested to the jury that it 12 should not be one of the ones that they more heavily favor 13 in the analysis.</p> <p>14 And finally, there's an argument that Beggar 15 believe that the Alistar agreement -- he was using it in an 16 unsupported way with an incredible rate, and of course he 17 was using the rate that was within the text of the document 18 itself.</p> <p>19 So for those reasons, we believe that there's 20 sufficient evidence for the jury to award damages and serve 21 as a fact question that the jury should be allowed to 22 consider.</p> <p>23 Thank you, Your Honor.</p> <p>24 THE COURT: Thank you. Mr. Pearson, those 25 responses were helpful from plaintiffs' counsel.</p>	<p style="text-align: center;">1135</p> <p>1 someone going to raise a further issue.</p> <p>2 So I can kind of tick it off the list or 3 similarly, which, if any, aspect of the verdict form is 4 someone going to raise an issue, and we'll try to talk about 5 that as we go through it.</p> <p>6 So we'll stand in a brief recess.</p> <p>7 (A recess was taken, after which the following 8 proceedings were had:)</p> <p>9 THE COURT: All right. So we could try this 10 since -- both sides will be popping up, you can try to stay 11 at counsel table. Speak up so our court reporter can hear 12 you, and we'll go from there.</p> <p>13 Why don't we start with final jury instructions. 14 I think from what my courtroom deputy told me, there's 15 various corrections item/and also removing a invalidity 16 item.</p> <p>17 I think you guys are going to probably tell us, 18 Here's all the stuff you've got to get out of here. And so 19 maybe I don't know if those kind of things, the corrections 20 and what we need to remove on the front is a good place to 21 start or maybe you guys decide who's going to lead us in 22 this process.</p> <p>23 MS. HALEY: Yeah. I'm happy to. I would 24 suggest maybe we go section by section.</p> <p>25 THE COURT: Fair enough. Okay. So I think</p>

<p style="text-align: right;">1136</p> <p>1 right now what we're talking about is like what corrections 2 do the parties think we need to make and what portion of the 3 final jury instructions we need to take out in light of 4 issues that are no longer in the case. 5 MS. HALEY: The first one we have is 6 section 1.14 which is the burdens of proof. 7 THE COURT: Okay. 8 MS. HALEY: And there's a paragraph on the 9 bottom of the first page about the clear and convincing 10 evidence standard. 11 THE COURT: Okay. Section 1.4. 12 MS. HALEY: 1.14. 13 THE COURT: Okay. Got it. All right. And 14 which paragraph is it? Begins with what words? 15 MS. HALEY: It begins "in this case in addition 16 to each defendant denying ME2C's infringement claims." 17 THE COURT: Okay. So we can take this whole 18 paragraph out? 19 MS. HALEY: I believe so. 20 MR. WILSON: Yes, we agree with that. 21 THE COURT: For these, I'll assume there's no 22 objections unless someone pipes up. Sound good? That way, 23 Mr. Wilson, you don't have to keep piping up. 24 Okay. So that paragraph is out. 25 MS. HALEY: The next one we have is section 2.2.</p>	<p style="text-align: right;">1138</p> <p>1 patent claim is directly infringed," you're saying is the 2 same paragraph verbatim as the paragraph beginning with the 3 same words in section 4.2? 4 MS. HALEY: Yes. 5 THE COURT: So the parties are just saying it's 6 redundant and doesn't need to be included: Is that right? 7 MS. HALEY: That's our position. 8 MR. WILSON: I think there might be one extra 9 sentence in the one in 4.3. 10 THE COURT: I think it may be the last sentence? 11 MR. WILSON: It might be the last sentence. 12 That extra sentence there, I don't think that sentence makes 13 any material difference here, but that's the only difference 14 I see between the two paragraphs and the two sections. 15 THE COURT: Okay. Mr. Wilson, any objection if 16 we remove that paragraph from the section 4.3 instruction in 17 light of it's included in the prior -- 18 MR. WILSON: If I could just show my co-counsel 19 what we're talking about. 20 THE COURT: Sure. 21 MR. WILSON: I think that is a holdover from 22 when I believe defendants had proposed a separate direct 23 infringement instruction, and plaintiffs had had that 24 wrapped into 4.3. 25 So, yes, I think it would be fine to take those</p>
<p style="text-align: right;">1137</p> <p>1 THE COURT: The parties' contentions. 2 MS. HALEY: Yes. And the last paragraph that 3 begins with "each defendant," the sentence that says 4 "defendants also collectively contend that ME2C's patents 5 are valid for several independent reasons." 6 THE COURT: That will be excluded. 7 MS. HALEY: And then on 2.3 which is the next 8 page, bullet 4. 9 THE COURT: Got it. Okay. So bullet 4 will 10 come out because it's referring to the clear and convincing 11 evidence invalidity standard. 12 MS. HALEY: And bullet 5 where it mentions 13 invalidity, I think "not shown to be invalid" should be 14 stricken. 15 THE COURT: So it will read "if you decide that 16 ME2C has proven that a defendant infringed the claim..." 17 Is that right? 18 MS. HALEY: Yes. 19 THE COURT: We'll make that change. 20 MS. HALEY: The next one we have is in 21 section 4.3. So in the middle of this second page of this 22 instruction, it has an instruction for direct infringement, 23 and that instruction is verbatim in 4.2. I think it's just 24 a duplicate. 25 THE COURT: Okay. So the paragraph beginning "a</p>	<p style="text-align: right;">1139</p> <p>1 redundant paragraphs out of 4.3. 2 THE COURT: So I'm going to take out of 3 section 4.3 the entire paragraph beginning with the words "a 4 patent claim is directly infringed" and the paragraph "the 5 power plant can directly infringe." 6 Is that correct? 7 MS. HALEY: Yes. 8 THE COURT: We'll do that then. 9 Okay. Ms. Haley. 10 MS. HALEY: The next thing we have is the 11 entirety of section 5 which is invalidity. 12 THE COURT: Okay. This is where we're really 13 going to cut down some papers, so all of section 5 is going 14 to be excised. Got that. 15 MS. HALEY: And that's the last sort of various 16 correction bucket that we have. 17 THE COURT: Okay. There's no other valid 18 invalidity stuff in here? 19 MS. HALEY: Not that I recall. 20 THE COURT: Mr. Wilson, anything else you saw in 21 the way of find of corrections? 22 MR. WILSON: I'm going to flip through the rest 23 of my pages. I don't think so but let me double check. 24 In the instructions, no. We'll need to do some 25 changes on the verdict form on the same issue, but nothing</p>

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1 else in the instructions on invalidity.
2 THE COURT: Okay.
3 MS. HALEY: I actually have a correction to what
4 I said, which is section 6 on damages references
5 invalidity --
6 MR. PEARSON: 6.6?
7 THE COURT: So the first -- I think you're
8 referring to the first section of section 6, damages: "If
9 you find that an accused product infringes any of the
10 asserted claims," and it goes on to say, "and the infringed
11 claim is not invalid."
12 So I think the proposal there is to remove the
13 word "and" ending with "invalid."
14 MR. PEARSON: And it continues on to the next
15 sentence, "on the other hand."
16 THE COURT: The next sentence reads: "On the
17 other hand, if you find that all of the asserted patent
18 claims are either invalid or are not infringed, then you
19 should not consider damages."
20 And I think the proposal there is to excise that
21 "are either invalid."
22 So it will say "all of the asserted patent
23 claims are not infringed."
24 MR. PEARSON: Yes, Your Honor.
25 THE COURT: Okay. We'll make that change. It

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1 will be help -- we'll do -- we'll also do like -- we'll
2 search for invalid.
3 Tomorrow if I'm reading it and we happen to miss
4 like a reference to invalidity, I'll try to just correct it
5 on the fly. Hopefully we won't.
6 MS. HALEY: We have one more correction we
7 found. It's in 6.2.
8 THE COURT: Okay.
9 MS. HALEY: This is in the middle of the first
10 paragraph. It says, "You should assume that both parties to
11 the hypothetical negotiation understood that the patents
12 were..."
13 (Stenographer clarification.)
14 (Off record.)
15 THE COURT: It's not talking about a contested
16 issue in your case --
17 MS. HALEY: Right.
18 THE COURT: -- more so what the parties at the
19 hypothetical negotiation would have on their minds.
20 Okay. All right. So those are the -- we have
21 those corrections and instances where we have to remove
22 language for invalidity.
23 Okay. Let's see. It looks like if I'm just
24 going down numbers wise, I think the next section that
25 either side had an issue with -- here's what I've got left

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1 on my list: Defendants' 4.3, which is inducement; 4.4,
2 which is contributory, and 6.3, which is apportionment, and
3 plaintiffs have a lingering issue with contributory which we
4 will cover, and 6.5.
5 MR. PEARSON: And 6.1, Your Honor.
6 THE COURT: Okay. Try to take those. Let's go
7 to section 4.3, which is induced infringement. And this
8 looks like something that defendant wanted to raise.
9 MR. WILSON: Yes, Your Honor. So what would
10 have been bullet 4 in our proposal -- so I guess we would
11 propose going in after bullet 3. The prior language we had
12 would be 4, that the defendants encouraged the power plants
13 to perform each and every step of the asserted claim.
14 So we would propose inserting that between what
15 is now currently number 3 and number 4.
16 THE COURT: Okay. I think you had had in your
17 proposal a separate line or element that included this
18 language; correct, n your prior proposal?
19 MR. WILSON: Correct, Your Honor.
20 THE COURT: And I think -- and I'll try to cut
21 to the chase a bit. I think the reason why I deleted it is
22 in the current version that I proposed, bullet 4 indicates
23 that they have to prove that the defense's actions actually
24 caused the power plant to perform each and every step.
25 I didn't see there to be a distinction

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1 encouragement and causation, I think in this context as I
2 understand it to be speaking to the same issue. Causation
3 is the encouragement, et cetera.
4 Any argument why that's wrong? What's
5 distinctive or separate about encouragement from the
6 causation element that's already in there?
7 MR. WILSON: I mean, I think the main thing
8 we're trying to capture with encouragement in this
9 context -- this is a slightly different case where it's not
10 necessarily a case of a -- you know, a set of instructions
11 that existed out there.
12 We've got kind of a closely contested issue on
13 affirmative acts that are causing things since it kind of
14 boils down to Mr. O'Keefe's analysis and the sale of refined
15 coal itself and sort of the surrounding context in which
16 that sale happens.
17 So if what we're worried about is sort of
18 devolving into where a sale alone might be enough without
19 some sort of element of encouragement associated with that
20 sale which, you know, can risk collapsing inducement into
21 contributory infringement.
22 THE COURT: I think it's probably the case that
23 folks will argue tomorrow to what extent sales of refined
24 coal and sales and circumstances and factors will be to
25 amount to a causation requirement, and certainly make those

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1 arguments to the jury.
2 I guess, Mr. Wilson, is it your understanding
3 there's some distinction made by the Federal Circuit when it
4 lists out elements of induced infringement that they say,
5 Well, you have to cause the infringement, but then you have
6 separately encourage the infringement?
7 The plaintiff says -- and I thought they were
8 correct. This is in the prior proposals -- the plaintiff
9 said encouragement is not a separate additional requirement
10 for inducement. It seems right to me.
11 Do you disagree?
12 MR. WILSON: I don't know that it's a separate
13 requirement, Your Honor. I think it's a finer articulation
14 on it consistent with Supreme Court cases and Federal
15 Circuit cases as we cited in our -- I don't want to retread
16 too much as we cited in our previous footnote like *Global*
17 *Tech Appliances versus SEBSA* where the Supreme Court said
18 the leading and inducing prevailing on persuading.
19 So we think it's important in this case. It's
20 not necessarily a separate element, but the feeling of
21 encouragement has a helpful gloss to it that we think the
22 Supreme Court and Federal Circuit had applied.
23 THE COURT: Okay. All right. Let me hear from
24 the plaintiff, Ms. Haley.
25 MS. HALEY: Sure. We continue to believe that

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1 encouragement is not a separate requirement and that the
2 factors that are already in the -- in your instruction
3 account for the concept of encouragement.
4 There's not an additional step, and we would
5 just point to the authorities we cited in our proposed
6 instructions.
7 THE COURT: Okay. All right. Here I'm going to
8 continue -- I'm going to ultimately utilize the version that
9 I proposed.
10 I don't think based on the law I've reviewed and
11 what I've seen from the Federal Circuit guidance that there
12 is some separate encouragement element to the claim. I
13 think even defendant acknowledges that.
14 I think it's certainly true that there are
15 different words that can be used to describe the type of
16 action that is asserted to have caused or induced
17 infringement, but there's many words. Encouragement is one.
18 But there are others, and it doesn't make sense
19 to highlight one among many here, so I think it's
20 appropriate to include the proposal that I previously made.
21 So we'll do that. Okay.
22 Other issues with regard to section 4.3,
23 Mr. Wilson?
24 MR. WILSON: One more, Your Honor. This would
25 be in what is now bullet point 4 in Your Honor's current

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1 constructions I believe we had previously.
2 Within that we had the statement instead of
3 other factors, so it would read that the defendants'
4 actions -- instead of other factors actually caused the
5 power plant to perform each and every step of the asserted
6 claim.
7 And we would like to reassert and preserve that
8 additional language in 4.4.
9 THE COURT: Understood. And I think you
10 probably understand that I had previously made a ruling that
11 it's my understanding and my view of the law that a
12 defendant can cause or induce someone else to commit
13 infringement even if it might be said that there was some
14 additional cause for why a defendant did X.
15 And I read the -- as opposed to other factors
16 inclusion as coming too close to the idea that the jury
17 might conclude that no other factor or no other cause could
18 be related to the act that is said to amount to
19 infringement.
20 And so for that reason I think I understand the
21 argument here, and for that reason I'll continue to include
22 the language that I proposed here for this instruction.
23 Okay.
24 Then let's -- it sounds like the next section is
25 contributory infringement. Let me raise something that I

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1 just noted. I think it was mentioned briefly before we
2 left -- this is something that I'm wondering where it should
3 be added in.
4 And I don't remember if it was in defendants'
5 prior version, but it's the issue of what are the elements
6 require the defendants' knowledge of this thing, and I'm
7 just wondering -- the way it reads now is element 5
8 specifically says that the defendant had to know that the
9 refined coal was especially made or adapted for use in an
10 infringed method.
11 But element 3, the element that relates to the
12 staple article or commodity and commerce of capable of
13 substantial non-infringing use, I'm wondering if that
14 element 2 should not start out by saying that the defendant
15 knew that -- I think that's probably the way it reads in
16 section 7.1.
17 And it's pretty clear the knowledge element
18 applies to both the specially made or adapted or the staple
19 article of commodity and commerce.
20 And I think defendants believe this.
21 MR. WILSON: Yes, Your Honor.
22 THE COURT: Does plaintiff disagree with that?
23 MR. MCCARTY: Yes, Your Honor, we believe that
24 the current version of the elements of contributory
25 infringement that were 1 through 5 listed in section 4.4 are

<p style="text-align: center;">1148</p> <p>1 correct.</p> <p>2 And specifically with respect to your</p> <p>3 question -- Your Honor's question about level of knowledge,</p> <p>4 we believe that knowledge is indeed required for element 5</p> <p>5 if it's constituted in the jury instructions, which is that</p> <p>6 the defendant knew that the refined coal was especially made</p> <p>7 or adapted for use in an infringing method, that that same</p> <p>8 knowledge or knowledge does not education tend above to</p> <p>9 number 3.</p> <p>10 THE COURT: I'll just tell you, the two things</p> <p>11 we looked -- because we caught it and I asked my law clerk</p> <p>12 to pick out some assistance. First is section 271 C itself</p> <p>13 which reads, you know, whoever offers. . . And then the key</p> <p>14 area is knowing the same to be especially made or especially</p> <p>15 adapted for use in an infringement of such patent, comma.</p> <p>16 And that's the gist of element 5, and then it</p> <p>17 goes on, "and not a staple, article or commodity of commerce</p> <p>18 suitable for a substantial non-infringing use."</p> <p>19 I think the question here is: Does the word</p> <p>20 knowing modify both the first and the second? It kind of</p> <p>21 reads like it does, but then additionally -- like there's</p> <p>22 some case law we found, case called Word Tech Systems, Inc.,</p> <p>23 versus Integrated Networks Solution, Inc., a Federal Circuit</p> <p>24 case from 2010 that has the following sentence.</p> <p>25 Under 35 U.S.C. Section 271 C, a party who sells</p>	<p style="text-align: center;">1150</p> <p>1 it's going into is not something or is not something else</p> <p>2 and you're creating levels or sort of peeling back the onion</p> <p>3 layers of knowledge that does not seem to be something</p> <p>4 that's supported in Federal Circuit case law and it seems to</p> <p>5 be in conflict with the purpose of contributory</p> <p>6 infringement.</p> <p>7 THE COURT: Okay. I understand though that</p> <p>8 separate and apart from -- certainly in this case, that the</p> <p>9 plaintiffs' side is going to be, you know -- there is</p> <p>10 evidence that both sides have here, and the plaintiffs have</p> <p>11 some and defendants do to contest the defendants' assertion</p> <p>12 with regard to both these elements, not just one of them,</p> <p>13 that, yes, Mr. Green and CERT defendants did know of not</p> <p>14 just that the refined coal is especially made or adapted for</p> <p>15 use, but also that it was a staple article of commodity or</p> <p>16 commerce capable of substantial infringing use.</p> <p>17 That would be the plaintiffs' position; right?</p> <p>18 MR. MCCARTY: If I understand your question,</p> <p>19 that -- sorry, Your Honor. If I understand your question,</p> <p>20 it's that in -- as part of the evidence in the case, whether</p> <p>21 we would have to show that they had knowledge of number 3,</p> <p>22 which is that there was -- essentially proving that they</p> <p>23 knew or had knowledge over -- or were willfully blind to the</p> <p>24 fact that the coal in this case as sold and delivered was</p> <p>25 not a staple article of commerce capable of substantial</p>
<p style="text-align: center;">1149</p> <p>1 a component with knowledge that the component is especially</p> <p>2 designed for use in a patented invention and it is not a</p> <p>3 staple article of commerce suitable for substantial</p> <p>4 non-infringing use is liable as a contributory infringement.</p> <p>5 Citing another case of the Federal Circuits,</p> <p>6 <i>Ricco versus Quanta Computer, Inc.</i>, a 2008 Federal Circuit</p> <p>7 case. Reading that case law, again it like the Federal</p> <p>8 Circuit articulates, the knowledge elements applying to</p> <p>9 both.</p> <p>10 Mr. McCarty, is there anything you want to add</p> <p>11 about why that is the wrong read?</p> <p>12 MR. MCCARTY: I don't have any counter cases. I</p> <p>13 think that we would disagree with Your Honor's</p> <p>14 interpretation of that. We think that that element 3 as</p> <p>15 apparently constituted is really more of a question about --</p> <p>16 really a binary question of what is and what is not.</p> <p>17 And that importing or graphing knowledge into</p> <p>18 that is an element of proof -- is not something that is</p> <p>19 required, and it's sort of awkward to say that, you know, in</p> <p>20 the puzzle piece analogy we've seen in trial this week, that</p> <p>21 not only does the defendant know of the patent, when he puts</p> <p>22 that puzzle piece to make the final puzzle, know that it</p> <p>23 matches onto some patent claim that they're aware of, that</p> <p>24 would be the fifth element.</p> <p>25 But also knows that puzzle piece or the thing</p>	<p style="text-align: center;">1151</p> <p>1 non-infringing use.</p> <p>2 Is that the question?</p> <p>3 THE COURT: I'll try to say it shorter, and I</p> <p>4 didn't say it well the first time. If I end up deciding</p> <p>5 that I need to include the words that the defendant knew in</p> <p>6 the beginning of number 3, my take is plaintiffs are going</p> <p>7 to be like, okay, we've got evidence, we're going to show --</p> <p>8 we're going to show that the defendants did know that.</p> <p>9 I guess all I'm asking -- you know, of course,</p> <p>10 the decision is going to be about what the law requires.</p> <p>11 All I'm asking is like -- I think it's the case here that</p> <p>12 the plaintiffs knew that the defendants were making this</p> <p>13 argument.</p> <p>14 I think Mr. Sykes in his opening statement -- he</p> <p>15 spoke about the knowledge and mistake, issue as to both</p> <p>16 especially made and adapted and substantial non-infringing</p> <p>17 use.</p> <p>18 I think the plaintiffs are going to combat that.</p> <p>19 Both sides are going to fight about this: Is that right, if</p> <p>20 that's the requirement?</p> <p>21 MR. MCCARTY: Yes, Your Honor I think that with</p> <p>22 reference to Mr. Sykes's opening statement we actually did</p> <p>23 not understand that did not understand that that was what</p> <p>24 they were arguing part of what we asked the Court for a</p> <p>25 corrective instruction for early on in the case was because</p>

<p style="text-align: center;">1152</p> <p>1 we thought that they were introducing the idea of pointing 2 to nonsubstantial or substantial non-infringing uses that 3 basically did not qualify under section three of the Court's 4 order. And in response to that motion we got well what 5 matters is not whether this refined coal was no n or out 6 technically and legally what matter is did we believe it and 7 that gets to the nub of the question which is is there a 8 knowledge requirement for 40.3 and we think there is not 9 there -- is no knowledge requirement that they knew or were 10 willfully blind to that idea that the refined coal in this 11 case was not a staple article of commodity or had 12 capabilities of substantial non-infringing use. 13 THE COURT: Okay. All right, Mr. Wilson. 14 Anything further on this issue? 15 MR. WILSON: We agree with Your Honor's reading 16 of 271(c), certainly. 17 THE COURT: I think having reviewed the statute 18 and having reviewed the case law I cited, I believe it's 19 correct that both elements three and elements five have a 20 "defendants knew" component to them. Based on everything 21 I've seen, it would be wrong not to include that as 22 instructing the jury on the law. So my intention will be to 23 add to element 3 after the wording that -- the words "the 24 defendant knew that" and then the remainder of the elements. 25 All right. Are there other issues lingering</p>	<p style="text-align: center;">1154</p> <p>1 which we think is improper. 2 The second reason is, ultimately, this, as we 3 understand it, is, basically, an instruction on mistake of 4 law. We don't understand -- the defendants haven't really 5 put forth a mistake of law case, and we're concerned about 6 instructing the jury on a claim or a defense that's not 7 really borne out by the facts they just heard from trial and 8 could lead to error. 9 THE COURT: Can I stop you there? You're 10 raising a bunch of points. I want to make sure I don't lose 11 them. 12 First point you said looks like was it's tying 13 or implicitly tying the requirement and showing its absence 14 of substantial non-infringing uses to defendants' knowledge 15 in the case, which we think is improper. And you said -- 16 I'm not sure I understand that. And then you said the 17 second reason is we understand this is basically an 18 instruction on a mistake of law. 19 I guess as to the latter, previously in the 20 instruction is the issue which we know has been raised and 21 come up and the case is <i>Kinetic</i> which is otherwise 22 referenced in instructions which is that if a defendant 23 reasonably believed it did not infringe, even if that belief 24 is incorrect, the defendant does not have knowledge of 25 infringement. We talked previously about case law about</p>
<p style="text-align: center;">1153</p> <p>1 that anyone wants to raise with regard to section 4.4? 2 MR. WILSON: We have one brief one, Your Honor. 3 So in what is element 3, consistent with our prior position, 4 we would ask for the "as sold and delivered during the 5 damages period" clause to be removed. 6 THE COURT: Okay. For the reasons I've 7 previously expressed, I'll deny that request. 8 Okay. I guess I had also sent you during the 9 day while you guys were doing other things a proposal for 10 what should be added to try to address the plaintiffs' 11 concerns, and I think, look, it's a difficult issue. 12 There's a lot of issues, as I said, in the case. The jurors 13 will have to parse them. Counsel will have to ably walk 14 through them. You guys saved an hour or so for them. 15 I have a proposal how I thought this would be 16 best addressed. Anybody have an objection to the proposal? 17 Mr. Wilson or Mr. McCarty? You've got 4.4? 18 MR. MCCARTY: I have the pleasure. 19 Your Honor, yes, we object to the second 20 paragraph of the addition that you proposed, the second 21 highlighted paragraph which is the final paragraph of 4.4 at 22 this point. We object because of the reasons discussed 23 earlier. It's tying or implicitly tying, not explicitly 24 tying, the requirement of showing an absence of substantial 25 non-infringing uses to defendants' knowledge in the case,</p>	<p style="text-align: center;">1155</p> <p>1 things like, for example, the defendant can demonstrate it 2 read the claims, albeit turned out wrongly. It could use 3 that as a way to demonstrate no knowledge of infringement. 4 I ultimately decided that I think, various times 5 now, I think defendants can raise that as a defense or 6 response, so if we know that, and I guess I don't understand 7 clearly. There's -- I mean, Mr. Green was just up here. 8 There's a direct and decent part of his direct the 9 defendants want the jury to hear through his testimony that 10 he didn't know with regard to contributory infringement 11 certain things he should -- that he had different beliefs, 12 and so I think, like, part of the reason for the last 13 paragraph is I've got to try to explain if I'm going to do 14 the first paragraph, which I think I need to remind the jury 15 when it comes to the elements other than the knowledge 16 element and the alleged mistake issue. I need to tell them 17 what to look at and the purpose for which they might look at 18 other things, and is there anything about the last paragraph 19 itself that you think is otherwise wrongful for using the 20 wrong word, wrong phraseology? 21 MR. MCCARTY: Yes, Your Honor. I would propose 22 removing the -- basically the reference to the refined coal, 23 which is kind of in between em dashes that kind of goes 24 through the various aspects of refined coal that would not 25 constitute the refined coal as sold and delivered in the</p>

<p style="text-align: right;">1156</p> <p>1 case. Importantly, I think that that is kind of improper in 2 the context of a construction -- or sorry instruction about 3 mistake of law. Where we disagree that Mr. Green's 4 testimony was actually about a mistake of law, it sounded to 5 us like this many and facts in the trial were we don't 6 believe we infringe because of various reasons but we don't 7 believe we infringe, that those facts and that belief is 8 already in the instructions and is appropriately in the 9 instructions and the jury should hear that.</p> <p>10 There are defenses to infringement with respect 11 to indirect infringement, the mens rea element, knowledge in 12 the case of contributory. But tying the refined coal and 13 the various aspects of refined coal to mistake of law, we 14 think, is improper for that reason. If we're going to 15 instruct on mistake of law here, we should be removing the 16 sort of that section in the middle about the different types 17 of refined coal at issue in the case.</p> <p>18 THE COURT: Between the em dashes. Okay. 19 Mr. Wilson, do you all have any objections to 20 the additional language I proposed? 21 MR. WILSON: No objection to either proof or the 22 additional language. 23 THE COURT: Let me ask you about the em dash. 24 Absent that it would say the contributory infringement 25 requires and a disbelief caused them not to have knowledge</p>	<p style="text-align: right;">1158</p> <p>1 not an argument you're making. I want to review this. 2 Refined coal that defendants may have sold prior to issuance 3 of the patents-in-suit. I did hear you talk about that at 4 trial and you're probably going to be raising that? 5 MR. WILSON: Yes. 6 THE COURT: Prior to this litigation, those are 7 almost the same thing. They're basically in parallel with 8 each other. Or outside the scope of the damages period if 9 we're talking another prior to to 2019 or refined coal sold 10 by entities that are not defendants in this case, and I 11 think you are, in fact, going to be pointing to that with 12 regard to this mistake issue; is that right? 13 MR. WILSON: Right. We would be pointing to 14 that, and I do think that's a different subset than the 15 first three, which might be fairly similar in their scope. 16 THE COURT: All right. Knowing defendants don't 17 have any objections to the additional proposals that the 18 Court made and that the plaintiffs do to the last paragraph 19 and maybe partially to the language between the hyphens, at 20 this point I'm going to overrule the plaintiffs' objection 21 and I'm going to include the language that is there in its 22 entirety. I think it related to an argument and/or defense 23 that the defendants are clearly making in the case that 24 relates to evidence that I saw the defendants attempt to 25 bring out with their witnesses through Mr. Green.</p>
<p style="text-align: right;">1157</p> <p>1 of possible infringement. You are making that argument you 2 believe in this case and will be in closing. Fair? 3 MR. WILSON: Yes. 4 THE COURT: Now, with regard to the material 5 between the em dashes, there's a lot of examples. Take the 6 plaintiffs' point in that there's a lot of examples and this 7 coal and that coal and maybe that strayed too much in the 8 line of -- I'm not trying to make the defendants' arguments 9 for them. I'm supposed to mutually set out the law. The 10 defendants are making the arguments they're making. Why 11 shouldn't I believe that? 12 MR. WILSON: The first paragraph is and part of 13 the goal of the first paragraph is to really highlight and 14 home in on the only coal that they can consider as sold and 15 delivered during the damages period, so I think the second 16 paragraph needs to make some corresponding reference to 17 what's the different scope there. I mean, if Your Honor is 18 worried at a certain point it becomes a little too lengthy, 19 it could be set out "in connection to the coal that was sold 20 and delivered during the damages period" could be 21 referencing additional coal and other coal. 22 THE COURT: I understand your point about the 23 paragraph. I basically adopted the plaintiffs' language 24 about what kind of coal can't count for the elements 25 otherwise. I guess I don't want to be saying here that is</p>	<p style="text-align: right;">1159</p> <p>1 I think for reasons we've discussed, it's also 2 an issue that is a confusing issue and that we have to 3 explain for to the jury what they can and cannot do with 4 evidence, and I think it's necessary. 5 I think with regard to the material between the 6 em dashes, I think for parity's sake it should be included. 7 The language itself about the coal issue, I think, it's fair 8 to be a pairing of that language in the second paragraph as 9 well, and I think it's consistent with the arguments and 10 defenses parties actually making. 11 For all those reasons, we'll make a change. 12 MR. DYESS: Can I have one second to look at 13 that on the point you were making? 14 THE COURT: You were doing other things too. 15 MR. DYESS: Nothing further. Thank you. 16 THE COURT: I think that takes us to section 17 6.1. That was raised by the plaintiffs, so that is for the 18 right date for commencement of damages. 19 Mr. Pearson. 20 MR. PEARSON: Yes, Your Honor. This is not an 21 issue that was taken up during this trial. The list of 22 dates here are dates proposed, I believe by Ms. Lawton, the 23 former CERT damages expert. The way these dates in here are 24 calculated are the dates each entity was first added to any 25 given complaint. That is not plaintiffs' damages theory.</p>

<p style="text-align: right;">1160</p> <p>1 The evidence showed Mr. Green is the vice 2 president of all the entities, and knowledge by one of them 3 would have been knowledge by all of them on the same date. 4 That was discussed. And the damages start date are not in 5 dispute with how Mr. Phil Green calculated. Plaintiffs 6 propose this whole section is unnecessary. There's no 7 dispute.</p> <p>8 In the alternative, if the Court would like an 9 instruction here, we would propose that it just stop on the 10 second line where it says "after the date below." Just 11 delete the language "after the date below" and everything 12 that follows.</p> <p>13 Alternatively, if the Court wants to read a lot 14 of extraneous language, I would propose as a further 15 alternate. The dates would be amended to follow the 16 testimony from Mr. Phil Green.</p> <p>17 THE COURT: I certainly don't want to read 18 extraneous language. I'll ask Defense.</p> <p>19 Is this section needed?</p> <p>20 MR. WILSON: So at this point, I don't know that 21 this section is needed, Your Honor. I mean, I think really 22 the only evidence in about when damages start is what 23 Mr. Green put in on his slides. I don't think the jury 24 really has anything to pick other dates or perform 25 calculations based off other dates.</p>	<p style="text-align: right;">1162</p> <p>1 language in yellow in the proposed instructions that may be 2 from pages 93 to 95; is that right?</p> <p>3 MR. WILSON: Correct. So this would by guess. 4 I'll find it in the record later. This is Exhibit 22 to the 5 pretrial order, and that would be the language from the 6 bottom of 93 starting "in particular" and carrying over onto 7 page 95 that is currently highlighted. Yes, sir.</p> <p>8 THE COURT: And just to be clear for the record, 9 this was language that read. I don't know if I need to read 10 it all. We know where it is in the pages, but one of the -- 11 it's about the concept of you need to apportion out the 12 value added to refined coal that flows from the tax credits 13 versus the incremental value of the patented technology.</p> <p>14 I have to say, Mr. Pearson was saying this 15 earlier. Ultimately, when Mr. Green gave his testimony, he 16 wasn't talking about Section 45 tax credit value as a part 17 of the calculus that he was making with regard to licensing, 18 was he, Mr. Pearson?</p> <p>19 MR. PEARSON: That's right. He didn't talk 20 about tax credits in the direct and redirect. I believe he 21 established the value of licenses he relied on were actually 22 not driven by the tax credits, as I believe I inartfully 23 tried to describe at the most recent pretrial conference. 24 But my position on this instruction is this is just not an 25 issue that was taken up in front of the jury. Certainly, an</p>
<p style="text-align: right;">1161</p> <p>1 THE COURT: You agree if I keep the section, I 2 should keep the first ending with the second line, 3 "patent-in-suit"? Surely that's true, right, that damages 4 commence on the date of first infringement?</p> <p>5 MR. DYESS: Your Honor, I apologize for the 6 confusion. Can I have just a second?</p> <p>7 THE COURT: Sure. That is fine.</p> <p>8 MR. WILSON: Yes, that first sentence would be 9 accurate.</p> <p>10 THE COURT: So, Mr. Pearson, you're good if we 11 have 6.1 date of commencement of damages include the first 12 sentence "patents-in-suit" and strike everything else?</p> <p>13 MR. PEARSON: Yes, thank you, Your Honor.</p> <p>14 THE COURT: We'll do that.</p> <p>15 Section 6.3 is next. Okay. Reasonable royalty. 16 And this is Defendants?</p> <p>17 MR. WILSON: Yes, Your Honor. So basically, in 18 our proposed instructions -- and I hate to read the entirety 19 of it into the record but I certainly will if need to. We 20 had an additional paragraph speaking more about 21 apportionment in the specific context of external factors 22 and specifically in the context of the Section 45 tax 23 credits, so we want to preserve our position on including 24 that language that was in the proposed instructions.</p> <p>25 THE COURT: I think you're talking about the</p>	<p style="text-align: right;">1163</p> <p>1 apportionment instruction Plaintiffs don't object to, and 2 that's in the beginning of 6.3, first paragraph.</p> <p>3 THE COURT: Mr. Green did talk about at times 4 the concept of apportionment.</p> <p>5 MR. PEARSON: Absolutely. That's fine. The 6 part about apportioning out the value one of the tax 7 credits, that was not an issue presented to the jury. That 8 shouldn't be there. It is extraneous especially, and then 9 of course the proposed defendants' instruction concludes 10 with "therefore you must demonstrate the value added to the 11 refined coal that flows from the tax credits," and the jury 12 has no basis to do that. If that instruction were given, I 13 suppose the defendants would just argue there should be no 14 damages because there's been no helpful information given to 15 the jury. Even on defendants' theory, even if they believe 16 that's a thing that should be done, they didn't suggest how 17 or that was a part of the cross-examination of Mr. Green.</p> <p>18 THE COURT: Mr. Wilson, I agree with Mr. Pearson 19 that I don't believe the credit for you referencing this 20 material has been put before the jury in the case. So I'm 21 inclined to not include it and you have made your position 22 clear.</p> <p>23 Is there anything further you wish to add?</p> <p>24 MR. WILSON: No, Your Honor. On the substance 25 of including it, it would be the sale as before, and I</p>

<p style="text-align: right;">1164</p> <p>1 certainly don't want to misrepresent what Mr. Green said and 2 certainly don't remember all of it. It is consistent that I 3 remember tax credits was a very minimal at best part of it, 4 so I would agree with that. 5 THE COURT: For the record, I agree with 6 Plaintiff and what Mr. Pearson said here but also what he 7 said in response to the JMOL. I don't think Mr. Green in 8 any report discussed in any way as part of the comparability 9 substantial non-infringing uses and damages analysis that he 10 is taking into account the value of section 45 tax credits 11 certainly such that there would be a need to apportion them 12 or discuss the apportionment as to them specifically, so 13 I'll exclude -- I'll continue to exclude that proposal by 14 Defendants. 15 Okay. Looks like Plaintiff had something with 16 regard to section 6.5. 17 MR. PEARSON: Yes, Your Honor. Briefly it's 18 minor. This, I believe, instruction is a leftover from 19 where there may have been more defendant groups in the case, 20 but in terms of Mr. Green's analysis, who was the only 21 expert, he testified this hypothetical negotiation would be 22 a single negotiation between ME2C and CERT generally sort of 23 based on the common ownership structure of CERT, and this 24 instruction in 6.5 references in the middle a hypothetical 25 license that would be noted. "Each defendant here" is used</p>	<p style="text-align: right;">1166</p> <p>1 Mr. Wilson, do you have -- Plaintiff first. 2 Mr. Pearson, do you have something else? 3 MR. PEARSON: I just had a discussion on the 4 verdict form. That was it for the instructions. 5 THE COURT: We'll turn to that. 6 MR. WILSON: So this isn't actually on 7 instructions, but going through the instructions reminded me 8 of this, and I wanted to raise it here. We may not need to 9 resolve it right now. We previously had an instruction on 10 express license, and Your Honor didn't include it and I 11 certainly understand why. 12 And the reason we had it is from our 13 perspective, express license is a bit of an odd situation. 14 We're not sure it's been perfected for appeal. We had a 15 motion for summary judgment on express license based on 16 licenses to the utilities. You recall you denied our 17 summary judgment motion. 18 I mean, I think everybody is in agreement. 19 Interpretation of the contract is a matter of law, but the 20 plaintiffs did not have a corresponding motion for summary 21 judgment of no license. Where it stands now, we have a 22 motion for summary judgment denied. I'm not sure it's 23 necessarily wrapped up in the noninfringement judgment, 24 maybe it is, but ultimately -- 25 THE COURT: Didn't you say something? Right.</p>
<p style="text-align: right;">1165</p> <p>1 again a few lines down. I think that's a little bit 2 confusing and doesn't track how the evidence came in, so I 3 would just propose that be substituted with "between ME2C 4 and the defendants here." 5 THE COURT: Okay. Mr. Wilson, in light of 6 Mr. Green's testimony, which I think is the only testimony 7 as a damages witness here, is Mr. Pearson correct? 8 MR. WILSON: I mean, there certainly is 9 testimony that they are separate entities, but I mean, yes, 10 they were certainly dealt with collectively by Mr. Green. 11 THE COURT: Okay. All right. In light of the 12 fact that I agree, my recollection of Mr. Green's testimony 13 is that his opinion was that the hypothetical negotiation 14 would be between Plaintiffs and Defendants, that is 15 representatives representing all of the defendants, the CERT 16 entities, and in light of the fact that really our witness 17 for the CERT entities was one person, Mr. Green, who I think 18 repeatedly indicated he speaks for each of the CERT 19 defendants as a whole, I agree with the plaintiffs' proposed 20 change. 21 So we'll change the words after "and that is 22 each defendant here" to "defendants" in the fourth line and 23 the seventh line in the instruction. 24 Okay. I think based on my notes, that's all we 25 had to deal with.</p>	<p style="text-align: right;">1167</p> <p>1 What I was thinking is along what you're suggesting, which 2 is it is true that the plaintiffs didn't separately move for 3 summary judgment of no express license, but in resolving the 4 defendants' motion for summary judgment of an express 5 license, I made a legal ruling that, essentially, the 6 defendants could not raise that defense. That's the import 7 of the ruling. 8 So of course, I couldn't permit the defendants 9 at trial to raise the defense that I had already ruled as a 10 legal matter could not be raised. Technically there's been 11 no judgment on the issue granted to date. I don't know. 12 You are smarter than me on this about what needs to be done 13 about that, but I think in your letter you said something 14 like we'll figure out what needs to be done and talk to the 15 plaintiffs and if we think we can make some kind of 16 stipulation or motion or something, we'll do it. Have you 17 had any conversations like that? 18 MR. WILSON: No because, honestly, I think that 19 disappeared after the pretrial conference, and I did not 20 recall it again until going through this last night. We're 21 certainly open to having that discussion with them. As long 22 as it's done at some point, it's fine. I don't think it 23 needs to be resolved in the next ten minutes. 24 THE COURT: I'll assume for now I need not take 25 further action by the Court unless someone tells me</p>

<p style="text-align: center;">1168</p> <p>1 otherwise. I would encourage you to talk to your colleagues 2 on the other side if you think there's a stipulation that -- 3 to be put before the Court or some other action. I will 4 consider it.</p> <p>5 Let's move on to talk about the verdict form. 6 And, obviously, we should do a corrections thing for this 7 too because there's got to come out a couple times. Let me 8 tell you two things for the record. I reviewed the parties' 9 respective positions with regard to the verdict form. I 10 made edits to one form using the look of the defendants' 11 form but incorporating in different components of the 12 positions. I presented it to the parties so presumptively 13 resolving any disputes.</p> <p>14 Since I did that, there's two things I thought 15 of. One is I missed this when we did it first. We should 16 be very anodyne in describing the claims, which claims are 17 induced infringement, contributory infringement. There's 18 the word "actively inducing infringement" in questions 1A 19 and 1B, and I don't think that's appropriate because we 20 should simply be referring to the claims by the legal name 21 without including wording or phraseology that gets to some 22 elements of that. My inclination now is to strike the word 23 "actively" in questions 1A and B.</p> <p>24 Separately, the parties disputed in terms of how 25 the defendants would be listed. The plaintiffs thought it</p>	<p style="text-align: center;">1170</p> <p>1 THE COURT: Okay. 2 MR. PEARSON: Which should go in its entirety. 3 THE COURT: Right. Okay. So question three is 4 out. 5 MR. PEARSON: Then on page eight, there's the 6 bold language at the top, the question numbers. 7 THE COURT: By the way, is this leftover? Are 8 we relitigating this? 9 MR. PEARSON: I was going to show that for the 10 verdict form. I apologize. 11 THE COURT: I'm sorry to interrupt you. 12 MR. PEARSON: Here on question four, there's the 13 question 4 and 5 at the top. That should be 3 and 4. 14 THE COURT: That should be 3 and 4. 15 MR. PEARSON: Only if you found using questions 16 1 through 2 that at least one defendant has infringed at 17 least one claim. 18 THE COURT: I need only take out the word. I'll 19 do it as to everything in the bolded top sentence. The 20 proposal -- it now reads as follows: Answer questions 3 and 21 4 only if you have found using questions 1 to 2 that at 22 least one defendant has infringed at least one claim. 23 And then I suppose because we need to change 24 question 4 to question 3. 25 MR. PEARSON: Yes, Your Honor.</p>
<p style="text-align: center;">1169</p> <p>1 made more sense to list the defendants grouped with the 2 RC defendants that related to a certain operations group 3 together. The defendants proposed doing it alphabetically. 4 Because I wasn't sure how the evidence would look, I did it 5 alphabetically. But now I've seen the trial, the charts 6 that link up the RC defendants, and they're very helpful, 7 and that linkage, it's confusing. So many names. And it's 8 undisputed certain of the RC defendants are related to 9 certain operations defendants and certain power plants.</p> <p>10 So anyway my proposal, my new inclination is to 11 revert to Plaintiffs' suggestion to group the defendants by 12 way of grouping RC defendants that are linked with certain 13 operations defendants together and then the next group and 14 next group and next group.</p> <p>15 Those are the two things to what I sent you that 16 I'm considering. With all that said, does anybody want to 17 walk me through on the firsthand corrections we need, 18 Mr. Pearson?</p> <p>19 MR. PEARSON: Sure. Do you mind if I approach 20 the Elmo?</p> <p>21 THE COURT: The 1980/2020 technology we talked 22 about during trial. It has probably not improved since 23 then.</p> <p>24 MR. PEARSON: As far as the corrections go, 25 Your Honor, the first thing we found was question three.</p>	<p style="text-align: center;">1171</p> <p>1 THE COURT: Okay. 2 MR. PEARSON: And then the first sentence of 3 question now 3, the word "valid" needs to be removed. 4 THE COURT: Okay. 5 MR. PEARSON: And the same in the next sentence. 6 THE COURT: Right. So in the first line after 7 question three, we remove the word "valid" and in the next 8 paragraph, the second line, remove the word "valid" as well. 9 Okay. 10 MR. PEARSON: Then question five becomes 11 question four. 12 THE COURT: Right. 13 MR. PEARSON: And there's the word "valid." 14 THE COURT: We remove "valid" in the first line 15 of the first paragraph. 16 MR. PEARSON: And the word "valid" in the 17 sentence of the second paragraph. 18 THE COURT: Okay. 19 MR. PEARSON: And then if Your Honor would 20 permit, I'd like to discuss the damages question. 21 THE COURT: Sure. Hold on a sec. 22 Okay. The damages question, which is question 23 four. 24 MR. PEARSON: Correct, Your Honor. I only 25 proposed this as a way to produce future work on the Court,</p>

<p style="text-align: right;">1172</p> <p>1 and I don't necessarily have a perfect solution, but I was 2 wondering if it would be possible to include a sentence that 3 asks the jury to find whether there's joint and several 4 liability between the refined coal defendants on the top 5 here and the operations defendants. And the only reason 6 that I ask that is that it's the plaintiffs' theory that it 7 should be assessed on a per ton basis and the tons are the 8 same.</p> <p>9 So for example, for the operations entity that 10 has just one, the Marquis Industrial, we are going to ask 11 for \$11 million or -- it's on the bottom row -- and 12 CERT Operations II which was -- managed Marquis and only 13 managed Marquis. We're going to ask the same amount because 14 it's the actual same tons.</p> <p>15 THE COURT: And the deal is if the jury were to 16 agree that Marquis should be liable for 11 million and 17 change and CERT II should be, it's not like you're going to 18 get -- you're only going to get 11 million and change.</p> <p>19 MR. PEARSON: That's what we're asking for, but 20 the concern is on the current verdict form, if they write 21 down 11 million twice, it implied they're awarding 22.</p> <p>22 THE COURT: It seems like it's not disputed that 23 essentially, you know, you can't -- I mean, it doesn't seem 24 like it's disputed that the concept of joint and several 25 liability is applicable here at least in the sense that</p>	<p style="text-align: right;">1174</p> <p>1 with, though I think the problem there is the more words you 2 include in the form, the more confusing it can be.</p> <p>3 And then maybe like there's a separate piece of 4 what you're saying that's kind of like as a legal matter I 5 want us to agree that joint and several liability is 6 applicable here. I don't know if that's another piece of 7 what you're saying.</p> <p>8 Is it really -- I wonder if the first concern is 9 about the jury articulating its view correctly.</p> <p>10 MR. PEARSON: I think it is more that if we had 11 a slightly more -- if there's a joint and several liability 12 at least as to inducement question, it would provide more 13 information from the jury which could be helpful to the 14 parties and Court later.</p> <p>15 For example, if we don't include a joint and 16 several liability question and the jury fills out the 17 amounts that the plaintiff asks for, I don't think that's a 18 problem.</p> <p>19 THE COURT: You keep saying if we don't include 20 a joint and several liability question. It's almost like 21 there's a disputed question about whether there should be 22 joint and several liability for certain claims that the jury 23 is supposed to figure out the answer. It's not the way it 24 was presented to them.</p> <p>25 I mean, I think the concept of joint and several</p>
<p style="text-align: right;">1173</p> <p>1 there's no double collection.</p> <p>2 Well, let me hear from defendants on this issue.</p> <p>3 MR. DYESS: The problem -- a problem we see with 4 that, Your Honor, is that the operations companies are not 5 liable on the contributory infringement claim.</p> <p>6 So if the jury decided there's no induced 7 infringement, then the operations companies would not be 8 jointly and severally liable on a joint infringement claim.</p> <p>9 THE COURT: That seems right.</p> <p>10 MR. PEARSON: That seems right to me too.</p> <p>11 THE COURT: I wonder though, presumably when we 12 get the verdict form, maybe in the closings, you're going to 13 be putting it up there and explaining to the jury like -- if 14 they find this and if they find that, here's what you do. 15 I wonder if that's the best we could do here.</p> <p>16 MR. PEARSON: Sure. No, and I have no 17 problem -- I don't like confidence in our ability to get the 18 jury to fill something out. It is more just, I don't want 19 there to be confusion posttrial, and perhaps we could say 20 joint and several liability for induced infringement. 21 That's an idea. I just want the -- I apologize, Your Honor.</p> <p>22 THE COURT: I think there's like two questions 23 here. One is a matter of the logistics of the jury filling 24 out the form and doing so like in an -- in the correct way, 25 the way that they need to deal with what they need to deal</p>	<p style="text-align: right;">1175</p> <p>1 liability may be referenced in maybe some of the docs that 2 Mr. Green went over, but it certainly is not a disputed 3 issue or one that they've presented competing arguments on.</p> <p>4 So I'm not sure what you mean by --</p> <p>5 MR. PEARSON: I agree with that, Your Honor, and 6 I didn't mean to speak inaccurately. My I guess most basic 7 observation is listing all of the names of the defendants 8 with separate lines for amounts could imply that the jury 9 intended to award additive amounts.</p> <p>10 THE COURT: Let's not think of like something 11 that would happen that would be confusing and bad. I don't 12 mean bad like moral judgment if we win or lose, more like 13 bad like this is confusing, and I wish we could avoid this.</p> <p>14 Like a scenario I guess could be let's say the 15 jury used the -- use the example you just gave; right, 16 Marquis and CERT II? They're -- they're related. They're 17 both charged with induced infringement.</p> <p>18 Let's say the jury puts down an \$11 million 19 figure for both of those. Now, we'll know whether the jury 20 found those defendants liable for both induced and 21 contributory infringement.</p> <p>22 So like in a scenario where we do have the 23 numbers listed for both, if they didn't check the box for 24 contributory infringement, the verdict would still make 25 sense because they would be jointly and severally liable for</p>

<p style="text-align: center;">1176</p> <p>1 induced infringement if they did check the box for induced 2 contributory. 3 I'm probably trying to make up in my mind 4 scenarios -- 5 MR. PEARSON: My phone died, so my calculator is 6 gone, but an idea that I had that might be confusing is if 7 the jury found liability for everything and then a jury took 8 \$27 and a half million, a figure that has been referenced 9 several times and could conceivably support a damages award, 10 and divided it by 12, whatever that number is, wrote that 11 same number down for each different defendant. 12 THE COURT: Okay. If they did that, what would 13 be the problem with it? 14 MR. PEARSON: If they did that, I would say the 15 jury took \$27 and a half million and divided it evenly, so 16 the award is intended to reflect \$27 and a half million 17 total. 18 And they would say the jury obviously bought 19 into the joint and several liability theory you, proposed 20 and they only intended to award \$3 million whatever one time 21 for both Marquis and CERT II. 22 THE COURT: I see. 23 MR. PEARSON: So defendants would say actually 24 this is a cumulative award of \$20 million or something like 25 that.</p>	<p style="text-align: center;">1178</p> <p>1 respect in terms of their interacting with each other, so I 2 appreciate it. 3 Anyway, that's all a prelude to say my hope is I 4 can say to you, Can you all talk about this tonight, see if 5 you can come up with a jointly agreed upon solution that 6 would make the jury's task in terms of awarding damages 7 here, if damages are going to be awarded, as clear as 8 possible. 9 And then hopefully you'll come to me with a 10 joint solution that I hope is acceptable, and if we need to 11 tweak the verdict form as it stands as of tonight or early 12 tomorrow morning before we the jury goes -- or before we go 13 to closings because you're going to want to have the verdict 14 form with you at closings and we can deal with it. 15 Or alternatively if tonight you guys agree, you 16 know, maybe you can take -- or we can send you the current 17 version of it after we make these changes, if you come up 18 with an agreement and solution, you could send it back to 19 us, and we'll make sure that we have copies first thing 20 tomorrow morning. 21 I guess if worst came to worst and you couldn't 22 agree, at least you'll have a chance to talk more about it, 23 and I think it's theoretical that if I had to take the bench 24 early to resolve something, we could do that too and have 25 the final version.</p>
<p style="text-align: center;">1177</p> <p>1 THE COURT: You'd be saying it's meant to be an 2 accumulative award, that you'd add up all the numbers 3 together and get to 27 million, but you're worried that they 4 would say that, no, you don't add up both 3 point something 5 millions. You only get one of them. 6 MR. PEARSON: Right. 7 THE COURT: I wish this had come up earlier. 8 MR. PEARSON: I apologize, Your Honor. 9 THE COURT: That's fine. 10 Defendants, do you have an idea -- part of me 11 wonders if you guys could talk and agree on what to do? Do 12 you think there's a chance you could agree? 13 MR. DYESS: I think we could certainly try. I 14 fully recognize the dilemma. My brain is not particularly 15 working well to figure out the solution. 16 THE COURT: Okay. Well, this is what I'm going 17 to do. Let me think about this for a second. I'm in 18 Mr. Dyess' place. It's been a long day and long week. 19 I think maybe the best thing to do is you all 20 are much smarter than I am about the facts of the case and 21 work out -- and I will say this tomorrow. 22 I really do appreciate, I hope you'll convey it 23 to other colleagues, even in a hard-fought case, I 24 appreciate the way in court with the jury here and not 25 here -- the way each side has treated each other with</p>	<p style="text-align: center;">1179</p> <p>1 Does that make sense, Mr. Pearson, from your 2 perspective: 3 MR. PEARSON: Yes, Your Honor. 4 MR. DYESS: Yes. 5 THE COURT: All right. Then I think that's all 6 the issues that we need to edit or address. 7 Anything further, Mr. Pearson? 8 MR. PEARSON: Just -- I'm sorry, Your Honor, to 9 make things easier on the Court, if you send us the current 10 verdict form as it is, would you like the parties to 11 rearrange the formatting to do the groups you mentioned, or 12 were you going to do that first? 13 We're happy to do it. 14 THE COURT: Well, I think if you wanted to make 15 the changes since you might well be making an additional 16 change to the verdict form by joint agreement, if you could 17 make the changes that we already talked about, that would 18 help us out a lot, and we could have them printed out 19 tomorrow morning. 20 We can take the jury instructions, and we can 21 make those changes and send it to you for you to review. 22 (Stenographer clarification.) 23 MR. LENNON: This is James Lennon. 24 THE COURT: We only sent you a PDF. The reason 25 we did that is we didn't want to send the Word, not that we</p>

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1 wrote anything bad. We had notes. Can you take the PDF
2 text and turn it into something?
3 MR. PEARSON: Of course we can, Your Honor.
4 THE COURT: Mr. Dyess?
5 MR. DYESS: On the change you discussed early on
6 on the verdict form about taking out actively the statute
7 271(b) reads whoever actively induces infringement?
8 So that was why we included it in our version of
9 the verdict form, and we think the Court will probably use
10 because that's what the statute says.
11 THE COURT: Understood, and I would just say I
12 understand that point, but I think in light of what I said
13 earlier, I'm going to continue to make the change that I
14 proposed.
15 And again just so it's clear because in so many
16 ways, even the parties in the instructions are referring to
17 these two claims in the -- I think correct, but also kind of
18 appropriately anodyne way the law has induced
19 infringement -- inducing infringement and contributory
20 infringement.
21 And I think doing that is is the best way to
22 make sure one side or the other doesn't have unfair
23 advantage in integrating additional language in the statutes
24 that is going to be there on the side.
25 All right. So we will --

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1 MS. HALEY: Can I put something on the record
2 just out of an abundance of caution?
3 THE COURT: Okay.
4 MS. HALEY: So this issue for contributory
5 infringement with respect to the mistake of law defense came
6 up for the first time in the context I think of a motion in
7 limine, and so I just want to be clear on the record that in
8 the context of our jury instructions, we maintain the
9 objection that we don't think that's a defense to
10 contributory infringement.
11 THE COURT: So noted.
12 All right. So you have a PDF of the most recent
13 proposed version of the verdict form. You will take that,
14 and you will make the changes we discussed.
15 You'll talk about the issue about how to
16 articulate the jury's task with damages and see if we can
17 agree on it, and I know that you will.
18 You'll send me -- and if you do before tomorrow
19 morning when we get up, we'll get a final version of the
20 verdict form. We will in the meantime go back and make the
21 changes to the final jury instruction that we just
22 discussed, and we will send you a PDF with those.
23 I'll ask you to take a look at them one more
24 time and make sure there's nothing on them, and then first
25 thing tomorrow morning ideally we'll be good to go with

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1 final versions.
2 If for some reason there's a problem with the
3 verdict form let us know, and we can work it out.
4 I also want to say I would love -- I don't think
5 it's going to be -- I don't believe we'll get a verdict
6 tomorrow or not by Monday, maybe more time.
7 I enjoy the chance to talk with you all off the
8 record about your thoughts of ways to make the trial easier
9 for the lawyers or little things we could do to change in
10 that regard.
11 I always like to try to do that I'm not sure if
12 we'll get a chance to do it. I don't want to keep you later
13 now because you've got a lot of work to do. Just to know if
14 we do get it, I don't know if there will be time tomorrow at
15 some point a year or two from now, we could all grab a beer.
16 MR. MCCARTY: One housekeeping matter,
17 Mr. Caldwell would have my neck if I didn't ask.
18 For closing is the Court's intention to issue
19 the jury instruction first and then allow the parties to
20 present closing arguments before sending the back for
21 deliberations?
22 THE COURT: My intention was to do closings and
23 then instruct, knowing that you will know what the
24 instructions will be and you can say, "Judge Burke will be
25 telling you."

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1 I think it's in my view on the thing. Otherwise
2 it's best that the last thing they hear going in is a
3 reminder of the rules they have to follow.
4 But, Mr. McCarty?
5 MR. MCCARTY: In your experience, that has not
6 been our experience. This is your courtroom, and we will
7 follow whatever rules you wanted to do on that one.
8 I just needed to clarify with Mr. Caldwell so he
9 knew if he was referring to instructions you just heard or
10 the instructions you will hear, and that was -- that was
11 what I told him I would ask.
12 THE COURT: In all the cases I've tried in our
13 court, we've done jury instruction after the closings, but,
14 Mr. Dyess, do you have anything?
15 MR. DYESS: I was standing because I thought you
16 were going to be leaving.
17 THE COURT: I thought too.
18 All right. So yes, the plan will be to do
19 closings and final jury instruction, and the jury will
20 adjourn.
21 With that said the Court will stand in recess.
22 (Time noted 6:31 p.m.)
23
24
25

<p style="text-align: right;">1188</p> <p>1 need to preserve that objection that, in our mind, it puts 2 those defendants back in on contributory infringement when 3 the judge has dismissed those claims against them. 4 THE COURT: I guess in what sense? Because the 5 question is one about what damages, if any, would be 6 appropriate. Obviously, those defendants are asserted to be 7 liable for certain claims, the claims of the induced 8 infringement. So of course there has to be the ability for 9 the jury to award damages as to them as to those claims. I 10 guess I'm not sure how -- I think what you said or suggested 11 is that the fact that those defendants are listed, a 12 question that relates to damages somehow unduly suggests 13 that those defendants could be found liable for contributory 14 infringement, even though the form otherwise makes it very 15 clear they're not charged with that. 16 MR. DYESS: Your Honor, that appropriately 17 addresses the concern. If we just -- it's difficult to 18 fully verbalize that objection, but the objection is it 19 separates them out and then funnels them right back in. 20 THE COURT: Understood. That objection is noted 21 for the record. Anything further? 22 MR. DYESS: No, Your Honor. 23 THE COURT: All right. So with those objections 24 noted, then what we will do is just take the final version 25 of the verdict form that the parties sent to me this</p>	<p style="text-align: right;">1190</p> <p>1 THE COURT: Understood. I understand that I 2 think the plaintiffs' side has an hour and 13 minutes 3 remaining, the defendants' side has 56 minutes for closing. 4 I'm assuming the plaintiffs will want to save some time fo 5 rebuttal close. I'll put that on you to know how much time 6 you're using. 7 Would you like us to tell you when you have, 8 like, five minutes left in your time, or is the only thing 9 you want to hear from us is if you hit the final buzzer? I 10 don't want to interrupt your flow. I'll do whatever you 11 want. 12 MR. PEARSON: If the Court would permit, I would 13 love if it you would allow Mr. Caldwell to make the request. 14 THE COURT: Okay, Sure. 15 Mr. Dyess? 16 MR. DYESS: We would love the five-minute 17 warning. 18 THE COURT: I'll say, Mr. Sykes, Mr. Dyess, just 19 to let you know, you have five minutes left. 20 Okay. Mr. Dorsney. 21 MR. DORSNEY: Good morning, Your Honor. Can 22 your staff send e-mails, the copies of the verdict form to 23 so we have a PDF if we need to reference it? 24 THE COURT: We'll send you a PDF version of the 25 verdict form by e-mail.</p>
<p style="text-align: right;">1189</p> <p>1 morning, we'll track changes, and have our final version and 2 get you a copy of that as well. 3 I will just say for the record that in any 4 patent case, and this one is certainly one that qualifies, 5 as I noted earlier, there are complicated and difficult 6 issues for the jury. I think the current verdict form, it's 7 the best we can attempt to explain how the parties should 8 assess their verdict in as concise and accurate a way as 9 possible. Obviously, it's also on the lawyers as they make 10 their closing arguments to explain to the jury, if they wish 11 to, how they should look at and assess the verdict form with 12 the regard to the law and the facts that they heard at the 13 trial. And that ability, the one of the lawyers to do that, 14 is something that will also aid the jury so they can 15 appropriately view and fill out the verdict form when it 16 comes time to. 17 I think with all those factors in place, I'm 18 comfortable and it's an appropriate verdict form. So we'll 19 adopt it. We'll get it ready for you. What else, if 20 anything, do we need to take up? 21 MR. NEMUNAITIS: Your Honor, I was replaying my 22 statement in my head. I just want to state on the record 23 when we said we don't have objections that's just with 24 reference to the verdict form and instructions. Just wanted 25 to clarify that.</p>	<p style="text-align: right;">1191</p> <p>1 MR. DORSNEY: Thank you, Your Honor. 2 THE COURT: Okay. Great. So then unless 3 there's anything further, we'll adjourn for now and plan to 4 come out at 9:00 for closings, and I'll give final jury 5 instructions. 6 (A recess was taken, after which the following 7 proceedings were had:) 8 THE COURT: Mr. Caldwell, did you want a five 9 minute warning? 10 MR. CALDWELL: A five-minute warning on a 11 certain time in terms of how much time I intend to reserve? 12 THE COURT: I had said -- I asked the parties do 13 you want me to let you know when you have five minutes left 14 or do you want to keep time yourself and I only pipe up when 15 you have no time. 16 MR. CALDWELL: When I'm doing rebuttal, I'll 17 want the warning. 18 THE COURT: And you're going to save time for 19 rebuttal? 20 MR. CALDWELL: Yes. 21 THE COURT: Okay. Great. We'll have the jury 22 brought in. 23 (The jury entered the courtroom.) 24 THE COURT: All right. We're now going to 25 proceed with closing arguments. We'll hear first from the</p>

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1 plaintiffs' side and then the defendants' side and the
2 plaintiffs may have rebuttal.
3 So I'll turn it to plaintiffs' counsel,
4 Mr. Caldwell.
5 MR. CALDWELL: May I have just a moment?
6 THE COURT: You may.
7 MR. CALDWELL: Thank you, Your Honor.
8 May I proceed?
9 THE COURT: You may proceed.
10 MR. CALDWELL: Thank you.
11 Ladies and gentlemen of the jury, thank you for
12 four days of paying attention and watching some things over
13 and over and over again. I've tried to -- sort of the
14 natural order of these things is we go back and here's the
15 stuff we told you at the beginning, but I kind of think at
16 this point, you guys have a pretty good handle on a patent
17 about a two-step process. Naturally, since this is a
18 summation and argument, we're going to show you things we've
19 shown you before, but I'm trying to be respectful of your
20 time and not show you the same things we've gone over and
21 over and over again.
22 Most importantly, so I don't forget to say it
23 later, on behalf of Mr. Pavlish, Mr. MacPherson, and kind of
24 the ME2C family, I want to thank you for your time and
25 attention, and I'm desperately afraid I'll forget to do that

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1 later.
2 But as you've seen, it's an odd case we've been
3 talking about with the filing of complaints and things like
4 that. This case alone has taken us four and a half years to
5 get to this point. And that's on a case that was filed
6 15 years after Mr. Pavlish put his stake in the ground at
7 the Patent Office and a couple more years since he had his
8 invention documented. So if you think about the lives, the
9 literal lives, of the children who are adults since this
10 thing started, it's hard to express how important this is to
11 my client. So thank you guys for being here because I know
12 each of you had somewhere else you probably would rather
13 have been when you showed up here on Monday.
14 You know that Mr. Pavlish was working at the
15 EERC and had something that turn out to be a breakthrough,
16 and it's basically for a certain type of coal that over the
17 years has become the leading source of coal in the United
18 States. It has been absolutely critical. On the dollars
19 and business side, it's critical to those plants and the
20 people who stay employed at those plants. And on the
21 environmental side, it's critical for all of us.
22 Mr. Pavlish showed you why the mercury is such
23 an important thing. We brought you evidence that the EPA
24 identified it in all the different things, the SOx and NOx
25 and these other things. Mercury was the most important

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1 hazardous air pollutant related to coal plants. Mr. Pavlish
2 walked you through all of his tests in 2002 and we went
3 through and showed you all the documentation of it, all the
4 reports to the EPA that were public at the Department of
5 Energy, and then his provisional application.
6 It's sort of in retrospect, now that the
7 evidence is closed, you may wonder why we showed you all
8 this. And I referenced it with Mr. Pavlish at the time, but
9 as I said, you guys were drinking from a fire hose that
10 first day.
11 As we explained, one of the reasons we went
12 through is because as we entered this process, the
13 defendants were telling us they disputed that he'd had and
14 documented this invention of putting bromine on the coal
15 before it's burned back in 2002 and that it had been
16 included in the provisional. They were telling us they
17 disputed it.
18 You were read the preliminary instruction from
19 the Court that said the defendants were going to challenge
20 the validity of these patents. Then in their opening, the
21 defendants said they're going to bring you an expert to show
22 there's something wrong with how the patent chain was filed
23 and that his patents are invalid, they were going to try to
24 take them away. That's why in this trial when we were on a
25 very tight chess clock, Mr. Pavlish and I went very

1195

1 carefully through the history.
2 You didn't hear word one about it from the
3 defense. Not one. You didn't hear his expert, this
4 Dr. Niksa. Not a word. But we used our time on cutting
5 into our time on other things. That's fine because I think
6 any question about Mr. Pavlish's legitimacy and the
7 legitimacy of his invention were pretty well answered by
8 what's there in writing.
9 We went through and showed you the provisional
10 patent. There's this chain of patents, because for a while
11 they were owned by EERC. Then when they got brought on by
12 ME2C, they helped shape the focus of the claims, the stuff
13 that was originally in the application, and this is from
14 Defendants' opening statements acknowledging that that kind
15 of a prosecution history where you claim different aspects
16 of an invention is perfectly normal. There's nothing weird
17 about it. That's exactly what happened here.
18 At the risk of getting myself off the path, I
19 think now we know exactly why this makes sense. Mr. Pavlish
20 did work at the EERC, and they're a fantastic research
21 organization. But do you remember him also telling you, "I
22 wanted to get out of the world of theory and get out and
23 work on what's actually happening in the plants"? That's
24 what he did by going to ME2C.
25 Yesterday, the defendants played you a video of

<p style="text-align: center;">1196</p> <p>1 Mr. Tom Erickson, the guy with a heck of a beard, I've got 2 to be honest. And he was a student at the EERC. He's the 3 guy doing the testing. He's like the head of the theory 4 department. And he testified. They played you a deposition 5 of a guy saying no, nobody would actually run a coal plant 6 where you put bromine on the coal and then later you use 7 activated carbon.</p> <p>8 So think about that for a minute. What is the 9 point of the defendants playing you a video of a guy from a 10 theory organization that's telling you nobody is doing that, 11 when it is literally undisputed over the last four days that 12 all the plants we're talking about in this case do exactly 13 that to meet the MATS regulations? There's no dispute they 14 all use bromine and they all use activated carbon. The 15 defendants played you that video to be like yeah, nobody is 16 doing this.</p> <p>17 That's precisely why ME2C knew there were 18 commercial environmental gems in this patent application and 19 they had limited time left to file those patents and get 20 those things issued and into the world. This goes back to 21 that video you watched on the first day of sort of a clock 22 starts when you put your stake in the ground, and you only 23 have a certain amount of time. Even though those patents 24 issue later, very limited window of time, and they were able 25 to get them issued and awarded, and after all this bluster</p>	<p style="text-align: center;">1198</p> <p>1 element of the patent. It's not even in dispute. 2 This is, I would venture to say, probably your 3 only patent trial you're going to sit on in your life, but 4 that's -- I can't imagine. You would normally be fighting 5 about, are they doing the steps. There's no question. 6 Nobody in this courtroom is even questioning that the plants 7 go through the steps and infringe the claims. 8 So what this has become is a trial about what 9 the defendants, or a big corporate org chart that's running 10 these things, has going on in their minds, what's motivating 11 them, what does the evidence tell you is their thought 12 process. 13 I think at the end of the day, things you guys 14 saw on cross-examination is just the best source to provide 15 you with the background. No question Mr. Green, the person 16 that is here to certainly speak for the four operations 17 companies and the person that somebody nobody can identify 18 is here to speak on behalf of the eight investment vehicle 19 LLCs, acknowledges we knew they were making refined coal 20 with the bromide, and he also knew the the eight plants at 21 issue were injecting a sorbent material, an activated carbon 22 sorbent material, downstream of the combustion chamber. He 23 knew that. 24 This is a case about induced infringement and 25 contributory infringement. I'll refer you back to a slide</p>
<p style="text-align: center;">1197</p> <p>1 about we're going to come in and show you this patent should 2 be taken away, none of it happened.</p> <p>3 You heard about how Mr. Pavlish went on to work 4 at ME2C and heard the story of Mr. MacPherson first meeting 5 Mr. Pavlish and the story of getting the business going, but 6 I think each of us can relate a little bit to one of those 7 moments you've had in life where you're starting a new 8 venture and it's pure excitement. And it's not hard to 9 picture Mr. MacPherson and his wife and their dog in a truck 10 going around living at whatever hotel is closest to a plant 11 in the middle of the country carrying around 70-pound totes 12 of bromine that they would mix to try to convince plants to 13 do this. They were trying to make a business. They would 14 like to make a profit off of a business. But they're trying 15 to bring a helpful solution to the industry.</p> <p>16 This is where this patent case gets a little 17 unusual. Normally, at this time, we'd be putting up patent 18 claim boards and we'd be arguing over a word, what is this 19 sorbent material, is it actually a bromide compound. We'd 20 be fighting over whether those checkmarks should be there. 21 But in this case, there's not even a dispute over whether 22 the checkmarks should be on the patent infringement claim 23 boards. Extraordinarily unusual. There's not even an 24 argument that from the moment they saw the claims, these 25 defendants knew that there should be checkmarks by every</p>	<p style="text-align: center;">1199</p> <p>1 that I showed you in opening. And as I said then and I'll 2 say you now, the judge -- it's the judge's role, in addition 3 to sort of ruling-on-evidence issues in the trial, to 4 instruct you on the law, and that's sort of a long process 5 that the Court goes through with the lawyers, has all the 6 cases and all that kind of stuff. 7 And you're going to get at the end of the 8 closings instructions from the Court on how to evaluate 9 induced infringement and contributory infringement. What we 10 did is we proved that the defendants in this case are 11 responsible for contributory infringement and induced 12 infringement. It's a little weird because there's some 13 different elements of the tests that make it a little 14 different depending on which party it is. 15 It's not terribly complicated, but I want to 16 make sure I spell this out very clearly because it's 17 important that the verdict form be filled out correctly so 18 the parties aren't later saying, got a new trial, something 19 is confusing here. That's why I'm going to do something 20 that's a little bit tedious, I want to be respectful of your 21 time, but I want you to understand why it's very important 22 that the verdict form needs to be filled out correctly. 23 So we looked at the parties involved in this 24 case. This is a slide -- this is a slide that you guys saw 25 a couple of times. I think initially there was some debate</p>

<p style="text-align: center;">1200</p> <p>1 about whether the CERT partners made a lot of money off 2 this. That debate was pretty conclusively resolved, and we 3 can see -- we can -- nobody seems to remember exactly what 4 the numbers are, and I'd probably remember if I got 50 or 5 \$60 million off of something.</p> <p>6 But we know that the numbers are staggering 7 because what we heard was these contracting defendants ended 8 up getting 5 to \$7 a ton in tax credits. There's 57 million 9 tons at issue in this case. So we're looking at 280 to 350, 10 more than \$350 million in tax credits, and then there was 11 evidence that the payment from these companies to the CERT 12 partners was on the order of 75 percent of that. So you 13 know everybody here is highly motivated to keep the machine 14 churning. And that's true once they knew about the patents. 15 It's true when they knew about exactly what the plants did. 16 Highly motivated to keep things churning.</p> <p>17 So we showed you, because it became this issue, 18 an activated carbon plant. Why did that become an issue? 19 It became an issue because we have these induced and 20 contributory infringement claims. And there's this issue 21 what did you know, what did you intend, what were you 22 wanting to happen when you did things. And certainly the 23 CERT defendants can't say well, didn't intend to use 24 bromine. No question about that side of things. The one 25 thing they can latch onto, the only step that they can point</p>	<p style="text-align: center;">1202</p> <p>1 infringement. Don't worry about it. You just keep going." 2 This is in multiple agreements with power companies. 3 And so that's another thing. If somebody 4 suggests, "Why are we here in a lawsuit against the CERT 5 folks? Why didn't we go sue each and every one of those 6 power plants that's at issue?" Well, first of all, you 7 don't have to. That's not the way the law is set up. The 8 law provides for induced contributory infringement like 9 what's at issue in this case. That's a cause of action to 10 be confirmed. But, also, I think the evidence shows the 11 defendants know we zeroed in on the exact right parties to 12 bring this lawsuit against.</p> <p>13 So His Honor will give you instructions on 14 induced infringement, okay? And there's got to be evidence. 15 And, remember, this is one of those things where we have the 16 burden of proof. So you'll hear instructions, but you'll 17 remember, maybe, burden of proof is like on the scales -- if 18 it's more likely than not that the elements we're 19 responsible for proving -- if that -- if you think that's 20 more likely than not -- doesn't mean, you know, something 21 that's beyond a reasonable doubt or clear and convincing. 22 If you think it's more likely than not that 23 we've shown the elements, that is -- that means, under the 24 law, you need to make a finding of infringement of ME2C's 25 patents. And we brought you evidence -- let me back up.</p>
<p style="text-align: center;">1201</p> <p>1 to, is that "I didn't mean for that to be burned in a 2 process with activated carbon. I didn't know that was 3 happening. I didn't want that to happen." That's what this 4 case kind of became about.</p> <p>5 We showed you the extensive evidence that the 6 plants were using activated carbon. What's kind of odd 7 about that is the defendants told us in their opening that 8 they didn't know, they didn't know, they had to make a phone 9 call. You heard in opening, we heard that was out in the 10 industry. What? They knew from the beginning of this case 11 as soon as it was filed, before it was filed, all their 12 plants were using activated carbon. Why did it take days 13 for all this to have to come out?</p> <p>14 There's discovery responses where they admitted, 15 the witness ultimately admits it on cross-examination, and 16 then we look at the five engineering reports they paid for, 17 the e-mails. But that's really where the fight started off 18 to be, what can I identify, something I didn't know was 19 happening. I didn't know activated carbon. But you have to 20 produce the documents, so we got a peek behind the curtain, 21 and that was nonsense.</p> <p>22 We also talked about how the defendants even 23 went to the plants and said, "Don't worry about it. Don't 24 worry about it if there's a patent that comes up. We'll 25 indemnify you, power plants. We'll indemnify you for patent</p>	<p style="text-align: center;">1203</p> <p>1 They want to put their state of mind at issue -- 2 or their state of mind is the issue, and they want to 3 emphasize that, as they said in the opening, because he 4 wants to say, "Disregard all the evidence that ME2C is going 5 to show you in this case. Don't pay attention to it. The 6 only evidence you should listen to is us because we're the 7 people, and we're going to tell you what's in our mind. 8 Nobody else will provide that evidence." And I ask that you 9 listen very carefully to the Court's instructions.</p> <p>10 The Court already told you and will tell you 11 again, that's why there are things like direct evidence, 12 which is -- I believe the example was, "I see it's raining," 13 and there's circumstantial evidence which is, "You walked in 14 with a wet umbrella, and your coat is pretty wet." The coat 15 and the umbrella are soaking wet in this case.</p> <p>16 Of course, the person that "the someone we can't 17 identify" is going to come to court and be like, "Man, I 18 didn't know." But it's the same team of people who would 19 come in and tell you they didn't know there's activated 20 carbon. It's the same people who filed an answer in this 21 case two and a half years into the case, two and a half 22 years after knowing there's activated carbon, saying, "We 23 deny that there's activated carbon at these plants." 24 Those are the people who are going to tell you 25 to believe only their direct evidence, and you don't have to</p>

<p style="text-align: center;">1204</p> <p>1 because you are the judges of the credibility of the 2 witnesses and the evidence. That's why I'm saying the 3 umbrella is soaking wet. The circumstantial evidence in 4 this case is overwhelming. It's exactly the type of 5 evidence you would dream of to have a case where you show 6 someone else's intent. Because there is no way to literally 7 extract what's going on in the neurons of somebody else's 8 mind; right? You have to look at the circumstantial 9 evidence.</p> <p>10 And in this case, we showed you the defendants 11 meet the first element. They knew they were putting bromine 12 on coal and sending it right into the power plant that they 13 knew was using activated carbon. They paid the power plants 14 take the refined coal even after they knew about our patent, 15 knew bromine was being put on the coal, and knew there was 16 activated carbon. They paid the plants to do it.</p> <p>17 Now, to be fair, there's an element of 18 contributory infringement that says, "You sold it." That's 19 not negated by the fact that they paid the other side to 20 take the coal because they actually sold the coal for, like, 21 \$0.50 more than they acquired it for, but then they turned 22 around and paid the plant some money to let me put my 23 equipment there on site. So they lose money in the process 24 selling this coal at an overall net loss to the plants. 25 Very powerful evidence of inducement.</p>	<p style="text-align: center;">1206</p> <p>1 carbon?</p> <p>2 So I'll give you a preview of what I believe the 3 verdict form will show. I suppose it is theoretically 4 possible something could change on the verdict form. I 5 think this is the final verdict form that you guys will see. 6 And as I expressed earlier, there's great appreciation from 7 everybody in here about your attention to detail and care 8 because it's super important that the verdict form be filled 9 out correctly.</p> <p>10 So what I'm going to show -- I feel like I'm in 11 sort of an awkward position of, like, "Hey, do this on the 12 verdict form." That's not, like, trying to impose on you in 13 that way. What I'm saying is if you agree with ME2C that 14 there's been infringement, the first question -- it says: 15 "Question 1(a): Have plaintiffs proven by a 16 preponderance of the evidence that any defendant listed 17 below is liable for inducing infringement of any asserted 18 claim of the '114 by a power plant?"</p> <p>19 You would say "yes," and it tells you in the 20 gray box "yes" is a finding for ME2C, and "no" is a finding 21 for that particular defendant. So in Question 1(a), our 22 belief is that you should answer "yes" to all and note that 23 that is all of the entities that were both the operations 24 entities and the investment vehicle or refined coal LLCs. 25 So just -- Question 1(a), pretty easy, "yes" on everything.</p>
<p style="text-align: center;">1205</p> <p>1 They continued to do so while knowing the -- 2 just glaring elephant in the room, knowing the completely 3 undisputed fact that everybody knows that checks go on the 4 patent breakdown. Nobody is disputing a single element of 5 it and hasn't. At no point have they indicated there's an 6 element on those check boards they dispute.</p> <p>7 So the defendants have certainly induced 8 infringement by taking an affirmative act that caused power 9 plants to engage in conduct the defendants knew or believed 10 with high probability -- sounds like I'm just rattling off 11 big words, "knew or believed with high probability." I'm 12 not much of a big-words guy, but that's what's going to be 13 in the instructions that the Court reads to you. The 14 test -- it's like the way judges have written in this 15 country for several hundred years, and then it accumulates 16 in the case law and ends up in the kind of jury instructions 17 that you guys get.</p> <p>18 Remember, when you're reading all that, you 19 don't check your common sense at the door. Did they induce 20 these plants to keep on going after they knew full well it 21 resulted in infringement? Absolutely. Not a question.</p> <p>22 And in inducement, is there any more powerful 23 evidence than the corporate representative of a defendant 24 that is admitting they had a tremendous motive to keep on 25 going after they knew all about the patent and activated</p>	<p style="text-align: center;">1207</p> <p>1 Now, the next -- the next page is just really no 2 different. I will point out that the next page is about the 3 '517 patent up. So kind of up here at the top, the '517 4 patent, again, "yes" to everything.</p> <p>5 So the first one I did -- I guess on my chart, I 6 had the puzzle piece on the left and the dominos on the 7 right. I just talked to you about the dominos, about my 8 side having them in that order. His Honor's verdict form 9 has sort of the dominos -- the, "You induced somebody to go 10 down this path." That was listed as the first question on 11 the verdict form, so that's why I started there.</p> <p>12 The next question is going to be sort of the 13 puzzle piece. And you're going to get the law on it, but 14 essentially the contributory infringement -- you can imagine 15 if you know that somebody kind of has a patent on a widget 16 with five parts and everybody already had the other four 17 parts, what you do is just give them the fifth part and say, 18 "Hey, go put this with the other one." You're sort of 19 saying, "Here's the missing piece to result in 20 infringement."</p> <p>21 That's kind of the idea of contributory 22 infringement. You can't say, "Oh, no. I just sold this one 23 little piece." It's about, "Did you complete the 24 infringement," is essentially the nature, and the Court will 25 instruct you on the precise contours of the law.</p>

<p style="text-align: center;">1208</p> <p>1 And we've proven that, too. This is going to be 2 a little bit different. On contributory infringement, it's 3 not all 12 defendants. And it's not that, like, somebody 4 proved a defense to contributory infringement or something 5 like that. It's that the law on contributory infringement 6 includes that somebody made a sale, and so technically the 7 way that, like, money flows -- the four guys I had in 8 purple, those guys weren't the ones making a sale. They 9 were the ones that are, like, turning knobs and stuff like 10 that at the -- at the place. It's really the way the money 11 flows. It's the other guys, the eight guys, the investment 12 vehicles, that technically made a sale.</p> <p>13 So for contributory, it's got to be -- it's 14 going to be slightly different. I don't -- I don't think it 15 will be confusing when I show you the verdict form, but I 16 just wanted to explain to you why there may be, like, a 17 difference in the parties listed for one and the other.</p> <p>18 But we proved to you that the defendants 19 contributorily infringed the patents in this case by selling 20 what they call refined coal -- so it's coal with the bromide 21 solution on it -- knowing that that refined coal supplied to 22 that power plant as sold and delivered during the damages 23 period -- we'll come back to that -- had no other 24 substantial non-infringing use other than to keep going 25 through the combustion and exhaustive process at those</p>	<p style="text-align: center;">1210</p> <p>1 very important to them that it be burned. That's their -- 2 that's their plan and their desire. Otherwise they can't go 3 certify that they've earned these tax credits.</p> <p>4 So you've seen all the evidence for contributory 5 infringement. We talked a lot about a lot of the reasons 6 why the defendants would do this. And, you know, it goes 7 back to this idea of these tax credits that were set up a 8 long time ago. And what's interesting is, you know -- I 9 keep talking with my hands. There's this issue of IRS and 10 Congress being like, "You know, we'll give somebody tax 11 credits for cutting out 40 percent."</p> <p>12 I mean, think what you will about the 13 government, whether the, you know, left hand needs to talk 14 to the right hand, but the guys that run sort of the 15 environmental rules come in later and, like, "Guys, that's 16 not enough. Like, we need to be capturing 90 percent."</p> <p>17 So what's funny is in this case, the defendants 18 are like, "Oh, man, all we care about is getting the 19 40 percent. That's all we care about. We -- I don't have 20 to use activated carbon. I just have to test that the coal 21 alone -- the coal alone gets me 40 percent"; right? You got 22 your tax credits for a really long time where that was 23 sufficient. It's a lot of money. It's a lot of money we're 24 not talking about in this case because it's not something 25 we're seeking damages on.</p>
<p style="text-align: center;">1209</p> <p>1 plants where they knew it would be treated with activated 2 carbon.</p> <p>3 No question that the refined coal constitutes a 4 material part of the invention -- it's one of the 5 elements -- and that the defendants knew the refined coal 6 produced at each facility was especially made and adapted 7 for infringement since it was made for each specific plant 8 where they expected it to be burnt. And they knew it would 9 be put in that coal combustion process at that plant.</p> <p>10 Now, I don't know if you caught this, but you 11 remember that I called their witness Mr. Jeff Green as an 12 adverse witness the first time he testified. So we started 13 off sort of on cross-examination, and we got to the end of 14 the day, and Judge Burke said, "You've got one or two more 15 questions." Oh, man, the very last thing I asked him was 16 confirming that they knew, at every one of these plants, for 17 the two-and-a-half-year damages period, there was going to 18 be use of activated carbon. It's not disputed.</p> <p>19 He also confirmed that when they made it, they 20 wanted it burned; right? They needed it burned because it's 21 a requirement of the tax program. You can't just sort of, 22 like, be spraying this on coal and cashing tax credits. You 23 can't just be spraying it and putting it in a parking lot 24 somewhere. You have to be desiring to have it burned and 25 expecting that's what's going on happen. So that's why it's</p>	<p style="text-align: center;">1211</p> <p>1 But then the EPA said, "Now you've got a choice. 2 If you want to keep that plant running, you've got to get 3 90 percent," and that's where it got real. Because now I 4 don't care if you just sort of sprayed it in the lab and 5 told me it's 40 percent. "If you want to still get those 6 tax credits, you've got to have a coal plant burning it." 7 Remember, that's a requirement for the IRS. "And I sure 8 want to be able to keep burning it because I sure want to 9 keep cashing in on tax credits."</p> <p>10 From that point on, it's like, "How are you guys 11 going to meet MATS?" They say they're talking to power 12 plants, talking to investors. They're going to be -- 13 they're not getting shut down. They're going to meet MATS, 14 activated carbon. They're going to do it. Why do you think 15 they're talking to investors about how the plants will meet 16 MATS? It's because the investor doesn't want to say, "Well, 17 I'll tell you what. You think I'm going to make 500 million 18 in tax credits. Let me just go ahead and give you 19 75 percent of that to run this program for me. Let me give 20 you 375 million, CERT partners. I'll do that." And then, 21 like, a week later, that plant gets shut down for not 22 complying with MATS. That's why they're going around 23 saying, "Hey, if I'm going to invest in this, how is that 24 plant going to meet MATS?"</p> <p>25 Everybody knows this is happening, that in order</p>

<p style="text-align: center;">1212</p> <p>1 to keep burning, you're going to have to take out the 2 90 percent. So they do, but the plants start using the 3 activated carbon so they can continue to burn this coal from 4 the Powder River Basin that's just -- it's so voluminous. 5 It's right under the surface of the earth. And compared to 6 old-school, like, burrowing into the side of a mountain to 7 get small quantities of coal, it's just in massive volumes. 8 They're throwing it on trains by the hundred tons per car 9 and shipping it all over, and these guys get the tax credits 10 based on that as long as, whatever it takes, the plant keeps 11 burning.</p> <p>12 So that's what happens once MATS comes into 13 effect, and they get more time where we're not asking for 14 money. Because, as the lawyers for CERT observed with their 15 client, you can't infringe a patent until it issues. So 16 they get even more time where they are doing the two-step 17 process knowing full well that they are doing both steps, 18 and there's no damages in this case for that either. It's 19 not until the patent issued. And even then, we're not up 20 here saying, "Wow, the minute it issued, that's when it 21 starts." It was close, but it's really -- our damages 22 period starts when we served the complaint on them and put 23 them on notice.</p> <p>24 And I have proven this to you guys over the last 25 couple of days. It's in the very original complaint that</p>	<p style="text-align: center;">1214</p> <p>1 said he's recognized in many courts as an expert on 2 valuation and the law. And you're going to see -- 3 I mean, he described things like this 4 hypothetical negotiation. It's sounds weird; right? I 5 mean, what -- let's sort of pretend we did something. 6 That's literally what the case law says. This isn't 7 something he made up. It says -- what you do is you go back 8 and say, "They have to sit down at a table with you, and 9 they don't get to say, 'But I don't think I infringed. I 10 don't think I contributed. I don't think I induced. I'm no 11 longer saying I don't think your patent is invalid. I'm not 12 saying that.'" They sit down and say, "Yeah, it's 13 infringed. Yeah, it's valid. I need to work out a license 14 with you." That is the context. It comes from the case 15 law.</p> <p>16 And so what Mr. Green did is he talked about 17 that case law in this thing called the <i>Georgia-Pacific</i> 18 factors. And, again, it's a paper company and other 19 products like that and makes probably no sense in this 20 context that it's called -- like, when we refer to cases -- 21 like, I mean, there's famous cases people hear about, of 22 <i>Brown v. Board of Education</i>, stuff like that. People cite 23 cases. There's this one where the lead party was called 24 <i>Georgia-Pacific</i>, so it's been known as the "<i>Georgia-Pacific</i> 25 factors" for as long as I've been practicing law.</p>
<p style="text-align: center;">1213</p> <p>1 it's this two-step process. Their witness has acknowledged 2 he understood that that's what the patent claims were about. 3 There's not a single checkmark they dispute, and he's 4 telling you he knew about that from the beginning and knew 5 for the full two and a half years that activated carbon was 6 being used.</p> <p>7 There is zero question why the defendants, with 8 eyes wide open to the patents and what's happening at the 9 plants, just kept on going. 350 million in tax credits is a 10 powerful, powerful motive.</p> <p>11 So once we prove to you the evidence, you're 12 going to get to Question 2 on the verdict form, and you guys 13 know what's going on by now. It's got less parties listed 14 here. These are sort of the investment-vehicle defendants, 15 and those are the ones who made the sale, which is one of 16 the elements of the contributory infringement. So for the 17 '114 patent, on Question 2, it's all "yes," and then there's 18 a 2(b) which is for the '517 patent.</p> <p>19 Now, once we've proved infringement, there's one 20 other thing -- two other things, actually, that we have the 21 burden of proof on. And I'm going to save willfulness for a 22 bit, but I want to talk about damages. So once we proved 23 the patents were infringed, we talked about the value, and 24 Mr. Phil Green talked about that.</p> <p>25 Mr. Green's been doing this for a long time and</p>	<p style="text-align: center;">1215</p> <p>1 And in the <i>Georgia-Pacific</i> factors, there's all 2 these different -- all these different factors. Factor 15 3 is the one that describes the hypothetical negotiation. But 4 it's kind of a funny opinion because it sort of says, "You 5 do the hypothetical negotiation, but it's come to mean you 6 take into account all these factors when you do hypothetical 7 negotiation."</p> <p>8 And all the folks that do this sort of patent 9 evaluation testimony know this. There's no dispute that it 10 will be in the instructions. The defendants had one of 11 those people, too, and you heard about her. Her name is 12 Ms. Kathy Lawton. You did not hear from her. You heard 13 about her. She was not presented, and I think there's a 14 reason why, which I'll come back to -- I'll come back to in 15 a minute.</p> <p>16 But, anyway, in terms of us meeting our burden 17 of proof, Mr. Green told you he considered all 15 factors as 18 required, and he walked through all the different comparable 19 licenses and explained his understanding of the license 20 rates. You heard Mr. MacPherson testify about agreements 21 like the AJ Gallagher-DTE agreement, the 22 \$27-and-a-half-million agreement, but they weren't in a 23 hypothetical negotiation. They weren't having to assume 24 that everybody got rid of their invalidity and 25 noninfringement arguments. And they, similarly situated to</p>

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1 these guys, agreed to pay \$27 and a half million.
2 They also talked about the Alistar deal for a
3 dollar a ton with ME2C, and you heard Mr. Phil Green look at
4 each one of these. And there's a super important point that
5 I just really feel like I need to address. Do you remember,
6 on cross-examination of Mr. Phil Green, the lawyer for CERT
7 was just going on and on and on and saying that Mr. Phil
8 Green and Mr. MacPherson were lying? He didn't use those
9 words. I'm not trying to say he was discourteous in that
10 way.
11 But he was like, "You know what? You all sat
12 down together at the last minute, and you hooked up this
13 really low number of tons and then had them pay that low
14 number so it would be like, 'It's a dollar a ton. That's
15 amazing. It used to be one and a half million tons. Let's
16 drop it to 100,000. You pay that. Wink, wink. We'll
17 pretend this is a dollar-a-ton deal.'"
18 Do you remember him making that suggestion to
19 the witness? Do you remember the frustration of Mr. Phil
20 Green when this is happening? I'm going to show you why.
21 Did he tell you the volume of documents that he had been
22 through, the amount of spreadsheets and reports he had
23 studied to try to get all this information together?
24 I'll show you this. I'm showing you a document
25 that is PTX 446. You can certainly look at it if you want,

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1 but this is -- in fact, it may be like a native Excel
2 spreadsheet. It's probably the kind of thing that my eyes
3 would glaze over if I had time to go through it.
4 But here's the killer thing about this. See, up
5 here at the top, I've got a -- what they call a Bates
6 number. It's sort of the serial number of the -- of how
7 it's produced in the case, and that's -- so, like, if I give
8 them a million pages and they give me a million pages, we
9 know how to refer to each one uniquely.
10 This is a CERT document that they produced to
11 us. So the lawyer is up here asking him, "You made up these
12 tons?" It's his side that produced this document that
13 Mr. Green considered, and you know what it says if you add
14 up the Alistar tonnage for that time? It says the
15 101,000 tons that Mr. Green said his opinion was based on.
16 Now, he had an earlier number that was higher.
17 I'm not sure of the source of the error. But like he
18 explained to you, they had a damages expert. We have a
19 damages expert. They both do analyses. They exchange
20 information back and forth, and each one of them identifies
21 things that maybe they misunderstood about the spreadsheets
22 and try to conform those as you're getting very close to
23 trial. Makes sense.
24 What else makes sense as you get very close to
25 trial? Gallagher and DTE say, "Here's your money." Alistar

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1 says, "What did we come settle on for the tonnage? Here's
2 your payment." So this suggestion -- it's like a, "Tell you
3 what? I need you to, really quick, whip me out a dishonest
4 total of tons." It's disproven by the document they gave
5 us.
6 So Mr. Green went through the damages
7 calculation. There's this thing about all the accused tons.
8 I'm going to present this to you guys in slightly different
9 format than it is because I think it kind of matters. But
10 ultimately he opined that based on using the framework --
11 which is un rebutted. I mean, they asked him about if he
12 made up these tons, but they didn't produce somebody who
13 could say his methodology is wrong. They didn't bring
14 somebody to say, "You looked at the licenses all wrong."
15 It's un rebutted that the reasonable royalty would be \$0.65
16 to a dollar per ton. And so this is kind of the final
17 calculation that he presented, and this is at a dollar a
18 ton.
19 So I don't know how to convey this information
20 to you any more clearly than giving you the opportunity to
21 record kind of the information that's based on tons. It's a
22 complicated case because there's so many different parties.
23 And what I would like to point out is where you have CERT
24 Operations RCB, there are several of these LLCs that are
25 associated with CERT Operations RCB; and then for

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1 CERT Operations II, there's just one; for CERT Operations
2 IV, there's just one; and for CERT Operations V, there's
3 just one. So this is the breakdown of how it fits with each
4 one of the LLCs.
5 So what you're going to get is a verdict form
6 where the amount should be filled in, and it matters.
7 Because of the linkage of the LLCs that worked together,
8 there's kind of this situation where certain ones need to
9 add up. So, for example, it's Cottbus, Rutledge, Larkwood,
10 Bascobert, and Senescence. Those numbers right here need to
11 add up to this number here. It's the same -- it's the same
12 tonnage that was sold. It's the two different entities that
13 work together.
14 And then when we get down to CERT Operations II
15 and Marquis, these two numbers need to match; then when we
16 get down to CERTs Operations IV, these two numbers need to
17 match; and then CERT Operations V, these two numbers need to
18 match.
19 Mr. Pearson, what is -- 754, there is a
20 Plaintiffs' exhibit, an admitted exhibit, that you can
21 request that will tell you these numbers, and that's
22 Plaintiffs' Trial Exhibit 754.
23 So what kind of stuff do we hear from the
24 defendants? We hear things like, "You can't compare tax
25 credits to the asserted claims." Guys, like, it's patent

<p style="text-align: center;">1220</p> <p>1 claims. The Court tells us we don't look at -- we don't 2 look at getting tax credits. We see technology doesn't meet 3 the claims, and we've been through all that. 4 Then we hear, "Yeah, they know anyway." They 5 claimed tax credits on millions and millions and millions of 6 tons where they knew the activated carbon was being used. 7 So this whole thing -- like, when we test for tax credits, 8 we don't use activated carbon. So what? You test it at a 9 lab to see where you were before activated carbon. Then in 10 order to keep running it with 90 percent emission, you have 11 to use activated carbon. It's pure distraction. It 12 literally has nothing to do with the test. 13 And the Court is going to tell you, for direct 14 infringement, that's what the plant did. You compare the 15 accused conduct of the power plant with the asserted claim. 16 It's not about, like, "Hey, did we meet a tax credit?" That 17 has literally nothing to do with whether the patent claim is 18 met. 19 So then what did we hear? The CERT says, "Well, 20 I'll tell you what." They show you -- this is a slide in 21 their opening. "We're going to bring you an authority." 22 This is Mr. Stephen Niksa, and he's going to tell you that 23 Mr. Pavlish's patents -- "They've got a big problem in them, 24 and they're not valid. You're going to take his patents 25 away." They told you this guy was going to come testify and</p>	<p style="text-align: center;">1222</p> <p>1 It's going to meet MATS and keep going because we're using 2 activated carbon. We heard of it in industry." 3 So we've shown you just a ton of evidence that 4 they knew all about the infringement. It's a Sargent and 5 Lundy in-depth report. And not only is it an in-depth 6 report that they organized for the investors, by the way, it 7 literally says it's going to work like the patents, the 8 first one, bromine. It ionizes elemental mercury in the 9 coal so it can form a compound with the carbon, coal, fly 10 ash, potash, activated carbon, and then maybe the S-sorb as 11 well. They knew exactly the chemistry that's going to check 12 the boxes on the claim. 13 And then we went through all these e-mails where 14 Mr. Green is saying, "Hey, power plant guy." This is -- 15 this one, I bring up for a very specific reason. When you 16 hear, "Oh, we didn't know it had activated carbon," Jeff 17 Green, the gentleman who testified, is telling the plant, "I 18 know you use activated carbon. Like, can I get your mercury 19 numbers? The results should show positive results since you 20 guys are using refined coal and also installed powdered 21 activated carbon systems." He's telling the plant, "I 22 already know you're using this. Give me your numbers so I 23 can get this investor to invest." 24 And it's not just Mr. Green. I told you there's 25 four CERT partners. They're writing amongst themselves.</p>
<p style="text-align: center;">1221</p> <p>1 tell you that. 2 Have you guys seen him, other than in the back 3 of the courtroom for the first three days? I think it 4 wasn't long after Mr. Pavlish finished describing his 5 invention story that Dr. Niksa disappeared. 6 You hear arguments like, "Hey, man, look at this 7 plan. Our stuff is way over here." But do you remember 8 when my colleagues Mr. Nemunaitis and Mr. O'Keefe went 9 through and checked off the patent claim elements? Who over 10 here is remembering any discussion of, "You've got to be 11 less than 700 feet away from the boiler"? What is the point 12 of this? Like, I'm way over here. 13 I'll tell you what the point is. The point is 14 at the time they told you that stuff in opening, they 15 thought they were going to come in and convince you, "Well, 16 because I'm way over here, I don't know if they've got 17 activated carbon going on in this plant." I don't need to 18 go through all that again, but obviously that's nonsense. 19 I've already showed you -- I mean, you guys know 20 Mr. Green admitted that they knew full well activated carbon 21 was being used. Knew full well for years. So when you 22 think back to their lawyer saying in opening, "We heard of 23 it. We heard of activated carbon. We heard of that in the 24 industry, sure," you were telling your investors that's what 25 was going to be used at this plant. "Give me your money.</p>	<p style="text-align: center;">1223</p> <p>1 Like, Barr Linton is writing to Jeff Green and other folks 2 saying, "We know they're using it, and the reason why is 3 because MATS is kicking into effect. Like, they need it for 4 MATS compliance." 5 And here's the funny part. You'll hear them 6 talking about, oh, some NOx or SOx or whatever. Who cares? 7 That's not what this case is about. The patent claims are 8 about reducing mercury, and the power plants feel the same 9 way. It's like, "Yeah, you can do your S-sorb thing and 10 claim a tax credit. I don't care. But even if that's 11 broken, you've got to keep putting bromine on the coal 12 because I need it for MATS." Like, they're literally 13 talking about this with the power plants. We've heard about 14 it in the industry. 15 So we saw just mountains of evidence. And as I 16 observed, this isn't even all of it. Even going back to 17 2012, Mr. Green testified -- he admitted it when I showed 18 him a presentation he had made. Even as far back as 2012, 19 they were telling power plants, "Hey, use us with your 20 activated carbon" to please you. "Guess what? We can make 21 your activated carbon bill go down. You won't have to use 22 quite as much because our stuff will make it more 23 effective." They're not saying, "Whoa, keep these two 24 things apart. What in the world is activated carbon?" 25 These things go together perfectly.</p>

<p style="text-align: center;">1224</p> <p>1 You heard from a power plant, and they're kind 2 of talking out of both sides of their mouth saying, "Oh, you 3 didn't get evidence from these power plants," the ones where 4 they had relationships. And they called them when the 5 lawsuit was filed, and they're like, "Hey, ME2C, you didn't 6 bring us evidence of how often it's running." Kind of 7 weird, don't you think? 8 When they called the power plant customers and 9 talked about this lawsuit and activated carbon, don't you 10 think if those guys said, "Man, we hardly keep that thing 11 on," don't you think he would be up here testifying about 12 that? But we found out from experts in the industry if 13 you're permitted for it, you have to keep it running. 14 And that's what Mr. O'Keefe and Mr. Nemunaitis 15 showed you. They showed you the permitting for the plants. 16 You've got to keep it running. They're saying it's off for 17 a substantial amount of time. Really? This guy is telling 18 us it may be off hours per year, hours, so he can clean the 19 nozzles. So it's off, so I can make sure it keeps running. 20 Let's say it's 24 hours, like 1/365th. It's a third of one 21 percent of the time it's off. Oh, yeah, we hardly use them. 22 But then they tell you you're going to get an 23 expert who's going to tell you all about this and when they 24 don't use it. They told you they're bringing Dr. Connie 25 Senior to come tell you this. Did you ever see her testify?</p>	<p style="text-align: center;">1226</p> <p>1 process once you knew it infringed. 2 And the Court is going to tell you that for 3 contributory infringement, you focus on not just coal they 4 sold years ago, not coal that they sold to a different kind 5 of plant that didn't need it, you focus on the coal as sold 6 and used in the accused time period at the accused plants. 7 We've been through the organization of these 8 companies and I don't think we need to replot old ground, 9 but, guys, there's sort of this last ditch effort that even 10 if the law is what it is and we all knew about activated 11 carbon, they're going to come and maybe argue we should get 12 off scot-free because we were mistaken about the law. And 13 that's perplexing. I mean, the law hasn't changed since 14 2019. We know CERT is really good at tax law. Also, we've 15 talked to the witness and he says, "Whether you send us a 16 letter or you send us a complaint, the result is the same. 17 We're handing it straight to our patent lawyers." So they 18 had the patent lawyers on. 19 And I asked him, "Were you getting good advice?" 20 "Yeah." 21 There's no evidence that I was confused about 22 the law, none. Think about it, not one bit of evidence I 23 was confused about the law. Nobody said that. No lawyer 24 said "I gave them bad advice." No witness said "they gave 25 me bad advice." There's no evidence that someone was</p>
<p style="text-align: center;">1225</p> <p>1 Did you ever see her other than sitting in about that fourth 2 row back there until last night or the night before? You 3 know what, we budgeted time. We cut some of our stuff 4 shorter saving time for that. Kind of got to wonder what's 5 going on. Make us save time, make the Court give the 6 instructions on it. We save time and then, well, we're not 7 bringing her after all. 8 What you're going to hear about contributory 9 infringement is a staple article or commodity of commerce is 10 capable of substantial non-infringing use. That would be if 11 it's something that has uses other than as a part or 12 component of the associated claim and those other uses are 13 not occasional, farfetched, impractical, experimental or 14 hypothetical. Yes, occasionally something that proves we're 15 right, occasionally they clean the nozzles. It is -- they 16 use activated carbon. 17 Then what you get, you get like scrolling 18 spreadsheets. You get squeaky markers on the same boards 19 over and over again. Guess what guys? They had that 20 formula and they used that formula before and after the 21 date. I don't think we needed an hour of that. That's not 22 been in dispute. Our point is once you knew about the 23 patent and it was resulting in infringement, you kept paying 24 the plant to do it. It's not about whether you changed that 25 number. You kept paying the plant to do the two-step</p>	<p style="text-align: center;">1227</p> <p>1 mistaken about the law, and that's a defense. 2 I already told you they filed answers and just 3 kind of denied things we all knew were true. I already told 4 you they would just turn it over to the lawyers as soon as 5 they receive it. So much of this trial about defenses and 6 arguments of defendants basically were a waste of time meant 7 to be misleading you, and you can ignore all that if you 8 find inducement for all defendants and you find contributory 9 for all defendants that are listed on the contributory. 10 I want you to step back. Remember, you don't 11 check your common sense at the door. Step back and take a 12 look at who's more credible. We were working for the public 13 benefit trying to run a business to bring this to market. 14 I'm sorry. I didn't hit the checks, I'll come 15 back to that. 16 The other side is saying -- they flatly say it's 17 not about the public benefit. "We shut down the instant we 18 couldn't get tax credits." They put their accountant, that 19 accountant that's like, "do you make profit" and she says, 20 "What's profit?" That accountant, the CFO, says, "What's 21 profit?" 22 And she's like, "There would be no reason for us 23 to keep doing this after we don't get tax credits." 24 Compare. Compare these two companies. ME2C 25 rolled up its sleeves, put in the hard work, built a long</p>

<p style="text-align: right;">1228</p> <p>1 term-business traveling all over the country. What do we 2 know about CERT? Only care if it's economical based on the 3 tax credit. 4 We brought you four live witnesses, two fact 5 witnesses. We brought you an expert in the technology and 6 brought you an expert in the damages side of it. It's our 7 burden of proof. How many witnesses did they bring you? I 8 mean, their fact witness says, yeah, you're going to hear 9 two or three more. They didn't give you evidence to support 10 their side. 11 So ladies and gentlemen, there is one more 12 question that's on the verdict form. It's very simple. 13 It's "Did you find that their infringement was willful?" 14 And I think, essentially, by the time you look at all the 15 knowledge and -- of the elements of the other ones, the 16 answer on those will all be yes. 17 I'll have a few minutes later to come back and 18 talk to you in rebuttal, but thank you very much for your 19 attention. 20 THE COURT: Thank you, Mr. Caldwell. Thank you. 21 And now we'll turn to Defendants' counsel 22 Mr. Sykes to make Defendants' closing argument. 23 MR. SYKES: Can I have a moment to get set up 24 here, Your Honor? 25 THE COURT: You may.</p>	<p style="text-align: right;">1230</p> <p>1 tell you "No, I wouldn't think that these would be used 2 together because they're just totally different things." 3 That's the way the industry looks at it, and we'll get into 4 that. 5 First, I want to say you've seen Mr. Jeff Green 6 here all week, and you've heard him testify. And this is 7 not an easy thing to sit here as a defendant, and I want to 8 let you know that he thanks you for your time and attention 9 and appreciates your careful evaluation of the evidence and 10 of the facts, and so we really do appreciate that. 11 I'm going to address Mr. Caldwell's points along 12 the way. I'm going -- what I'm going to do -- I felt like 13 what we heard was a lot of jumping around, a lot of pure 14 speculation and attorney argument, and I'm going to try to 15 walk us through some pretty strong statements about all this 16 money and the incentives. I'm going to walk us through the 17 evidence, what the legal claims are. I'm going to touch on 18 the instructions, and the judge will carefully -- it's his 19 role. He will instruct you on the law. But he's been very 20 generous to us in providing advance copies of that, and if 21 you listen to him -- and I believe His Honor will be handing 22 them out for you to read with us. So we're going to walk 23 through them in an orderly way. 24 We've talked a lot about this Section 45 tax 25 credit and we talked about it. Why is it relevant? Its</p>
<p style="text-align: right;">1229</p> <p>1 MR. SYKES: May I proceed, Your Honor? 2 THE COURT: You may, Mr. Sykes. 3 MR. SYKES: Well, it's a pleasure to speak with 4 you, speak directly to you. I told you in the opening of 5 this case that it turned on CERT's state of mind and the 6 evidence supporting that state of mind, which you will be 7 instructed in very carefully and thoroughly by the Court, 8 that evidence of the tens of millions of tons of refined 9 coal that was made and sold and combusted without activated 10 carbon for nearly a decade before this suit was filed and 11 every single day that the refined coal program was running 12 during the lawsuit from 2019 to the end of 2021. That 13 evidence came in, it's overwhelming, and it's undisputed. 14 And the reasonableness and good faith of my 15 clients' belief that its actions that refined coal and 16 activated carbon don't go together like peanut butter and 17 jelly, that they aren't always married together, that was 18 corroborated by none other than the former CEO, the 19 long-time owner, of these very patents, Mr. Erickson, the 20 CEO of that fantastic research organization where the 21 original research work was done. 22 And that's why Mr. Caldwell right out of the box 23 took a punch at Mr. Erickson. You had a chemical engineer, 24 the vice president of operations and intellectual property 25 for the EERC who owned these patents from 2004 to 2017, just</p>	<p style="text-align: right;">1231</p> <p>1 technical requirements establish the basic facts, the 2 simplest, most fundamental things that we understood not 3 long after being sued. Those simple facts -- 4 If we could flip over to slide five, please. 5 Those simple facts bear directly on what our 6 intentions were, to our knowledge and state of mind in 7 proving that we did not and cannot have had the required 8 state of mind that they have to prove to prove infringement 9 of the patents from the get go. Ours is a fuel, theirs is a 10 process. They both deal with mercury reduction, fair 11 enough. Ours reduces NOx, theirs does not. And 12 importantly, this is very critical, our coal is qualified 13 under the law to meet its reductions without activated 14 carbon. Theirs requires activated carbon. 15 They miss each other coming and going. None of 16 that was disputed, and, in fact, you heard Mr. Pavlish 17 himself, the inventor, testify that he didn't invent the 18 method of capturing Section 45 tax credits. They tried to 19 belittle that as though it was a thing in the air in the 20 flue, but he knew exactly what that question meant. He was 21 familiar with it. And he testified that used alone, it's 22 not part of his invention. And he also admitted that ME2C's 23 patents and technology don't reduce NOx to any appreciable 24 amount. All these basic facts our folks understood from the 25 get-go are understood and established in this case.</p>

<p style="text-align: right;">1232</p> <p>1 So direct infringement. Let's look back at 2 slide -- I think it's slide two. It's direct infringement 3 against eight power plants. They have to prove all these 4 elements of these patent claims, which are tedious, long 5 elements, for every one of these power plants that we've 6 talked about. And it's every word of every claim has to be 7 proven to your satisfaction by a preponderance of the 8 evidence.</p> <p>9 They keep saying this is undisputed, this is 10 undisputed. There's a lot more than a two-step process with 11 activated carbon and bromine laid out in all this. So yeah, 12 we've admitted that we knew that activated carbon was used 13 at these plants at some time for some period of time. What 14 we didn't know -- it wasn't our role at the plant -- how 15 much, how continuously, that volume. That is information 16 they could have gone out and gotten. It's their burden of 17 proof.</p> <p>18 Remember, we did investigate in the sense that 19 we knew well -- remember they sued plants that never used 20 activated carbon and those plants stayed in the case through 21 2022? So who did they rely on? They relied on their 22 professional expert witness, Mr. O'Keefe, who'd never dealt 23 with activated carbon or bromine when he last worked at a 24 power plant three decades ago. He gave an opinion on MATS 25 which went into effect 20 years after he left the industry.</p>	<p style="text-align: right;">1234</p> <p>1 proof on contributory infringement. And you heard Jeff 2 Green testify about this evidence. It's undisputed. We 3 showed you a summary chart in opening where we put in all 4 the data, a hundred percent of the underlying data on that 5 chart, that Excel spreadsheet, DTX 1514, went into evidence. 6 It's an electronic spreadsheet. It's what kept every day 7 for a decade.</p> <p>8 And Mr. Dyess read the stipulated facts about 9 when each of these plants installed activated carbon 10 equipment and then from there, it's fifth grade arithmetic 11 that shows that tens of millions of tons of refined coal was 12 sold to plants that combusted it without activated carbon. 13 There was no challenge to that data. There was no 14 cross-examination on that data. That evidence is really 15 that powerful to show why our client reasonably believed 16 that if the basis of the suit is refined coal, you have to 17 know and intend it to be used with activated carbon, why he 18 didn't believe and had a reasonable belief it wasn't always 19 so. Every single day it was being combusted without 20 activated carbon. I'm not going to rehash it all since you 21 heard it just yesterday.</p> <p>22 But just focusing on the three power plants, 23 Intermountain, Mount Storm, and Chesterfield, who were 24 accused of infringement the day this suit was filed in 25 May 2022, that alone was 20 percent, 20 percent of the</p>
<p style="text-align: right;">1233</p> <p>1 He never set foot or talked to any of the power plants. And 2 everything he learned for his expertise he learned it in the 3 60 to 90 days between the time he was hired by ME2C and when 4 he gave his testimony.</p> <p>5 If you're not comforted relying on Mr. O'Keefe's 6 testimony for all these claims -- the first step in the 7 process is a finding of direct infringement for each one of 8 these power plants. If you're not comfortable relying on 9 them, you can write "no" on questions 1(a) and (b), 2 (a) 10 and (b) on the verdict form.</p> <p>11 But I want to talk about contributory 12 infringement first. ME2C has to prove there was no 13 substantial non-infringing uses. So what is the evidence 14 that we didn't believe that we knew there was no substantial 15 non-infringing use? And the jury instructions are going to 16 explain this very carefully.</p> <p>17 You heard this mistaken belief about the law. 18 The jury instructions will set that out. And they're going 19 to say if the defendant reasonably believed it did not 20 infringe, even if that belief is incorrect, the defendant 21 doesn't have knowledge of the infringement. So that's why 22 we've been emphasizing state of mind.</p> <p>23 And you heard and then the Court will instruct 24 you very carefully that a reasonable belief negates the 25 level of knowledge needed for them to carry their burden of</p>	<p style="text-align: right;">1235</p> <p>1 refined coal ever that the CERT companies ever produced and 2 sold every single day while the refined coal program was 3 running during this lawsuit.</p> <p>4 And then there's the formulation issue, 5 especially made and adapted, and you heard that. Undisputed 6 evidence again that without question, our refined coal was 7 not specially made and adapted to be used with activated 8 carbon, and we didn't know it was especially made and 9 adapted to be used with activated carbon.</p> <p>10 And the EERC set that formula, the 0.002 percent 11 MerSorb and the 0.20 percent S-sorb, so how could our 12 refined coal be specially made and adapted to infringe a 13 patent that didn't exist when the formula was set by the 14 EERC?</p> <p>15 And on the accused power plants, the same power 16 before and after the patent issued, same formula before and 17 after we knew about the patent, the same formula as a 18 formula burning at an entirely different grade of coal that 19 had never used activated carbon at all, Intermountain. It's 20 really impossible with those undisputed facts for us to 21 believe that refined coal is specially made to adapt and 22 infringe.</p> <p>23 Let's look at slide eight. 24 Mr. Erickson. So one of the things, one of the 25 key issues that you'll be looking at is was that belief</p>

<p style="text-align: right;">1236</p> <p>1 reasonable. Absolutely. The final witness, Mr. Erickson, 2 the CEO -- former CEO of the EERC, its current chief 3 operations officer -- chief operations officer, not some 4 intellectual theorist, I don't know where that came in, that 5 wasn't in evidence -- vice president for intellectual 6 property. This is where these inventions were made, at 7 these labs.</p> <p>8 And this is the fellow, his organization owned 9 them from 2014 to '17. Third party premier research center 10 with no dog in this fight, and he testified it would not be 11 reasonable to expect refined coal and activated carbon to be 12 used together. There are substantial uses of refined coal 13 without activated carbon. And Mr. Erickson himself, who's 14 been in this field for his whole career, said he's been 15 there a long time in lots of positions, had no reason to 16 believe that refined coal could only be used with activated 17 carbon.</p> <p>18 So that is exactly what Jeff Green testified to, 19 that they don't go together like peanut butter and jelly. 20 They're not always together. If you notice, that was me 21 taking the deposition, and I was trying to lead him down the 22 plaintiffs' theory, "well, isn't it reasonable to think." 23 No, he wouldn't agree to it.</p> <p>24 The final nail in the coffin -- slide nine, 25 please -- of the contributory infringement claim is that</p>	<p style="text-align: right;">1238</p> <p>1 after Mr. Erikson so hard in the first 90 seconds, 60 2 seconds of their opening.</p> <p>3 We also put on Mr. Kuennen from Chesterfield and 4 Mount Storm, Mr. Finlinson from Intermountain, and they 5 corroborated exactly what Jeff Green said. Yeah, Mr. Green 6 got confused about how many witnesses you're going to put 7 on, live witnesses, and it's tricky being a regular person 8 keeping up with all this lawyer stuff, but indeed we did put 9 on Kuennen, Finlinson, and Mr. Harris, three. Mr. Caldwell 10 made fun of the number of witnesses we had.</p> <p>11 But did you hear from a single witness testify 12 for them who either didn't own millions of shares of ME2C 13 stock, Mr. Pavlish and Mr. MacPherson, or isn't being paid 14 by ME2C to testify, Mr. Green and Mr. O'Keefe? The best 15 they did was put on testimony of power plant operators of 16 the defendants that settled. That's the Mr. Whitney they 17 pointed to. He wasn't with any of our power plants. He's 18 with a different power plant. They still didn't go out and 19 get any deposition testimony, any witness testimony from any 20 of our power plants. They're pointing to one that's not in 21 the case. They settled -- the other defendants settled and 22 we're fighting it because we have confidence that you will 23 consider the evidence.</p> <p>24 And inducement. Okay. This is the first 25 question. This is intent. In selling refined coal to power</p>
<p style="text-align: right;">1237</p> <p>1 even ME2C's infringement expert Mr. O'Keefe testified in 2 this case, he confirmed it right this week on the stand, 3 that for those patents that use refined coal before 4 activated carbon, those would be a substantial 5 non-infringing uses of refined coal. He agreed with us.</p> <p>6 So with this evidence about substantially made 7 and adapted, the same formula, this evidence of this 8 extensive long-term use including during the lawsuit by 9 power plants accused of infringement in the lawsuit for 10 years burning refined coal every day without activated 11 carbon, then clearly we had a reasonable belief that it 12 could be used without activated carbon obviously. So 13 questions 2(a) and 2(b) on your verdict form you should mark 14 "no" for contributory infringement.</p> <p>15 And it's true we were going to put our own 16 expert, Dr. Senior, on to corroborate the reasonableness of 17 Mr. Green's belief that there was substantial non-infringing 18 uses for refined coal. But with that testimony from 19 Mr. O'Keefe agreeing with us, we no longer needed to do 20 that. Their expert witness actually testified for us.</p> <p>21 And then you add the slam-dunk testimony of a 22 knowledgeable independent witness, somebody with no dog in 23 the fight -- you didn't hear that from them. I'll touch on 24 Mr. Whitney in just a second -- Mr. Erickson. We didn't 25 need to put on an expert after that. That's why they went</p>	<p style="text-align: right;">1239</p> <p>1 plants, was it our intent to cause the power plants to 2 infringe? Simply put, it was not our intent.</p> <p>3 Let's take a look at slide ten.</p> <p>4 Were we trying to cause them to use activated 5 carbon with the intention that they would infringe the 6 patents? Of course not. Our specific intent in selling 7 refined coal to the power power plants was to sell a 8 self-contained fuel certified under the law in Section 45's 9 emission reduction requirements for mercury and NOx. Those 10 were certified without the use of activated carbon, so it 11 makes no sense to say we were selling refined coal with the 12 intention to use with activated carbon when the material we 13 were prohibited by law from certifying with when -- I can't 14 even say it because it's so nonsensical -- we were selling 15 it with the intent that we use it with activated carbon 16 which was the very material we were prohibited by law from 17 using and testing. It just doesn't line up. You heard 18 Mr. Erickson, the chemist, CEO of EERC, testify that he was 19 puzzled, to that's contrary to my thinking. He couldn't put 20 it together either.</p> <p>21 Let's look at slide 11.</p> <p>22 This is so important to really pay attention to 23 the Court's jury instructions because of the state of mind 24 and intent between contributory and inducement and what that 25 proves. So it's not sufficient that the power plant</p>

<p style="text-align: center;">1240</p> <p>1 customer directly infringe, and it's not sufficient that the 2 defendant was aware of it. Okay. Almost all of 3 Mr. Caldwell's examination of Mr. Green was going through 4 e-mails four, five, eight years ago to show he had awareness 5 or knowledge. That's not even relevant to inducement. Not 6 even relevant. They have to show an intent. And today in 7 the opening argument -- or closing argument, they focused on 8 knowledge, awareness, these e-mails. They referred to a 9 Barr Linton e-mail, I think it was from 2015, intent during 10 the statutory period.</p> <p>11 Causation is where their claim really falls 12 apart. Their own expert, again, testified against them. 13 The Court is going to instruct you that the defendants' 14 actions had to actually cause the power plant to perform 15 each and every step of the asserted claim. And each and 16 every step, we actually cause the power plant to perform 17 each and every step.</p> <p>18 They've been showing you their dominos, that we 19 perform the first one and, therefore, the dominos fall and 20 we're responsible for everything else. You're also going to 21 be instructed that it's not enough for the defendant to 22 cause a power plant to engage in conduct that happens to 23 amount to direct infringement. That's exactly our position, 24 is just exactly what the dominos are about. Where will it 25 stop?</p>	<p style="text-align: center;">1242</p> <p>1 If that's not enough, the plaintiffs' own sworn 2 securities filings, their 10-Ks, -- this is what I talked 3 about -- says were sworn under oath to be true and be 4 complete. They identified activated carbon sellers as 5 competitors with large, well connected sales forces selling 6 activated carbon at the power plants. We have no role in 7 it. The government mandates that they use activated carbon, 8 and the activated carbon sellers, they're competitors, are 9 encouraging them and selling it to them and causing them or 10 allowing them to buy it. We're just not -- we're out of 11 that loop. And the law that you'll be instructed on is we 12 have to cause each step, but we have nothing to do with 13 that.</p> <p>14 And then the third step, the separated step, 15 Mr. O'Keefe identified the power plants' ESPs and baghouses 16 as performing that step. So are we causing them to use a 17 baghouse? He flat-out testified that we didn't cause the 18 power plants to use them. He said all power plants in the 19 country, all power plants must use ESPs and baghouses. 20 They've had them for decades. They continue to use them 21 before and after, after refined coal, before refined coal, 22 CERT has nothing to do with causing power plants to use 23 baghouses and ESPs. Mr. O'Keefe told you that.</p> <p>24 And then try to compare that -- fit into the 25 concept of the jury instructions that we caused the power</p>
<p style="text-align: center;">1241</p> <p>1 A fuel vendor in the coal yard responsible for 2 the entire operations of a gigantic power plant that takes 3 up city blocks, catalytic reducers and scrubbers and so on? 4 Once we put the coal on the conveyer, everything that 5 happens after that we cause it? Of course not. We're not 6 the actual cause of the power plant making electricity. You 7 really have look at who caused what.</p> <p>8 So what are the jury instructions going to say 9 on that? Look at each step, pay attention, who caused each 10 step.</p> <p>11 And remember the two-part process they told you 12 about, slide 13. It turns out it's a three-part process. 13 Mr. O'Keefe testified about this, combusting coal, injecting 14 the sorbent material activated carbon, and separating the 15 mercury sorbent from the gas. In the '517 patent, it's 16 arranged a little differently, but you still have -- you're 17 combusting coal with bromine added with the sorbent, the 18 activated carbon, and then the third step collecting the 19 mercury in the flue gas. They glossed over that third step 20 all week.</p> <p>21 Let's revisit activated carbon first. 22 Mr. O'Keefe himself, you remember, we have to cause every 23 step. He testified the only reason our power plants use 24 activated carbon is that the government compels them to do 25 so in the MATS regulations.</p>	<p style="text-align: center;">1243</p> <p>1 plant to use a baghouse with the intention that the plant 2 infringe the patent. That doesn't make any sense. So 3 there's just to evidence of inducement either. Answer "no" 4 on your verdict form for questions 1(a) and (b) for every 5 defendant for inducement.</p> <p>6 And so you may wonder -- and I'm sure you are 7 wondering -- why did we have to go through all those 8 complaints? And that was very tedious and difficult to 9 listen to. It's for their willfulness claim, and that's the 10 third question on your verdict form: willfulness. And the 11 complaint -- it's important to look at those allegations 12 because that's what they -- that's what the plaintiff says 13 it was accusing of infringement. It's what they say they're 14 accusing of infringement. Did we willfully infringe what 15 they were suing on?</p> <p>16 And let's look at Slide 19. 17 And, you know, we went through this. Here are 18 the operative allegations. They were alleging that if the 19 defendants performed a certification test by merely 20 combusting refined coal and measuring mercury, they wouldn't 21 be able to do it without activated carbon. They wouldn't be 22 able to demonstrate the required reduction. And then they 23 alleged that the coal-fired power plants that use activated 24 carbon that we demonstrate the qualified emission reduction, 25 the Section 45 requirements, about adding activated carbon</p>

<p style="text-align: center;">1244</p> <p>1 downstream of the combustion chamber during the testing. 2 And those allegations were in the complaint the 3 whole time that we were making refined coal from July 19th 4 to December 2021, and they didn't pull them out until 5 May 2022. They kept saying, "Well, what's the live 6 complaint?" Well, what did -- what were we willfully doing? 7 What was the complaint while we were making refined coal? 8 It was asserting we were using activated carbon in testing, 9 and we knew that wasn't true. 10 And you heard, again, for us, independent 11 third-party witnesses from the EERC. Mr. Gunderson and 12 Mr. Erickson both testified, exactly like Jeff Green. 13 Activated carbon was used in testing. And surely 14 Mr. Pavlish knew that, too. He worked there right alongside 15 those gentleman in the same facility. These combustion 16 things were right across the hall. They're in and out every 17 day for, you know, 15-plus years. 18 So Mr. Caldwell tried to cross Jeff Green and 19 trick him up on more of the legal stuff, but he left out the 20 facts. You remember all the talk about websites, you know, 21 the websites of our companies. Turns out they're not so 22 good at using them either. 23 As Mr. Pavlish testified, the refined coal data 24 for power plants is in a searchable, downloadable, public 25 EIA database with a website going back for years for refined</p>	<p style="text-align: center;">1246</p> <p>1 step. 2 The plaintiffs can't carry their burden of proof 3 on any claim. There just isn't evidence and certainly 4 nowhere near a preponderance of the evidence to find 5 infringement. So we're going to ask you to render a verdict 6 for the CERT defendants. 7 And something that I learned after I started 8 practicing law is that the word "verdict" is Latin for "to 9 speak the truth." So for you to do your job, it's very 10 important for you to have the facts so you can speak the 11 truth. 12 And during the opening and the testimony of the 13 plaintiffs' witnesses, it became apparent that the story 14 that you were being told in this trial is not really what 15 happened, and that's why we tried to pry the facts out on 16 cross, and it took a lot longer than expected. And because 17 of that, we had to make a difficult choice between getting 18 the true history out, the actual facts, the truth, and 19 putting on our invalidity case of Dr. Niksa. And we chose 20 the former. It was more important to us to get you the 21 truth through those long difficult crosses and going through 22 some of these documents than to prove invalidity. So we had 23 to -- we had to make a choice, a difficult choice at the 24 time. 25 And I'm going to show why that was so important.</p>
<p style="text-align: center;">1245</p> <p>1 coal data. 2 And slide 20 are the operating permits. These 3 are on the internet, too. This is public data on the 4 internet. So every single thing they're pointing to right 5 now to prove infringement, it was publicly known and 6 available to them the whole time. What they said 7 infringement was, three CERT defendants making refined coal 8 for power plants and never used activated carbon and using 9 it in the certification testing itself. 10 And those allegations are directly contrary to 11 the law they didn't even bother to look up on the IRS 12 website, Section 45 on the IRS. And the bulletins are right 13 there on the IRS website. It would take about ten minutes 14 to find. 15 So that's why we had to go through that. The 16 allegations that they maintained every single day while we 17 were making refined coal from July 2020 to December 2021 or 18 July '19, they're ridiculous, and that's what their 19 willfulness claim has to be judged against. 20 Okay. And then in May 2022, they finally 21 settled on a theory, the domino theory that you saw in the 22 opening we just talked about. And that fails on causation, 23 and it's contrary to the instructions the Court is going to 24 give you on causation -- on intent and cause and taking 25 actions to cause the power plant to perform each and every</p>	<p style="text-align: center;">1247</p> <p>1 Because one of your biggest roles, one of your most 2 important jobs, is evaluating credibility. You've heard the 3 expression, "I hear what you're saying now. What did you 4 say back then?" And I think that's a good way to judge 5 credibility. Is somebody being consistent? That's what we 6 used all those depositions for. 7 Well, you heard the sworn testimony this week. 8 But we've also got the sworn statements of ME2C's CEO, of 9 ME2C itself and its CEO, verified under oath in their 10 securities filings, their stock market filings. That's why 11 we looked at those 10-Ks, and that's what they swore to, and 12 you remember some of the stories you heard this week. 13 Just a few of them to review. One of them, we 14 heard ME2C was doing great with the announcement of MATS in 15 2012. They were on a glide path to success because the 16 industry needed their products. And with new MATS 17 regulations, they had their best year ever in 2017. And 18 they couldn't -- but then what happened was they couldn't 19 compete against the refined coal companies, and that's why 20 their sales went down. 21 What did they swear under oath to the government 22 and the public back then before this litigation? Let's look 23 at DTX 376, page 5 with the heading "Regulation and 24 Markets." What we learned was that -- was that because of 25 the MATS regulations -- this is what they told the</p>

<p style="text-align: center;">1248</p> <p>1 government. Because of the MATS regulation, the coal-fired 2 power plants went from 1,250 to 450 in five or six years, a 3 two-thirds drop. The customers are dropping like flies 4 because of the regulation you think is going to save the 5 business. It actually doomed them. 6 And then what did we learn? We learned that 7 they're actually competing against their suppliers of 8 activated carbon. That's who their competitors are. And, 9 you know, we looked at that. And those are the ones with 10 the large, well-connected sales forces encouraging and 11 persuading and pestering the power plants to use activated 12 carbon. There is not a thing in their sworn statement on 13 competitors about refined coal being a competitor or risk, 14 and they're required to list their risk factors, and there 15 are pages of them. You can see these. This is DTX 376, and 16 it's in the first few pages. So the story at trial that 17 they're telling you that it was our fault doesn't match what 18 they swore to to the government just a few years ago. 19 Another story you heard, that they couldn't do 20 anything about refined coal. The infringers -- you got that 21 long timeline this morning, even, that put up, you know, the 22 patents way over here and all this money trail back here. 23 That was years, you know, years before these patents 24 existed. 25 Well, the whole time they had another patent,</p>	<p style="text-align: center;">1250</p> <p>1 They're using refined coal, and this is what they're doing, 2 and they've got a new plant manager" and all this stuff. 3 Nothing like, "Hey, they're ripping us off. What are we 4 going to do about it?" They're talking about how to work 5 with them. 6 So, you know, it's completely contrary to the 7 story you heard at this trial. It wasn't that there was 8 nothing they could do about it. They want -- and now this 9 was -- and, remember, they didn't list these guys as a 10 competitor on their 10-Ks. 11 All right. And then the third story we've 12 heard, it was refined coal and the alleged infringement back 13 in 2018 on patents that didn't exist yet that caused them to 14 lay off their sales force. That was a big deal, laying off 15 their sales force. That's a big deal to any company. 16 Well, the sworn 10-Ks, sworn not to leave out 17 any information, tells us a different story. Let's pull up 18 DTX 376 and look at page 19. They -- this is their 2018 19 10-K for the year ending 2018. So it was filed in March or 20 April 2019, just a few months before this lawsuit. And this 21 is going to be in your binders, DTX 376. It's on page 19. 22 They saw a decrease in sales in 2018 as compared 23 to 2017. They tried to blame that on us in Mr. MacPherson's 24 testimony. What did he say? "Primarily due to the loss of 25 customer EGUs, shutdown a competitive disadvantage of other</p>
<p style="text-align: center;">1249</p> <p>1 the '147 patent issued in 2012, that they said in this very 2 litigation was being infringed by the refined coal companies 3 made by the Chem-Mod process, and you remember we went 4 through some of those e-mails. And back then, they had a 5 contractual obligation to the EERC back and forth to notify 6 one another of any infringement, and they said nothing. 7 They didn't even send an e-mail, even though they were under 8 a contractual obligation to notify of infringement. The 9 EERC didn't do so either. 10 And then we went through a couple of e-mails 11 from the 2012 to 2014 time frame where instead of saying 12 Chem-Mod was an infringer, they proposed working with them 13 at Joppa and teaming up with them; right? That's DTX 77. 14 That would be in your binders. That's October 11, 2012. 15 You know, that's where -- "We want to work with Chem-Mod at 16 Joppa. We're pleased to provide this." It doesn't say 17 "you're infringing" or "you shouldn't use it" or "we 18 invented that." 19 And then we looked at DTX 112. That's at 20 September 18, 2013. That's where they highlighted teaming 21 up -- or considered teaming up with Chem-Mod. They didn't 22 say, "Hey, they're stealing my stuff." They said, "Hey, 23 let's team up and work with them." 24 Then we looked at DTX 56. That was a 25 December 4, 2014, e-mail. "Great call. Great call.</p>	<p style="text-align: center;">1251</p> <p>1 EGUs." And then revenues, the money, the decrease from the 2 primary year, is due to the loss of customer EGUs. That 3 goes back to the power plants shutting down from 1,200 to 4 400 of these things in five years. And they're trying to 5 blame it on us. 6 The regulation they're talking about -- MATS, 7 MATS, MATS -- is causing the power plants to go out of 8 business, and they're trying to put that on us. And then, 9 you know, is there a word about refined coal on here? And 10 these are thick documents. Nobody can read them all. 11 There's not a word about refined coal in these things, and 12 they couldn't omit information that would make them 13 misleading. Mr. MacPherson testified to that. 14 All right. And then let's jump to page 11. 15 This says, "Our industry could be highly competitive." And 16 you remember we looked at this, the companies with the large 17 sales staff. And they say: 18 "Our ability to compete successfully depends, in 19 part, on our ability to offer superior technology, including 20 our superior team of sales and technical staff." 21 So this was filed in April 2019. They had -- 22 they had disbanded their sales staff. Mr. MacPherson said 23 they let them go. They were blaming that on us. 24 All right. Not only are we not the cause, but 25 they're telling the public we -- "To be successful, we</p>

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1 needed to have a sale -- a superior sales staff," and they
2 don't even have one. How misleading is that? So, you know,
3 this is a risk factor. It's something they swore to the
4 public to tell the truth about. And, you know, wow, they're
5 not even telling the truth back then about the fact that
6 they don't have a sales staff.

7 So let me shift gears for just a minute.

8 Mr. Caldwell spent a huge amount of time in this trial and
9 in his closing -- opening with the boards with stickers,
10 talking about CERT's corporate structure, which is driven by
11 Delaware Corporate Law, and the federal tax code as if it's
12 a crime to comply with the law of this great state and the
13 federal tax code to implement a program passed into law by
14 President Obama and bipartisan in Congress to encourage
15 cleaner burning coal.

16 You remember all that. You remember the sticky
17 boards and the LLCs and all this mystery. Well, when you
18 get your jury instructions -- and you may have picked this
19 up. You may have picked this up in the opening, but have to
20 be careful.

21 On the cover sheet and in Section 2.1 on
22 page 17, there's a plaintiff in this case named MES, MES
23 Inc. Did you hear any evidence about MES Inc.? Where is
24 it? Who is it? What does it do? I searched the
25 transcripts electronically. There was not a single word of

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1 testimony about MES. Not one word about it and why it's a
2 plaintiff in this case. Did it put on a witness? Did you
3 see a picture or hear of an MES office or a single product
4 it sells, single employee? What does it do? No testimony.

5 Why is this mysterious corporation in our courtroom and on
6 your jury instructions? There's no evidence in the record
7 about this entity.

8 And then there's ME2C. We saw some great
9 pictures of the early days. We saw a little bit more of a
10 tanned and more handsome version of Mr. MacPherson, 70-pound
11 totes, and all that stuff. What did you hear about more
12 recently? Did you hear about its customers very much? Did
13 you catch that Mr. Green, after touting the NRG, Talen, and
14 AEP supply agreements, those licenses, the litigation
15 settlement licenses, I asked him, "Well, how much have they
16 sold?" Mr. Green, the details man, had no answer. "I don't
17 know. I don't know." He's telling you their supply
18 agreements, and that's what important, and he couldn't
19 tell -- he couldn't acknowledge or tell us the volume of
20 products sold. No evidence they sold a penny or a nickel
21 under those agreements.

22 The picture is starting to get a little bit
23 clearer. Let's look back at DTX 92, the corporate rework
24 and strategic initiatives, official company document written
25 by Mr. MacPherson himself in late November 2017, six to

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1 nine months after they bought the patents. And you'll
2 remember this is written by the CEO himself. It came in
3 without objection, and it's corporate strategies, strategic
4 initiatives, for a corporate strategic initiative. Right
5 down here. Let me get my pointer.

6 In this second paragraph -- pull that up if you
7 can, Mr. Brown.

8 ME2C tell us in its own words that it has either
9 the Cabot license deal or, quote, "The alternative grounds
10 that a litigious troll --" let me read it:

11 "That of a litigious patent troll route which
12 would see us litigate to the very market we are here to
13 serve, the utilities."

14 And as he testified, the Cabot license failed.
15 Zero royalties in less than two years after he wrote this
16 document. 18 months later, they sued the very market they
17 were here to serve -- Vistra, NRG, Talen, AEP -- and they
18 brought us along for the ride.

19 In their own words, they became a litigious
20 patent troll. And guess what? Our old friends, the sworn
21 10-Ks, complete the picture. Remember, these are sworn to
22 be truthful and complete under oath. They're given to the
23 federal government and to the public so you can rely on
24 them.

25 Let's look at 379, the 2021 10-K. And let's

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1 look at -- Part 1, Item 1. This is Part 1, Item 1. This is
2 the very beginning of it under the business. This is what
3 the business is, on the very top. The business. We have
4 the overview, background, industry background. And then
5 let's -- and then if we jump to page 7, our growth strategy
6 for mercury emissions. And just scroll down a little bit,
7 patent enforcement. Patent enforcement is a growth
8 strategy.

9 "We believe a significant..."
10 This is in their public filings:
11 "... a significant percentage of coal-fired
12 power plants in the US has adopted infringement on our
13 patents. Since 2018 we have engaged a Dallas-based
14 intellectual property and business litigation firm to
15 oversee and spearhead our efforts to protect our
16 intellectual property."

17 And then they go on to describe it. And then
18 when you get down to the bottom:
19 "We have entered into agreements with four of
20 the major defendants."
21 That's our old friends DTX 19, 20, 21, and 23:
22 Vistra, Talen, AEP and NRG. Those settlement agreements
23 that they say are not comparable to this litigation are
24 referenced in their 10-Ks. They're bragging about it, and
25 they don't want you to look at them in this case. They've

<p style="text-align: right;">1256</p> <p>1 come up with some crazy hypothetical number. 2 And then they tell us to look down to Part 1, 3 Item 3 in the legal proceedings. And here they describe -- 4 this is where it gets good -- as a risk factor to the 5 business, to investors. Do you remember all this talk about 6 investors and Wall Street and JPMorgan? 7 Getting fired up now, y'all. 8 They describe litigation as a growth strategy. 9 And look at this: 10 "Investors should note that patent litigation, 11 like most patents and commercial litigation, can be 12 time-consuming and expensive. And although we have already 13 entered into agreements with each of the four major utility 14 defendants in this litigation, such action will continue 15 with respect to the other defendants involved. In fact, we 16 recently received approval from the district judge of the 17 United States District Court of Delaware..." 18 That's where we are. That's this courthouse. 19 "... for the adoption of the recommendation and 20 report of the magistrate judge to allow us to proceed with 21 litigation claims against certain refined coal entities, 22 CERT." 23 These are their sworn statements, y'all. You 24 don't have to believe a word I say. This is in the 10-K as 25 part of the business strategy of this plaintiff. "Investors</p>	<p style="text-align: right;">1258</p> <p>1 Are you as disgusted as I am? Speak the truth. 2 Speak the truth. Give them a defense verdict, a defense 3 verdict to report on their next 10-K. And as we saw, they 4 even reference their Dallas-based firm. 5 So now you know who ME2C's team of sales staff 6 is. They're right here. They've got an army. We've got 7 our little team under there. Have you noticed the gorgeous 8 graphics, the beautiful animations? Where's that coming 9 from? Lawyers -- we lawyers make slides like the ones 10 you've been seeing us do. I mean, they're not that great, 11 but they're okay. These things are gorgeous. Yeah, you've 12 got some Wall Street money with these, you know, beautiful 13 graphics. They are beautiful. 14 And the best part of all this is you don't have 15 to take my word for any of it. It's right here in ME2C's 16 own filings, the public documents. 17 Now, let's talking about the most outrageous 18 story of all, these crazy damages numbers. Mr. MacPherson, 19 on the stand, proclaims he didn't rehearse, like somebody 20 from Wall Street is getting a live feed of the trial 21 transcripts realtime, which can happen. A dollar a ton 22 burned since the day the lawsuit was filed. He got his line 23 out. Mr. Green came right back out and then, all of a 24 sudden, changed his tune. 25 From the day the lawsuit was filed to the</p>
<p style="text-align: right;">1257</p> <p>1 should note --" investors, investment vehicles. You heard 2 all that stuff in not just any litigation, this litigation; 3 this lawsuit. This is a Wall Street securities filing for 4 investors who want to buy ME2C stock and get a piece of the 5 action in this courtroom. It says it right there. 6 You think mom and pops -- you heard that "mom 7 and pop" stuff from Mr. MacPherson. You think they're 8 investing in patent litigation? Have any of you all heard 9 of investing in patent litigation? ME2C is literally 10 keeping Wall Street investors apprised of the blow-by-blow 11 action in this courthouse, this actual lawsuit. 12 So, ladies and gentlemen, the truth comes out. 13 Our plaintiff ME2C and the mystery corporation MES -- ME2C 14 is a publicly traded self-described litigious patent troll 15 whose business growth strategy is patent litigation. 16 Look who's representing Wall Street now. Here 17 in the first state, Delaware, the first state, ME2C has 18 turned an institution that dates back to the Constitution, 19 the right to trial by jury, into a business for Wall Street 20 investors. Are you going to be part of that? That's the 21 question for you. 22 A verdict for ME2C in this case is endorsing 23 litigation as a business, as a growth strategy. It is right 24 there in their 10-Ks. That's what their business is. 25 That's why you didn't hear or see any recent pictures.</p>	<p style="text-align: right;">1259</p> <p>1 applicable damages period, Mr. Green had calculated 2 1.4 million tons for Alistar since the day the case was 3 filed. I showed you all PTX 641, PTX 642. They were 4 submitted to the Court. They were sworn under oath to be 5 true. They had 1.4 million tons, and I went through all 6 that crazy stuff with the timelines as to how these numbers 7 changed, and then they come up with 107,000. 8 And so it's a \$100,000 agreement. It's 100,000 9 bucks, and you've got some real funny business going on as 10 to how you get from 1.4 million to 100,000 tons. And the 11 AJG-Chem-Mod agreement settled every -- you remember those 12 134 entities? Every ton of refined coal ever made was 13 settled by that agreement. See if you can draw that 14 inference. I sure do. 15 In short, as they pointed out, trainloads of 16 coal every day going to a hundred power plants. Trainloads 17 every day for a decade or 8 or 10 years going to power 18 plants. How much tonnage is that? We get a sense from that 19 from DTX 419. You remember this little agreement? 20 Put up DTX 419. 21 The licenses with the big utilities -- this is a 22 nice little summary chart of the licenses. Vistra Corp. Do 23 you remember Mr. Pavlish? He's the EIA data expert. 24 Hundreds of millions of tons. I think Vistra was 4- or 25 500 million tons over an eight-year period for a -- what,</p>

<p style="text-align: right;">1260</p> <p>1 this one was 3.3 million for half a billion tons. Do that 2 arithmetic.</p> <p>3 And then AEP, 400 grand. NRG is the one I'm 4 interested in because it's \$600,000, and that's a big 5 utility. Mr. Pavlish testified ten power plants. It's 20 6 power plants. Mr. Green said he had no dispute with 20 7 power plants. These are big companies. This stuff is not 8 hard to look up. 20 power plants. We've got eight, eight. 9 20 power plants for 600 grand, 30 grand apiece.</p> <p>10 But they like this per ton number, per ton. And 11 \$600,000, remember, divided by a hundred million tons -- 12 that's, like, running way down for Vistra, a big utility 13 with 20 power plants. 6/1000ths of a penny. 6/1000th of a 14 penny. And these are the agreements they bragged about on 15 their 10-Ks to Wall Street, and that's why they're coming in 16 here trying to come up with these totally outrageous 17 fictitious numbers based on hypothetical negotiation.</p> <p>18 And why didn't we bring a damages expert? 19 Because we trust your common sense. You didn't check it at 20 the door. You did not check your common sense at the door. 21 And so this stuff is -- we didn't think we needed to put on 22 an academic. And as Mr. Green said, he did do a 23 thousand-page report. It was kind of mind-blowing to me. I 24 was like, "No, we don't need to put something on like that." 25 This is straightforward. The jury can figure it out. We</p>	<p style="text-align: right;">1262</p> <p>1 sucked into this. Look at the real agreements that they 2 swore about in their -- in their 10-Ks.</p> <p>3 So third grade math. Take a couple hundred 4 million tons. If you were to find the verdict for them, if 5 you want to endorse patent litigation as a business strategy 6 and you want to put your stamp on that, that you think it is 7 appropriate and proper to use the United States District 8 Court for the District of Delaware as a business strategy, 9 as a growth initiative -- don't believe me. It's in their 10 10-Ks. It's right there, sworn to be true.</p> <p>11 If you want to put your stamp on that and you 12 want to award some damages -- a thousandth of a penny; you 13 know? A ton or 10 grand or 20 grand a power plant. What's 14 NRG? 30 grand a power plant? That's the thing. You guys 15 are the jury. You can do anything you want. You can award 16 a dollar, a hundred dollars, \$100,000. You can do anything 17 you want.</p> <p>18 We say, our view, we're confident. That's why 19 we're here. That's why we're fighting. We didn't settle. 20 We didn't settle like AJG and DTE and Gallagher and Chem-Mod 21 and all those guys, and we sure didn't do the funny business 22 that Alistar did. That's fishy as all get-out. The number 23 changing overnight, the number of 1.4 million all of a 24 sudden magically changes in the wee hours before the 25 agreement gets signed? Fishy. Very fishy. You saw the</p>
<p style="text-align: right;">1261</p> <p>1 don't need to put somebody talking about a 12-point 2 <i>Georgia-Pacific</i> multifactor hypothetical negotiation.</p> <p>3 Did he ever give you an explanation of how 4 coal -- do you remember how the licenses cut off on -- his 5 damages just cut off on January 5? You can look at that 6 number that they told you to look at. That's because, after 7 January 5, that coal on that conveyer belt is licensed by 8 NRG for 600 grand.</p> <p>9 THE COURT: Mr. Sykes, you're just under five 10 minutes.</p> <p>11 MR. SYKES: Thank you. Thank you, Your Honor.</p> <p>12 And so somehow, in this hypothetical world 13 that's detached from the real agreements they bragged about 14 in their sworn security filings, the coal on the same 15 conveyer belt -- think about it. These power plants are 16 running 24/7 making our electricity. That coal -- at 11:55, 17 11:58, 11:59 p.m. on January 5th -- according to Mr. Green, 18 is worth a dollar a ton.</p> <p>19 And then somehow, as it's moving into that power 20 plant to perform the two-step process, it magically, 21 somehow, drops to hundreds of millions of tons for 22 600,000 -- you know, six one-thousandths of a penny for the 23 same coal, magically?</p> <p>24 That is the -- that's the mumbo jumbo that's 25 been thrown to you guys. Look at the agreements. Don't get</p>	<p style="text-align: right;">1263</p> <p>1 facts. That's why I dropped my invalidity expert. It was 2 so important to get you guys the truth because I was 3 appalled at what was going on here. And it's in their 4 security filings, this litigation, in this court.</p> <p>5 So going back to the evidence on infringement. 6 I know I wore you all out in the opening, and I apologize 7 for that. It took longer than I thought. And I know some 8 of you seem more worn out than others, but I think I wore 9 you all out.</p> <p>10 Especially made and adapted, same formulas, 11 before and after activated carbon, with and without, before 12 and after the patents. There's no way we could know that 13 was a especially made and adapted. So did we have a 14 reasonable belief as to substantial non-infringing use based 15 upon the millions and millions of tons burned without 16 activated carbon? Heck, yeah, we did. It was reasonable.</p> <p>17 Mr. Erickson, the CEO of the EERC, told you his 18 view, a guy with no dog in the fight. The only 19 disinterested witnesses in this case testified for us. 20 Induced infringement -- did we have a specific intent to 21 make the power plant infringe? Heck, no. No. We didn't 22 intend to cause a power plant to use activated carbon.</p> <p>23 Read your jury instructions carefully. Listen 24 to them very, very carefully when His Honor gives them to 25 you. They're detailed. They're important. They're really</p>

<p style="text-align: center;">1264</p> <p>1 important. And the stuff on state of mind and the knowledge 2 required and the law protecting someone with a reasonable 3 belief that they have substantial non-infringing uses and a 4 reasonable belief of especially made and adapted, that 5 negates the state of mind that they have to prove for 6 infringement.</p> <p>7 So, with that, I'm going to ask you to take 8 these facts and to speak the truth speak the truth. Speak 9 the truth. Answer "no" on every one of those boxes on 10 contributory and inducement and be done with it and enter a 11 judgment for defendants. Thank you.</p> <p>12 THE COURT: Thank you, Mr. Sykes. 13 Mr. Caldwell, lastly, I'll call on you for your 14 rebuttal closing. You have 13 minutes and 6 seconds. As I 15 did with Mr. Sykes, I'll let you know when you get to five 16 minutes.</p> <p>17 MR. CALDWELL: Thank you, Your Honor. May I 18 proceed?</p> <p>19 THE COURT: You may. 20 MR. CALDWELL: Ladies and gentlemen of the jury, 21 wow, so we just tried a case for four days. And here on 22 Day 5, what you hear is this impassioned argument that this 23 is some Wall Street company that's doing patent litigation 24 as a business. 25 What evidence of that is there in the record?</p>	<p style="text-align: center;">1266</p> <p>1 do this?" He's yelling at you, "I'm getting impassioned." 2 Look for that anywhere in the jury instructions, anywhere on 3 the verdict form. That was ridiculous and offensive to 4 Mr. Pavlish and Mr. MacPherson, who have been trying hard to 5 make this business work for decades now. Unbelievable. 6 Now, we started through a whole lot of different 7 things. I'm not sure where to go to, but I believe one 8 argument that he started off with is he's talking about this 9 Tom Erickson. He's like, "Look, we've got a neutral guy 10 that says you would not use bromine and activated carbon," 11 and that's supposed to be their defense. 12 This is why I started with it. Like, literally 13 they are down to an argument that a guy who works at the 14 EERC says you would not use the two things together when we 15 have just done a trial on four days of them using the two 16 things together. 17 Now, can I see slide, I think, 340. There's a 18 few things that I want to show you. This is from the 19 Court's instructions. Do you remember how you kept getting 20 this argument? "We didn't cause them to buy their 21 baghouse." Do you remember that? This is the Court's 22 description of what it means to infringe. 23 And the Court's instructions are actually going 24 to tell you, for a claim that covers a process of making a 25 round cake, it would recite, "Making cake batter, pouring</p>
<p style="text-align: center;">1265</p> <p>1 There's none. What he showed you was a 10-K where 2 Mr. MacPherson said, "That's a path we can go down." What 3 did he show you before that? Where ME2C had tried to go to 4 the plants in 2012. He showed you we tried to go to the 5 plants in 2012. We want to get involved in this. We tried 6 to go to the plants in 2014. We want to get involved in 7 this. We tried repeatedly to sell. We had a sales staff. 8 We had to let them go because we couldn't afford it, and 9 then he makes fun of the fact that it says we would need a 10 sales staff to be more successful at selling. 11 And then it says we have an option to be a 12 litigious patent troll. Remember what the agreement with 13 NRG distinctly just flashed up there. They are supply 14 agreements because they are trying -- they don't want to be 15 in a litigious business. They got shut out of the industry 16 because people never cared about them, never cared about 17 their invention, and were infringing. And they tried to do 18 it commercially and then had to bring a lawsuit once the 19 patents issued to get other people to respect their 20 intellectual property, and that's why the courts exist. 21 And here is what I would suggest to you: Think 22 about what he just argued to you, and look for it on the 23 verdict form or in the Court's jury instructions. 24 Literally, this lawyer said, "I tell you what. You want to 25 send a signal that these people can come use the Courts to</p>	<p style="text-align: center;">1267</p> <p>1 the batter into a round cake pan, and baking it in an oven." 2 What does that not require? It doesn't require 3 that you make them go shop for ovens, and that's why -- 4 that's why this argument is absolutely ridiculous. It is 5 not that they -- there's no requirement that we prove that a 6 coal plant go and install new equipment after our patents 7 issue or that it be specialized equipment, and that's not in 8 the instructions anywhere. It is pure lawyer argument. 9 What matters is did they go through the process steps once 10 they had knowledge of the patents. This argument is 11 preposterous. 12 Then you heard, "Well, they keep talking about 13 knowledge, not intent. Knowledge. Knowledge is no part of 14 the inducement, no part in the inducement instruction." 15 That's what he told you. And, look, guess what? They took 16 an affirmative action. Yes, they paid people to take the 17 coal. They knew of the asserted patent or showed willful 18 blindness to it. They knew or showed willful blindness that 19 the actions of the power plant would infringe, and then the 20 actions actually caused the power plant to perform the 21 steps. 22 So you want to talk about who's on the up-and-up 23 or who's trying to mislead you? They showed you knowledge. 24 Knowledge has no part of intent. That's just what you 25 heard. Got to read the jury instructions. And in these</p>

1268

1 jury instructions, when you get to the section that says
2 induced infringement, it's a page and a half. What he is
3 doing is he's picking out one little element from the bottom
4 of that instruction and saying this alone is not sufficient,
5 like the fact that the power plants happen to do the steps
6 is not sufficient.
7 That's right. It's not a matter of they
8 automatically have to pay just because some random power
9 plant happened to do the steps. We had to prove, and did,
10 that they caused that. That's what's on the court's
11 instructions for inducement. So when he's showing you just
12 some excerpted portion that says, it's not enough that they
13 have to prove the steps, the reason he's showing you that is
14 he's pretending it's a defense. He doesn't want to know
15 that what converts it to an infringement verdict against
16 them is the actual legal test that the Court is going to
17 give you. So don't fall for this nonsense where you get one
18 little snippet out of the instructions. That's why it's
19 very important to rely on the Court and why I kept pointing
20 to the Court on that.
21 You know, I don't mean to lead back to this, but
22 it's, like, deeply offensive that he's talking about, oh,
23 there's this litigation deal. Do you remember right before
24 that he told you we wanted to try to work with Chem-Mod and
25 they shut us out?

1269

1 Do you think the tax program is open to all of
2 us? No. You know what happens? Chem-Mod who worked with
3 these guys before on other tax programs, comes and invites
4 just them, and the law ends up with this special requirement
5 that you had to have your thing in place by late 2011. So
6 it's just those guys, just the inside circle of people who
7 did it right then at the end of 2011 and built their
8 equipment, and they can't invite anybody else to the party.
9 They're the only ones who don't have to pay the taxes and
10 the rest of us do.
11 Now, you want to judge credibility on who's
12 being consistent? That's what you just heard. Think about
13 the arguments when I'm talking about who's being consistent.
14 What did you just hear? How is that consistent with
15 anything that has come up with the case? These little
16 snippets, did they ask Mr. MacPherson, are you a patent
17 troll? No. They admitted a document so he could come back
18 later and not give any explanation or evidence on it.
19 Wonder why that is. There's crystal clear evidence that the
20 things that are actually on the verdict form for you guys
21 that we have proven liability.
22 Can I see slide 46, please, Mr. Diaz. I'm going
23 to tell you it's probably in the other deck and the number
24 may have changed. So tell you what, can I see slide 335.
25 Remember, they keep saying, we sold all this

1270

1 other coal to Intermountain. He cites the other
2 depositions. It's Finlinson and Kuennen and we cited all
3 those. Guys, those are other plants that used bituminous
4 coal, didn't use activated carbon. So he's like, we brought
5 you this evidence of the witnesses, their these third
6 parties, really rely on it. But the Court's instruction and
7 the instruction that their corporate rep knows is right is
8 that when you evaluate what coal matters for whether there's
9 a substantial non-infringing use, you're looking at the coal
10 that is used in the accused process after the infringement
11 period starts. That's it. You don't look at what they did
12 before, and that makes sense; right?
13 So let's say the court reporter comes up with an
14 amazing invention that relates to sitting in a chair and
15 it's super comfortable for your spine all day.
16 THE COURT: Four and a half minutes.
17 MR. CALDWELL: They file the application, and
18 when they file the application it takes quite a while for it
19 to be issued, but someone else had heard about or saw the
20 published application and starting cranking it out in the
21 meantime. Are they scot-free now that your patent comes out
22 because they say, oh, no, I'm going to keep using your
23 design that I started before the Patent Office issued your
24 patent? It doesn't even make sense.
25 Yes, there's not a property right that you can

1271

1 stop someone or get a license fee until it issues, that's
2 true, but you don't check your common sense at the door.
3 Once they give you the property right, from then on it's not
4 a defense to just simply say, "Well, yes, of course I knew
5 about your patent and I knew I was meeting the claim, but
6 I'm scot-free because I don't respect your patent" and keep
7 plowing forward doing the exact same thing over and over and
8 over.
9 He makes this comment about we're not good at
10 websites because we couldn't find something that says what a
11 plant does. Here's the problem -- and this is why we have
12 to look at all the entities -- the problem is, who are we
13 supposed to accuse? He keeps making fun of the series of
14 complaints. Who are we supposed to accuse? There's no
15 place we can go and find out that what their witness called
16 a made-up word, Senescence, is the company that's servicing
17 the W.A. Parish plant. There is no website we can find
18 that. So all this complaint nonsense is ridiculous.
19 Was it 341 or 341 we had? Can I see 341,
20 Mr. Diaz.
21 From the very first complaint -- so this is the
22 one that I showed you the other day in cross that we had
23 alleged that they knew what was going on and then it goes on
24 to say induced and contributory. From the very first
25 complaint, this was in the very first complaint. So all

<p style="text-align: center;">1272</p> <p>1 this stuff about we're confused as to this other stuff, it's 2 because he keeps not showing you we made the exact same 3 allegation from the very first complaint. And all that 4 happened later is they finally had to tell us the 5 information that only they knew about their corporate 6 organization, and that's why there are amendments. 7 I've already showed you the induced 8 infringement. 9 So this is where in the original complaint, 10 Docket Number 1, we had gone through the entities in 11 sections 271(b) and 271(c) are the legal authority for 12 induced and contributory infringement, detailed infringement 13 from Day 1. So that was a complete distraction and total 14 nonsense. 15 Then you heard about who's this MES, we've never 16 heard of this MES. The exact page he was showing you tells 17 you why. From the Court's original instructions in this 18 case, the Court said we'll be referring to Midwest Energy 19 Emissions Corp. and MES as ME2C for the plaintiff as we have 20 from the beginning. So he's acting like, aha, guess what, 21 there's some nefarious actor in their corporate structure. 22 Don't you think if there was something untoward about that 23 they might have asked somebody a question about it? If 24 somebody comes back and is ambushing you with an 25 out-of-context page for something that nobody thought was</p>	<p style="text-align: center;">1274</p> <p>1 our staff will have to talk to lawyers about the exhibits, 2 and we'll bring you back in and give you final jury 3 instructions and you can deliberate. 4 Let's have the jury brought out for a ten-minute 5 break. 6 (The jury exited the courtroom.) 7 THE COURT: We'll get started no later than 8 11:25. The Court stands in recess. Thank you. 9 (A recess was taken, after which the following 10 proceedings were had:) 11 (The jury entered the courtroom.) 12 THE COURT: Members of the jury, now it's time 13 for me to instruct you about the law that you must follow in 14 deciding this case. Each of you have been provided with a 15 copy of these instructions. You can read along as I deliver 16 them if you prefer. 17 I'll start by explaining your duties and the 18 general rules that apply in every civil case. Then I'll 19 explain some rules you must use in evaluating particular 20 testimony and evidence. 21 Then I will explain the positions of the parties 22 and the law you will apply in this case. And last, I'll 23 explain the rules you must follow during your deliberations 24 in the jury room and the possible verdicts you may return. 25 Please listen very carefully to everything I</p>
<p style="text-align: center;">1273</p> <p>1 worth ten seconds of questioning, what does that say to you 2 about the credibility of the parties? The Court told you 3 how we would be referring to them from the very beginning. 4 He's looking at that document when he makes the argument to 5 you we've hidden this crazy company. 6 And Mr. MacPherson told you he had investors and 7 that's why he has to stand up for their intellectual 8 property because if you're the little guy and these guys and 9 their tax buddies run one of these organizations and they 10 only invite each other and it shuts you out of the business, 11 what are you supposed to do? Think about it. He wants 12 people to walk a mile in their shoes. Walk a mile in ours. 13 Walk 20 years worth of miles in Mr. Pavlish's shoes. What 14 is he supposed to do if they shut us out of their business 15 and go to the plant and say, "Do not look their way. I will 16 pay you to burn my coal"? So yeah, I'll tell you what, we 17 agree about one thing, and that is you do not check your 18 common sense when you go back to the jury room. 19 THE COURT: Mr. Caldwell, you're at your time. 20 MR. CALDWELL: Ladies and gentlemen of the jury, 21 thank you very much. We look forward to your verdict. 22 THE COURT: All right. Thank you, counsel for 23 both sides. All right. Ladies and gentlemen, what we're 24 going to do is take a ten-minute break so you guys with use 25 the restroom and stretch your legs and folks here can too,</p>	<p style="text-align: center;">1275</p> <p>1 say. 2 You'll have a written copy of these instructions 3 with you in the jury room for your reference during your 4 deliberations. You will also have a verdict form which will 5 list the questions you must answer to decide the case. 6 You have two main duties as jurors. The first 7 is decide what the the facts are from the evidence that you 8 saw and heard in court. Deciding what the facts are is your 9 job, not mine, and nothing that I have said or done during 10 this trial was meant to influence your decision about the 11 facts in any way. You are the sole judges of the facts. 12 Your second duty is to take the law that I give 13 you, apply it to the facts, and then decide under the 14 appropriate burden of proof which party should prevail on 15 any given issue. It's my job to instruct about the law, and 16 you're bound by the oath you took at the beginning of the 17 trial to follow the instructions I give you even if you 18 personally disagree with them. This includes the 19 instructions that I gave you before and during the trial and 20 these instructions. All of these instructions are 21 important, and you should consider them together as a whole. 22 Perform these duties fairly. Do not guess or 23 speculate, and don't let any bias or sympathy or prejudice 24 you may feel toward one side or the other influence your 25 decision in in way.</p>

<p style="text-align: center;">1276</p> <p>1 You must make your decision based only on the 2 evidence that you saw and heard here in court. Do not let 3 rumors, suspicions, or anything else that you may have seen 4 or heard outside of court influence your decision in any 5 way.</p> <p>6 The evidence in this case includes only what the 7 witnesses said while they were testifying under oath, 8 including deposition transcript testimony that has been 9 played by video, the exhibits that I allowed into evidence, 10 and the stipulations to which the parties agreed.</p> <p>11 Certain charts and graphics have been used to 12 illustrate testimony from witnesses. Unless I have 13 specifically admitted them into evidence, these charts and 14 graphics are not themselves evidence, even if they refer to 15 or identify or summarize evidence, and so you will not have 16 these demonstratives in the jury room.</p> <p>17 Nothing else is evidence. The lawyers' 18 statements and arguments are not evidence. The arguments of 19 the lawyers are offered solely as an aid to help you in your 20 determination of the facts. Their questions and objections 21 are not evidence. My legal rulings are not evidence. You 22 should not be influenced by a lawyer's objection or by my 23 ruling on the objection. Any of my comments and questions 24 are not evidence.</p> <p>25 During the trial, I may not have let you hear</p>	<p style="text-align: center;">1278</p> <p>1 the direct and circumstantial evidence. The law makes no 2 distinction between the weight that you should give to 3 either one, nor does it say that one is any better evidence 4 than the other. You should consider all the evidence, both 5 direct and circumstantial, and give it whatever weight you 6 believe it deserves.</p> <p>7 You should use your common sense in weighing the 8 evidence. Consider it in light of your everyday experience 9 with people and events, and give it whatever weight you 10 believe it deserves. If your experience tells you that 11 certain evidence reasonably leads to a conclusion, then 12 you're free to reach that conclusion.</p> <p>13 A further word about statements of counsel and 14 arguments of counsel. The attorneys' statements and 15 arguments are not evidence. Instead, their statements and 16 arguments are intended to help you review the evidence 17 presented.</p> <p>18 If you remember evidence differently from the 19 way it was described by the attorneys, you should rely on 20 your own recollection.</p> <p>21 You are the sole judges of each witness's 22 credibility. You may believe everything a witness says or 23 part of it or none of it. You should consider each 24 witness's means of knowledge; strength of memory; 25 opportunity to observe; how reasonable or unreasonable the</p>
<p style="text-align: center;">1277</p> <p>1 the answers to some of the questions that the lawyers asked. 2 I also may have ruled that you could not see some of the 3 exhibits that the lawyers wanted you to see. And sometimes 4 I may have ordered you to disregard things you saw or heard 5 or that I struck from the record. You must completely 6 ignore all these things. Do not speculate about what a 7 witness might have said or what an exhibit might have shown. 8 These things are not evidence, and you are bound by your 9 oath not to let them influence your decision in any way. 10 Make your decision based only on the evidence as I have 11 defined it here and nothing else.</p> <p>12 You may have heard the terms "direct evidence" 13 and "circumstantial evidence."</p> <p>14 "Direct evidence" is simply evidence like the 15 testimony of an eyewitness which, if you believe it, 16 directly proves a fact. If a witness testified that he saw 17 it raining outside, and you believe him, that would be 18 direct evidence that it was raining.</p> <p>19 "Circumstantial evidence" is simply a chain of 20 circumstances that indirectly proves a fact. If somebody 21 walked into the courtroom wearing a raincoat covered with 22 drops of water and carrying a wet umbrella, that would be 23 circumstantial evidence from which you could conclude that 24 it was raining.</p> <p>25 It's your job to decide how much weight to give</p>	<p style="text-align: center;">1279</p> <p>1 testimony is; whether it's consistent or inconsistent; 2 whether it's been contradicted; the witness's biases, 3 prejudices, or interests; the witness's manner or demeanor 4 on the witness stand; and all circumstances that, according 5 to the evidence, could affect the credibility of the 6 testimony.</p> <p>7 In determining the weight to give the testimony 8 of a witness, you should ask yourself whether there was 9 evidence tending to prove that the witness testified falsely 10 about some important fact or whether there was evidence that 11 at some other time the witness said or did something or 12 failed to say or do something that was different from the 13 testimony he gave at trial. You have the right to distrust 14 such a witness's testimony in other particulars, and you may 15 reject all of some of the testimony of that witness or give 16 it such credibility as you may think it deserves.</p> <p>17 You should remember that a simple mistake by a 18 witness does not necessarily mean that the witness was not 19 telling the truth. People may tend to forget some things or 20 remember some things inaccurately. If a witness has made a 21 misstatement, you must consider whether it was simply an 22 innocent lapse of memory or an intentional falsehood, and 23 that may depend on whether with it concerns an important 24 fact or an unimportant detail.</p> <p>25 One more point about the witnesses. Sometimes</p>

<p style="text-align: center;">1280</p> <p>1 jurors wonder if the number of witnesses who testified makes 2 any difference.</p> <p>3 Do not make any decisions based only on the 4 number of witnesses who testified. What's more important is 5 how believable the witnesses are and how much weight you 6 think their testimony deserves. Concentrate on that, not 7 the numbers.</p> <p>8 Expert testimony is testimony from a person who 9 has a special skill or knowledge in some science, 10 profession, or business. This skill or knowledge is not 11 common to the average person but has been acquired by the 12 expert through special study or experience.</p> <p>13 In weighing expert testimony, you may consider 14 the expert's qualifications, the reasons for the expert's 15 opinions, and the reliability of the information supporting 16 the expert's opinions, as well as factors I have previously 17 mentioned for weighing testimony of any other witness. 18 Expert testimony should receive whatever weight and credit 19 you think appropriate, given all the other evidence in the 20 case. You're free to accept or reject the testimony of 21 experts, just as with any other witness.</p> <p>22 Deposition testimony is out-of-court testimony 23 that's given under oath and is entitled to the same 24 consideration you would give it had the witness personally 25 appeared in court.</p>	<p style="text-align: center;">1282</p> <p>1 The remainder of the exhibits, including charts, 2 PowerPoint presentations and animations, were offered to 3 help illustrate the testimony of the various witnesses. 4 These illustrative exhibits, called "demonstrative 5 exhibits," will not be in the jury room, and they have not 6 been admitted. They are not, and they should not be 7 considered as, evidence. Rather, it's the underlying 8 testimony of the witness that you heard when you saw the 9 demonstrative exhibits that is the evidence in this case.</p> <p>10 In some instances, certain charts and summaries 11 may have been received into evidence to illustrate 12 information brought out in the trial. You may use these 13 charts and summaries as evidence, even though the underlying 14 documents and records may not be there. You should give 15 them only such weight as you think they deserve.</p> <p>16 Now, in any legal action, facts must be proven 17 by a required standard of evidence, which is known as the 18 "burden of proof." In a case such as this, the burden of 19 proof is called "preponderance of the evidence."</p> <p>20 ME2C is accusing each Defendant of patent 21 infringement. ME2C has the burden of proving for each 22 Defendant its claims and the amount of its money damages, if 23 any, by a preponderance of the evidence. That means that 24 ME2C has to produce evidence which, when considered in light 25 of all the facts, leads you to believe that what ME2C claims</p>
<p style="text-align: center;">1281</p> <p>1 During the trial, certain testimony was 2 presented to you by the reading of a deposition transcript 3 or the playing of video excerpts from a deposition. If 4 played by video, the deposition testimony may have been 5 edited or cut to exclude irrelevant testimony. You should 6 not attribute any significance to the fact that the 7 deposition videos may appear to have been edited.</p> <p>8 You may have heard answers that the parties gave 9 in response to written questions submitted by the other 10 side. These written questions are called "interrogatories." 11 The written answers were given in writing and under oath 12 before the trial.</p> <p>13 You must consider the parties' answers to 14 interrogatories in the same manner as if the answers were 15 made from the witness stand.</p> <p>16 The parties have stipulated that certain facts 17 are not disputed or have agreed to or stipulated that they 18 are true, and some of those stipulations have been read to 19 you during this trial, sometimes referred to as "uncontested 20 facts" or "requests for admission." You should treat these 21 facts as having been proved for the purposes of this case.</p> <p>22 During the course of the trial, you've seen many 23 exhibits. Many of these exhibits were admitted as evidence. 24 You will have these admitted exhibits in the jury room to 25 consider as evidence for your deliberations.</p>	<p style="text-align: center;">1283</p> <p>1 is more likely true than not. To put it differently, if you 2 were to put the evidence of ME2C and a defendant concerning 3 infringement on opposite sides of a scale, the evidence 4 supporting ME2C's claims would have to make the scales tip 5 somewhat on its side in each instance. If the scale should 6 remain equal or tip in favor of that defendant, you must 7 find for that defendant.</p> <p>8 If you find that a defendant infringed one or 9 more of ME2C's patents then as a separate question, ME2C has 10 also asserted that had the infringement of the patents was 11 willful. ME2C has the burden of proving for each Defendant 12 this additional contention by a preponderance of the 13 evidence.</p> <p>14 Some of you may have heard the phrase "proof 15 beyond a reasonable doubt." That burden of proof applies 16 only in criminal cases, and it has nothing to do with a 17 civil case like this one. You should, therefore, not 18 consider it in this case.</p> <p>19 You may use notes taken during trial to assist 20 your memory. However, as I instructed you at the beginning 21 of this case, you should use caution in consulting your 22 notes. There's generally a tendency, I think, to attach 23 undue importance to a matter which one has written down. 24 Some testimony which is considered unimportant at the time 25 presented, and thus not written down, takes on greater</p>

<p style="text-align: right;">1284</p> <p>1 importance later in the trial in light of all the evidence 2 presented. Therefore, your notes are only a tool to aid 3 your own individual memory, and you should not compare notes 4 with other jurors in determining the content of any 5 testimony or in evaluating the importance of any evidence. 6 Your notes are not evidence, and are by no means a complete 7 outline of the proceedings or a list of the highlights of 8 trial.</p> <p>9 Above all, your memory should be your greatest 10 asset when it comes time to deliberate and to render a 11 decision in this case.</p> <p>12 I'll now review for you the parties in this 13 action and the positions of the parties that you'll have to 14 consider in reaching your verdict.</p> <p>15 The plaintiffs in case are Midwest Energy 16 Emissions, Corp., and MES Inc., which I may refer to as 17 "ME2C" or "Plaintiff."</p> <p>18 The defendants in this case are CERT 19 Operations RCB, LLC; CERT Operations II, LLC; 20 CERT Operations IV, LLC; CERT Operations V, LLC; Senescence 21 Energy Products, LLC; Bascobert (A) Holdings, LLC; 22 Buffington Partners, LLC; Larkwood Energy, LLC; Rutledge 23 Products; Cottbus Associates, LLC; Springhill Resources, 24 LLC; and Marquis Industrial Company, LLC. I may refer to 25 this group of entities as "the defendants."</p>	<p style="text-align: right;">1286</p> <p>1 of one or more of the asserted claims of the '114 and '517 2 patents.</p> <p>3 Third, that if you decide that ME2C has proven 4 that a defendant infringed one or more of the asserted 5 claims of the patents, whether ME2C has proven by a 6 preponderance of the evidence that defendant willfully 7 infringed that claim.</p> <p>8 And last, if you decide that ME2C has proven 9 that a defendant infringed a claim, what monetary damages 10 ME2C has proven by a preponderance of the evidence that it 11 is entitled to.</p> <p>12 I'll provide more detailed instructions on each 13 of the issues you must decide elsewhere in these jury 14 instructions.</p> <p>15 At the beginning of trial, I gave you some 16 general information about patents and the patent system and 17 a brief overview of the patent laws relevant to this case. 18 I'll now give you a more detailed instruction about the 19 patent laws that specifically relate to this case.</p> <p>20 Before you can decide many of the issues in the 21 case, you'll need to understand the role of patent claims.</p> <p>22 The patent claims are the numbered paragraphs at 23 the end of each patent. The claims are important because 24 it's the words of the claims that define what a patent 25 covers. Only the claims of a patent can be infringed.</p>
<p style="text-align: right;">1285</p> <p>1 There are two patents at issue in this case: 2 United States Patent Numbers 10,343,114 and 10,596,517. You 3 heard the lawyers and witnesses in this case refer to ME2C's 4 patents as the '114 and '517 patents and/or the "ME2C 5 patents." Copies of ME2C's patents have been given to you.</p> <p>6 ME2C contends that each Defendant induced and 7 contributed to the infringement of the ME2C patents, that 8 that infringement was willful, and that ME2C is entitled to 9 damages.</p> <p>10 Each Defendant denies that it infringed the ME2C 11 patents, or that it did so willfully. Each Defendant also 12 denies that ME2C is entitled to recover any damages relating 13 to the patents.</p> <p>14 I'll now summarize the patent issues that you 15 must decide and for which I'll provide instructions to guide 16 your deliberations. The specific questions you must answer 17 are listed on the verdict sheet that you will be given. 18 Here are the issues you must decide:</p> <p>19 First, whether ME2C has proven by a 20 preponderance of the evidence that each defendant induced 21 infringement by a power plant of one or more of the asserted 22 claims of the '114 and '517 patents.</p> <p>23 Second, whether ME2C has proven by a 24 preponderance of the evidence that each of the CERT RC 25 defendants contributed to the infringement by a power plant</p>	<p style="text-align: right;">1287</p> <p>1 The claims are intended to define, in words, the 2 bounds of an invention. The figures and the text in the 3 rest of the patent provide a description and/or examples of 4 the invention and provide a context for the claims, but it 5 is the claims that define the breadth of the patent's 6 coverage. Each of the asserted claims must be considered 7 individually.</p> <p>8 In patent law, the requirements of a claim are 9 often referred to as "claim elements" or "claim 10 limitations." For example, a claim that covered a process 11 for making a round cake may recite the steps of: First 12 making cake batter; second, pouring the batter into a round 13 cake pan; and third, baking it in an oven.</p> <p>14 Each of the three steps is a separate limitation 15 of the claim. When a process meets each and every 16 limitation of a claim, that claim is said to cover that 17 process, and that process is said to fall within the scope 18 of the claim.</p> <p>19 Each claim may cover more or less than another 20 claim. Therefore, what a patent covers depends, in turn, on 21 what each of its claims covers.</p> <p>22 You'll first need to understand what each claim 23 covers in order to decide whether there's infringement of 24 the claim.</p> <p>25 It's the Court's duty under the law to define</p>

<p style="text-align: right;">1288</p> <p>1 what the patent claims mean. As I instructed you at the 2 beginning of the case, I've made my determinations, and I'll 3 now instruct you on the meaning or construction of the claim 4 terms.</p> <p>5 You must apply the meaning that I give in each 6 patent claim to decide if the claim is infringed. You must 7 accept my definitions of these words in the claims as being 8 correct. You must ignore any different definitions used by 9 the witnesses or the attorneys.</p> <p>10 You're advised that the following definition for 11 the following term must be applied:</p> <p>12 For Claim 25 in the '114, the claim term 13 "injecting a sorbent material comprising activated carbon 14 into the mercury-containing gas downstream of the combustion 15 chamber."</p> <p>16 The construction for that claim term is 17 "injecting a sorbent material comprising activated carbon 18 into the mercury-containing gas downstream of, and from 19 outside, the combustion chamber."</p> <p>20 For any words in the claim for which I have not 21 provided you a definition, you should apply the plain and 22 ordinary meaning to a person of ordinary skill in the art.</p> <p>23 Now, this case involves two types of patent 24 claims: Independent claims and dependent claims.</p> <p>25 An independent claim does not refer to any other</p>	<p style="text-align: right;">1290</p> <p>1 methods that have additional elements.</p> <p>2 If you find, for example, that the accused 3 conduct includes all of the elements of a particular claim, 4 then the fact that the accused conduct might include 5 additional steps would not avoid infringement of the claim.</p> <p>6 I'll now instruct you how to decide whether ME2C 7 has proven by preponderance of the evidence, that is, that 8 it is more likely than not, that Defendants infringed the 9 asserted claims of the patents-in-suit.</p> <p>10 As I stated earlier, ME2C has alleged 11 infringement of the '114 and '517 patents in this case.</p> <p>12 A claim of a patent may be infringed directly or 13 indirectly. As explained further in the following 14 instructions, direct infringement results if the accused 15 process is covered by at least one claim of the patent. 16 Indirect infringement results if a defendant induces another 17 to infringe a claim of a patent or contributes to the 18 infringement of a claim of a patent by another.</p> <p>19 ME2C does not allege that Defendants directly 20 infringed any asserted claim. Instead, ME2C alleges that 21 each Defendant induced one or more power plants to infringe 22 one or more of the asserted claims, and that the CERT RC 23 defendants contributed to infringement of those claims by 24 power plants.</p> <p>25 A finding of induced infringement or</p>
<p style="text-align: right;">1289</p> <p>1 claim in the patent and sets forth all of the requirements 2 that must be met in order to be covered by that claim. 3 Thus, it's not necessary to look at any other claim to 4 determine what an independent claim covers.</p> <p>5 In this case, Claim 25 of the '114 patent and 6 Claim 1 of the '517 patent are each independent claims. An 7 independent claim must be read separately from the other 8 claims to determine the scope of the claim.</p> <p>9 Now, the remaining two asserted claims are 10 dependent claims. A dependent claim does not itself recite 11 all of the requirements of the claim but refers to another 12 claim or claims for some of its requirements. In this way, 13 the claim depends on another claim or claims.</p> <p>14 A dependent claim incorporates all of the 15 requirements of the claims to which it refers, and then the 16 dependent claim then adds its own additional requirements. 17 To determine what a dependent claim covers, it's necessary 18 to look at both the dependent claim and any other 19 independent claims to which it refers.</p> <p>20 The beginning portion, or preamble, of the 21 asserted claims has the word "comprising." The word 22 "comprising" means "including the following but not 23 excluding others." A claim that uses the word "comprising" 24 or "including" is not limited to methods having only the 25 elements that are recited in the claim, but also covers</p>	<p style="text-align: right;">1291</p> <p>1 contributory infringement requires a showing that someone 2 has directly infringed. ME2C alleges power plants that are 3 Defendants' customers have directly infringed one or more 4 asserted claims.</p> <p>5 Now, to find that a power plant has directly 6 infringed an asserted claim, you must compare the accused 7 conduct of that power plant with the asserted claim using my 8 construction of the claims -- instruction concerning the 9 meaning of the terms that patent claims use.</p> <p>10 A patent claim is directly infringed only if the 11 power plant's conduct includes each and every step recited 12 in the patent claim. If a power plant does not perform one 13 or more steps recited in the claim, then the power plant 14 does not directly infringe that claim.</p> <p>15 You must determine direct infringement with 16 respect to each patent claim individually. The accused 17 conduct should be compared to the invention described in 18 each claim it is alleged to infringe.</p> <p>19 A power plant can directly infringe a patent 20 without knowing of the patent or without knowing that what 21 the power plant is doing is patent infringement. Thus, 22 while ME2C must prove that a defendant knew of or was 23 willfully blind to a patent to prove induced or contributory 24 infringement, ME2C is not required to prove that any power 25 plant was aware of any of the asserted ME2C patents or that</p>

<p style="text-align: right;">1292</p> <p>1 the power plant knew that its conduct directly infringed. 2 ME2C alleges that defendants are liable for 3 infringement by actively inducing power plants to engage in 4 acts that directly infringe one or more claims of the 5 asserted ME2C patents. You must determine whether there has 6 been active inducement on a defendant-by-defendant and 7 claim-by-claim basis. 8 This may be shown by direct or circumstantial 9 evidence. A given defendant is liable for active inducement 10 of a claim only if ME2C proves by a preponderance of the 11 evidence each of the following: 12 First, that the defendant took some affirmative 13 action intending to cause a power plant to directly infringe 14 one or more asserted claims of the asserted ME2C patents; 15 Second, that the defendant knew of the asserted 16 ME2C patent or showed willful blindness to the existence of 17 the asserted ME2C patent at that time; 18 Third, that the defendant knew, or showed 19 willful blindness, that the actions of the power plant would 20 infringe the asserted claim; 21 And four, that the defendants' actions actually 22 caused the power plant to perform each and every step of the 23 asserted claim. 24 To find willful blindness of infringement, the 25 defendant must have believed that there was a high</p>	<p style="text-align: right;">1294</p> <p>1 sufficient that the defendant was aware of the actions of 2 the power plant that allegedly constitute the direct 3 infringement. 4 Rather, you must find that the defendant 5 specifically intended that the power plant would infringe 6 the patent claim at issue, or that the defendant believed 7 there was a high probability that the power plant would 8 infringe ME2C's patents but remained willfully blind to the 9 infringing nature of the power plant's acts in order to find 10 inducement of infringement. 11 ME2C also asserts that each CERT RC defendant 12 has contributed to infringement by the power plants. As 13 with induced infringement, you must determine whether there 14 has been contributory infringement by each of the CERT RC 15 defendants on a defendant-by-defendant and claim-by-claim 16 basis. 17 The CERT RC defendants are Senescence Energy 18 Products, LLC; Bascobert (A) Holdings, LLC; Buffington 19 Partners, LLC; Larkwood Energy, LLC; Rutledge Products, LLC; 20 Cottbus Associates, LLC; Springhill Resources, LLC; and 21 Marquis Industrial Company, LLC. 22 There is not a contributory infringement claim 23 against the CERT Operations defendants. 24 A given CERT RC defendant is liable for 25 contributory infringement of a given claim only if ME2C</p>
<p style="text-align: right;">1293</p> <p>1 probability that the actions of its power plant customer 2 infringed an asserted ME2C patent and taken deliberate steps 3 to avoid learning of that customer's infringement. A belief 4 that a patent is invalid is not a defense to induced 5 infringement. 6 The mere fact, if true, that a defendant knew or 7 should have known there was a substantial risk that a power 8 plant would infringe a claim would not be sufficient for 9 active inducement of infringement. 10 Inducing infringement cannot occur 11 unintentionally. It's not enough for a defendant to cause a 12 power plant to engage in conduct that happens to amount to 13 direct infringement. 14 Rather, to have induced infringement, the 15 defendant must have taken an affirmative act that caused a 16 power plant to engage in conduct that the defendant knew -- 17 or believed with a high probability but deliberately avoided 18 confirming -- was direct infringement. 19 To find that a power plant has directly 20 infringed, you must compare the accused conduct with each 21 patent claim ME2C asserts is infringed using my instruction 22 as to the meaning of the terms the patent claims use. 23 In order to establish inducement of 24 infringement, it is not sufficient that the defendants' 25 power plant customer directly infringed the claim, nor is it</p>	<p style="text-align: right;">1295</p> <p>1 proves by a preponderance of the evidence each of the 2 following: 3 First, that a power plant has directly infringed 4 one or more claims of an asserted ME2C patent; 5 Second, that the defendants sold that power 6 plant refined coal made with calcium bromide; 7 Third, that the defendant knew that the refined 8 coal supplied to that power plant, as sold and delivered 9 during the damages period, is not a staple article or 10 commodity of commerce capable of substantial non-infringing 11 use; 12 Fourth, that the refined coal constituted a 13 material part of the claimed invention; 14 And fifth, that the defendant knew that the 15 refined coal was especially made or adapted for use in an 16 infringing method. 17 A "staple article or commodity of commerce 18 capable of substantial non-infringing use" is something that 19 has uses other than as a part of component of the asserted 20 claim and those other uses are not occasional, farfetched, 21 or impractical or experimental or hypothetical. 22 The defendants' knowledge that the component was 23 especially made or adapted for use in an infringing method 24 may be shown with evidence of willful blindness, as I 25 previously explained when discussing induced infringement.</p>

<p style="text-align: center;">1296</p> <p>1 To find willful blindness, the defendant must have believed 2 there was a high probability that the patent existed 3 covering the accused method and must have taken deliberate 4 actions to avoid learning of the patent. 5 Contributory infringement requires only proof of 6 a defendant's knowledge, not intent, that the activity 7 causes infringement. 8 Proof that the defendant knew that its activity 9 might contributorily infringe is not sufficient to show 10 contributory infringement. Similarly, if a defendant 11 reasonably believed it did not infringe, even if that belief 12 was not correct, then a defendant does not have knowledge of 13 infringement. 14 Instead, contributory infringement requires 15 proof that the defendant actually knew the acts were 16 infringing. However, a belief that a patent is invalid is 17 not a defense to contributory infringement. 18 Let me say a few final words about the refined 19 coal that may be considered when you assess these 20 contributory infringement issues. 21 When you're assessing the five elements of 22 contributory infringement that I have just described -- 23 including the questions of whether a defendant sold a power 24 plant refined coal made with calcium bromide or whether that 25 refined coal was a staple article or commodity of commerce</p>	<p style="text-align: center;">1298</p> <p>1 patents-in-suit, prior to this litigation, or outside the 2 scope of the damages period, or refined coal sold by 3 entities that are not defendants in this case -- and that 4 this belief caused them not to have knowledge of any 5 possible infringement. 6 You may consider these additional types of 7 refined coal solely for purposes of assessing this question 8 regarding defendants' knowledge of infringement. 9 If you have decided that a defendant has induced 10 and/or contributed to infringement, then you must go on to 11 address the additional issue of whether or not this 12 defendant's infringement was willful. To prove willful 13 infringement, ME2C must prove by a preponderance of the 14 evidence that the defendants deliberately or intentionally 15 infringed an asserted patent. To determine whether the 16 defendant acted willfully, consider all the facts. 17 If you determine that any infringement was 18 willful, you may not allow that decision to affect the 19 amount of any damages award you give for the infringement. 20 If you find that an accused product infringes 21 any of the asserted claims, you must determine the amount of 22 damages to be awarded to ME2C for the infringement. On the 23 other hand, if you find that all of the asserted patent 24 claims are not infringed, then you should not consider 25 damages in your deliberations.</p>
<p style="text-align: center;">1297</p> <p>1 capable of substantial non-infringing use or whether that 2 refined coal constituted a material part of the claimed 3 invention or whether that refined coal was especially made 4 or adapted for use in an infringing method -- the only 5 refined coal you may consider is the refined coal that each 6 defendant supplied during the damages periods to a power 7 plant that is alleged to have directly infringed the 8 patents-in-suit in this case. 9 In other words, in assessing those questions, 10 you may not consider refined coal that the defendants may 11 have sold prior to the issuance of the patents-in-suit, 12 prior to this litigation, or outside the scope of the -- of 13 the damages period, nor may you consider refined coal sold 14 by entities that are not defendants in this case. 15 However, one of the defendants' arguments as to 16 why they are not liable for contributory infringement is 17 that, during the relevant damages period, they did not have 18 the requisite knowledge that they were committing 19 contributory infringement. In this regard, Defendants are 20 arguing that they had a reasonable though mistaken belief 21 about what the law on contributory infringement requires. 22 That is, that they had a reasonable though mistaken belief 23 that the refined coal at issue in the contributory 24 infringement analysis could include refined coal that 25 Defendants may have sold prior to the issuance of the</p>	<p style="text-align: center;">1299</p> <p>1 ME2C must prove each element of its damages -- 2 including the amount of damages -- by a preponderance of the 3 evidence, which, again, means more likely than not. If you 4 find that a defendant has infringed any of the asserted 5 claims in the patents-in-suit, patent law provides that the 6 amount of damages that the defendant should pay ME2C for 7 infringing ME2C's patent must be enough to compensate for 8 the infringement, and it may not be less than a reasonable 9 royalty for the use of the patented invention. 10 The purpose of a damages award is to put ME2C in 11 about the same financial position it would have been in if 12 the infringement had not happened. You may not add anything 13 to the amount of damages to punish defendants or to set an 14 example. You also may not add anything to the amount of 15 damages for interest. ME2C must prove the amount of damages 16 with reasonable certainty. While ME2C need not prove the 17 amount of damages with mathematical precision, you may not 18 award damages that are speculative, damages that are only 19 possible, or damages based on guesswork. 20 The fact that I'm instructing you on damages 21 does not mean the Court believes that one party or the other 22 should win in this case. My instructions about damages are 23 for your guidance only in the event you find in favor of 24 ME2C. 25 I'll now give you more detailed instruction</p>

<p style="text-align: right;">1300</p> <p>1 regarding damages.</p> <p>2 For each defendant that you find liable for</p> <p>3 infringement, damages commence on the date that defendant</p> <p>4 first induced or contributed to infringement of a</p> <p>5 patent-in-suit.</p> <p>6 A reasonable royalty is the royalty that would</p> <p>7 have resulted from a hypothetical license negotiation</p> <p>8 between ME2C and a defendant that took place at a time prior</p> <p>9 to when Defendants' infringement first began.</p> <p>10 Of course, we know that the parties in this case</p> <p>11 did not agree to a license and royalty payment. But in</p> <p>12 order to decide on the amount of reasonable royalty damages,</p> <p>13 you should assume that each infringing defendant did</p> <p>14 negotiate a license just before the infringement began.</p> <p>15 This is why it's called a "hypothetical" license</p> <p>16 negotiation.</p> <p>17 You should assume that both parties to the</p> <p>18 hypothetical negotiation understood that the patents were</p> <p>19 valid and infringed and that both sides were willing to</p> <p>20 enter a license. You should also presume that the parties</p> <p>21 had full knowledge of the facts and circumstances</p> <p>22 surrounding the infringement at the time of the hypothetical</p> <p>23 negotiation.</p> <p>24 But evidence of things that happened after the</p> <p>25 infringement first began can be considered only to the</p>	<p style="text-align: right;">1302</p> <p>1 marketing program to maintain its right to exclude others</p> <p>2 from using the patented invention by not licensing others to</p> <p>3 use the invention or by granting licenses under special</p> <p>4 conditions designed to preserve the exclusivity;</p> <p>5 Fifth, the commercial relationship between the</p> <p>6 licensor and the licensee, such as whether they're</p> <p>7 competitors in the same territory, in the same line of</p> <p>8 business;</p> <p>9 Sixth, the effect of selling the patented</p> <p>10 product in promoting sales of other products of the</p> <p>11 licensee; the existing value of the invention to the</p> <p>12 licensor as a generator of sales of its nonpatented items</p> <p>13 and the extent of such collateral sales;</p> <p>14 7, the duration of the asserted patents and the</p> <p>15 term of the license;</p> <p>16 8, the established profitability of the product</p> <p>17 made under the asserted patents, its commercial success, and</p> <p>18 its current popularity;</p> <p>19 9, the utility and advantages of the patented</p> <p>20 invention over the old modes or devices, if any, that had</p> <p>21 been used for achieving similar results;</p> <p>22 10, the nature of the patented invention, the</p> <p>23 character of the commercial embodiment of it as owned and</p> <p>24 produced by the licensor, and the benefits to those who have</p> <p>25 used the invention.</p>
<p style="text-align: right;">1301</p> <p>1 extent that the evidence aids in assessing what royalty</p> <p>2 would have resulted from a hypothetical negotiation.</p> <p>3 Although evidence of the actual profits each</p> <p>4 defendant made may be used to determine the anticipated</p> <p>5 profits at the time of the hypothetical negotiation, the</p> <p>6 royalty may not be limited or increased based on the actual</p> <p>7 profits each defendant made. You role is to determine what</p> <p>8 the license would have looked like had the parties agreed to</p> <p>9 a license prior to infringement.</p> <p>10 In determining the amount of a reasonable</p> <p>11 royalty, you may consider evidence on any of the following</p> <p>12 factors that the experts may have referenced as</p> <p>13 <i>Georgia-Pacific</i> factors, in addition to any other evidence</p> <p>14 presented by the parties on the economic value of the</p> <p>15 patents:</p> <p>16 First, any royalties received by the licensor</p> <p>17 for the licensing of patent-in-suit proving or tending to</p> <p>18 prove an established royalty;</p> <p>19 Second, the rates paid by each defendant to</p> <p>20 license other patents comparable to the asserted patents;</p> <p>21 Third, the nature and scope of the license, as</p> <p>22 exclusive or nonexclusive, or as restricted or nonrestricted</p> <p>23 in terms of its territory or with respect to whom the</p> <p>24 manufactured product may be sold;</p> <p>25 Fourth, the licensor's established policy and</p>	<p style="text-align: right;">1303</p> <p>1 11, the extent to which a defendant has made use</p> <p>2 of the invention and any evidence that shows the value of</p> <p>3 that use;</p> <p>4 12, the portion of the profit or of the selling</p> <p>5 price that may be customary in the particular business or in</p> <p>6 comparable business to allow for the use of the invention or</p> <p>7 analogous inventions;</p> <p>8 13, the portion of the profit that arises from</p> <p>9 the patented invention itself as opposed to profit arising</p> <p>10 from unpatented features, such as the manufacturing process,</p> <p>11 business risks, or significant features or improvements</p> <p>12 added by the accused infringer;</p> <p>13 14, the opinion testimony of qualified experts;</p> <p>14 15, the amount that a licensor and a licensee</p> <p>15 such as a defendant would have agreed upon at the time the</p> <p>16 infringement began if both sides had been reasonably and</p> <p>17 voluntarily trying to reach an agreement; that is, the</p> <p>18 amount which a prudent licensee -- who desired, as a</p> <p>19 business proposition, to obtain a license to manufacture and</p> <p>20 sell a particular article embodying the patented</p> <p>21 invention -- would have been willing to pay as a royalty and</p> <p>22 yet be able to make a reasonable profit and which amount</p> <p>23 would have been acceptable by a patentee who was willing to</p> <p>24 grant a license;</p> <p>25 And 16, any other economic factor that a</p>

<p style="text-align: right;">1304</p> <p>1 normally prudent businessperson would, under similar 2 circumstances, take into consideration in negotiating the 3 hypothetical license.</p> <p>4 The amount you find as damages must be based on 5 the value attributable to the patent's technology as 6 distinct from other unpatented features of the accused 7 product or other factors, either marketing or advertising, 8 or Defendant's size or marketing position.</p> <p>9 In determining the appropriate royalty base and 10 the appropriate royalty rate, the ultimate combination of 11 both the royalty rate and the royalty base must reflect the 12 valuable attributable to the patented technology. In other 13 words, the royalty base must be closely tied to the 14 invention. It's not sufficient to use a royalty base that's 15 too high and then adjust the damages downward by applying a 16 lower royalty rate.</p> <p>17 Similarly, it's not appropriate to select a 18 royalty rate that's too low and then adjust it upward by 19 applying a higher royalty rate. Rather, you must determine 20 an appropriate royalty rate and an appropriate royalty base 21 that reflects the value attributable to the patented 22 invention alone.</p> <p>23 Damages are not based on a hindsight evaluation 24 of what happened but on what the parties to the hypothetical 25 license negotiations would have agreed upon. Nevertheless,</p>	<p style="text-align: right;">1306</p> <p>1 also consider evidence concerning the availability and cost 2 of acceptable non-infringing substitutes to the patented 3 invention. An acceptable non-infringing substitute must be 4 a product that does not infringe the patent. It must also 5 have been, at the time of the hypothetical negotiation, both 6 available and acceptable.</p> <p>7 To be an available substitute, it must have been 8 available during the damages period. A substitute is 9 available if, during the damages period, the defendant had 10 all the necessary equipment, materials know-how, legal 11 right, and experience to design and manufacture the 12 non-infringing substitute. The substitute need not actually 13 have been sold at the time.</p> <p>14 To be an acceptable substitute, the product or 15 process must have had one or more of the advantages of the 16 patent invention that were important to the actual buyers of 17 the infringing products, not the public in general. The 18 acceptable substitute to their use must also -- also must 19 not infringe the patent. An acceptable non-infringing 20 substitute may be one that modify the product or method to 21 avoid infringement.</p> <p>22 In order to recover damages for induced 23 infringement, ME2C must either prove that the defendants' 24 products necessarily infringed the patents-in-suit or prove 25 acts of direct infringement by others that were induced by</p>
<p style="text-align: right;">1305</p> <p>1 evidence relevant to the negotiation is not necessarily 2 limited to facts that occurred on or before the date of the 3 hypothetical negotiations. You may also consider 4 information that the parties would have foreseen or 5 estimated during the hypothetical negotiation which may, 6 under certain circumstances, include evidence of usage after 7 infringement started; license agreements entered into by the 8 parties shortly after the date of the hypothetical 9 negotiation; profits earned by the the infringer; and 10 non-infringing alternatives.</p> <p>11 When determining a reasonable royalty, you may 12 consider evidence concerning the amounts that other parties 13 have paid for rights to the patents in play or for rights to 14 similar technologies. A license agreement need not be 15 perfectly comparable to a hypothetical license that would be 16 negotiated between ME2C and Defendants here in order for you 17 to consider it.</p> <p>18 However, if you choose to rely upon evidence 19 from any other license agreements, you must account for any 20 differences between those licenses and the hypothetically 21 negotiated license between ME2C and the defendants here in 22 terms of the technologies, the parties to the license, and 23 economic circumstances of the contracting parties when you 24 make your reasonable royalty determination.</p> <p>25 In determining a reasonable royalty, you may</p>	<p style="text-align: right;">1307</p> <p>1 the defendants. Because the amount of damages for induced 2 infringement is limited by the number of instances of direct 3 infringement, ME2C must further prove the number of direct 4 acts of infringement of the patents-in-suit, for example, by 5 showing individual acts of direct infringement or by showing 6 that a particular class of uses directly infringes.</p> <p>7 In order to recover damages for contributory 8 infringement, ME2C must either prove that the defendants' 9 products necessarily infringe the patents-in-suit or prove 10 acts of direct infringement by others to which Defendants 11 made a substantial contribution. Because the amount of 12 damages for contributory infringement is limited by the 13 number of instances of direct infringement, ME2C must 14 further prove the number of direct acts of infringement of 15 the patents-in-suit, for example, either by showing 16 individual acts of direct infringement or by showing that a 17 particular class of uses directly infringes.</p> <p>18 I've now concluded the part of my instructions 19 explaining the rulings for considering some of the testimony 20 and evidence. Now let me finish up by explaining some 21 things about your deliberations in the jury room and your 22 possible verdicts.</p> <p>23 Once you start deliberating, do not talk to the 24 jury officer or to me or to anyone else, except each other, 25 about the case. If you have any questions or messages, you</p>

<p style="text-align: center;">1308</p> <p>1 must write them down on a piece of paper, sign them, and 2 then give them to the jury officer. The officer will then 3 give them to me, and I'll respond to you as soon as I can. 4 I may have to talk to the lawyers about what you have asked, 5 so it may take some time to get back to you. 6 Any questions or messages normally should be 7 sent to me through your foreperson who, by custom of this 8 court, is Juror Number 1. So Juror Number 1 will be our 9 foreperson. 10 One more thing about messages: Do not ever 11 write down or tell anyone how you stand on your votes. For 12 example, don't write down or tell anyone that you're split 13 four to four or six to two or, in this case, because there 14 are seven of you, four to three or six to one, or whatever 15 your vote happens to be. That should stay secret until the 16 verdict. 17 Your verdict must represent the considered 18 judgment of each juror. In order for you as a jury to 19 return a verdict, it's necessary that each juror agree to 20 the verdict, so your verdict must be unanimous. It's your 21 duty as jurors to consult with one another and to deliberate 22 with a view towards reaching an agreement, if you can do so 23 without violence to your individual judgment. 24 Each of you must decide the case for yourself, 25 but do so only after an impartial consideration of the</p>	<p style="text-align: center;">1310</p> <p>1 arguments are complete, you're free to talk about the case 2 in the jury room. In fact, it's your duty to talk with each 3 other about the evidence and to make every reasonable effort 4 you can to reach a unanimous agreement. Talk with each 5 other. Listen carefully and respectfully to each others' 6 views, and keep an open mind as you listen to what your 7 fellow jurors have to say. 8 Try your best to work out your differences. Do 9 not hesitate to change your mind if you're convinced that 10 other jurors are right and that your original position is 11 wrong, but don't ever change your mind just because other 12 jurors see things differently or just to get the case over 13 with. 14 In the end, your vote must be exactly that: your 15 own vote. It's important for you to reach unanimous 16 agreement but only if you can do so honestly and in good 17 conscience. No one will be allowed to hear your discussions 18 in the jury room, and no record will be made of what you 19 say, so you should all feel free to speak your minds. 20 Listen carefully to what the other jurors have to say and 21 then decide for yourself. 22 During your deliberations, you must not 23 communicate with or provide any information to anyone by any 24 means about this case. You may not use any electronic 25 device or media, such as a telephone, cell phone,</p>
<p style="text-align: center;">1309</p> <p>1 evidence with your fellow jurors. In the course of your 2 deliberations, don't hesitate to re-examine your own views 3 and change your opinion if you're convinced it's erroneous. 4 But don't surrender your honest conviction as to the weight 5 or effect of evidence solely because of the opinion of your 6 fellow jurors or for the purpose of returning a verdict. 7 Remember at all times that you are not partisans. You're 8 judges, judges of facts. Your sole interest is to seek the 9 truth from the evidence in this case. 10 A form of verdict has been prepared for you. 11 I'll review it with you in a moment. You'll take this form 12 to the jury room. And when you've reached a unanimous 13 agreement as to your verdict, you will have your foreperson 14 fill in, date, and sign the form. You'll then return to the 15 courtroom and my deputy will read aloud your verdict. Place 16 the completed verdict sheet in the envelope we will give 17 you. Do not show the completed verdict form to anyone or 18 share it with anyone until you are in the courtroom. 19 It's proper to add the caution that nothing said 20 in these instructions and nothing in the verdict form is 21 meant to suggest or convey in any way or manner any 22 intimation as to what verdict I think you should find. What 23 the verdict shall be is your sole and exclusive duty and 24 responsibility. 25 Now that all the evidence is in and all the</p>	<p style="text-align: center;">1311</p> <p>1 smartphone, iPhone, tablet, or computer, the internet, any 2 internet service, any text or instant messaging service, any 3 Internet chat room, blog, or website such as Facebook, 4 TikTok, LinkedIn, YouTube, Instagram, Snapchat, or Twitter 5 to communicate to anyone any information about this case or 6 to conduct any research about this case until I accept your 7 verdict. 8 In other words, you can't talk to anybody on the 9 phone, correspond with anyone, or electronically communicate 10 with anyone about this case. You can only discuss the case 11 in the jury room with your fellow jurors during 12 deliberations. 13 Let me finish by repeating something I said 14 earlier. Nothing that I have said or done during this trial 15 was meant to influence your decision in any way. You must 16 decide the case yourselves based on the evidence presented. 17 Okay. It's a lot of talking, ladies and 18 gentlemen. So I mentioned the verdict form. You're going 19 to have a copy of the verdict form which will look like 20 this. There will be copies in the jury room for you, 21 including the final version of the verdict form that the 22 foreperson must fill out and sign and bring back. You'll 23 also have copies of the exhibits back there as well, as well 24 as some other materials. 25 All right. With all that said, let's allow our</p>

<p style="text-align: right;">1312</p> <p>1 jury to begin deliberations.</p> <p>2 Before we do, though, I'm reminded that I needed</p> <p>3 to do one more thing, which is I need to direct our CSO, who</p> <p>4 is our court security officer, forward to be sworn in. I</p> <p>5 can't forget that.</p> <p>6 (The security officer was sworn.)</p> <p>7 (The jury exited the courtroom.)</p> <p>8 THE COURT: All right. Ladies and gentlemen, we</p> <p>9 will get your information and e-mails so my staff will be</p> <p>10 able to get ahold of you. We'll have lunch and be in touch.</p> <p>11 The Court will stand in recess. Thank you.</p> <p>12 (A recess was taken, after which the following</p> <p>13 proceedings were had:)</p> <p>14 THE COURT: All right. As I think you know, we</p> <p>15 got a note that the jury has a verdict. Is there anything</p> <p>16 to take care of before I bring the jury in?</p> <p>17 Seeing nothing, all right, then I'll ask my law</p> <p>18 clerk to let the courtroom deputy know they can bring the</p> <p>19 jurors in.</p> <p>20 (The jury entered the courtroom.)</p> <p>21 THE COURT: All right. Ladies and gentlemen of</p> <p>22 the jury, thank you.</p> <p>23 And, Mr. Foreperson, I understand the jury has</p> <p>24 reached a unanimous verdict; is that correct?</p> <p>25 THE FOREPERSON: Yes, we have.</p>	<p style="text-align: right;">1314</p> <p>1 Claim 26: Yes.</p> <p>2 Marquis Industrial Company, LLC; Claim 25: Yes.</p> <p>3 Claim 26: Yes.</p> <p>4 CERT Operations IV, LLC; Claim 25: Yes.</p> <p>5 Claim 26: Yes.</p> <p>6 Springhill Resources, LLC; Claim 25: Yes.</p> <p>7 Claim 26: Yes.</p> <p>8 CERT Operations V, LLC; Claim 25: Yes.</p> <p>9 Claim 26: Yes.</p> <p>10 Buffington Partners, LLC; Claim 25: Yes.</p> <p>11 Claim 26: Yes.</p> <p>12 Question 1(b): Have Plaintiffs proven by a</p> <p>13 preponderance of the evidence that any Defendant listed</p> <p>14 below is liable for inducing infringement of any asserted</p> <p>15 claims of the '517 patent by a power plant?</p> <p>16 Defendants CERT Operations RCB, LLC; Claim 1:</p> <p>17 Yes. Claim 2: Yes.</p> <p>18 Senescence Energy Productions, LLC; Claim 1:</p> <p>19 Yes. Claim 2: Yes.</p> <p>20 Bascobert (A) Holdings, LLC; Claim 1: Yes.</p> <p>21 Claim 2: Yes.</p> <p>22 Larkwood Energy, LLC; Claim 1: Yes. Claim 2:</p> <p>23 Yes.</p> <p>24 Rutledge Products, LLC; Claim 1: Yes. Claim 2:</p> <p>25 Yes.</p>
<p style="text-align: right;">1313</p> <p>1 THE COURT: All right. I'm going to ask my</p> <p>2 courtroom deputy to go down and obtain the verdict from you.</p> <p>3 She'll bring it back to me to inspect.</p> <p>4 All right. You may hand the verdict form to my</p> <p>5 courtroom deputy, and I'll ask my courtroom deputy to</p> <p>6 publish the verdict, that is, to read it aloud here in open</p> <p>7 court.</p> <p>8 THE CLERK: Question 1(a): Have Plaintiffs</p> <p>9 proven by a preponderance of the evidence that any Defendant</p> <p>10 listed below is liable for inducing infringement of any</p> <p>11 asserted claims of the '114 by a power plant?</p> <p>12 Defendant CERT Operations RCB, LLC; Claim 23:</p> <p>13 Yes. Claim 26: Yes.</p> <p>14 Defendant Senescence Energy Products, LLC;</p> <p>15 Claim 25: Yes. Claim 26: Yes.</p> <p>16 Defendant Bascobert Holdings, LLC -- sorry,</p> <p>17 Bascobert (A) Holdings, LLC; Claim 25: Yes. Claim 26:</p> <p>18 Yes.</p> <p>19 Defendant Larkwood Energy, LLC; Claim 25: Yes.</p> <p>20 Claim 26: Yes.</p> <p>21 Rutledge Products, LLC; Claim 25: Yes.</p> <p>22 Claim 26: Yes.</p> <p>23 Cottbus Associates, LLC; Claim 25: Yes.</p> <p>24 Claim 26: Yes.</p> <p>25 CERT Operations II, LLC; Claim 25: Yes.</p>	<p style="text-align: right;">1315</p> <p>1 Cottbus Associates, LLC; Claim 1: Yes.</p> <p>2 Claim 2: Yes.</p> <p>3 CERT Operations II, LLC; Claim 1: Yes.</p> <p>4 Claim 2: Yes.</p> <p>5 Marquis Industrial Company, LLC; Claim 1: Yes.</p> <p>6 Claim 2: Yes.</p> <p>7 CERT Operations IV, LLC; Claim 1: Yes.</p> <p>8 Claim 2: Yes.</p> <p>9 Springhill Resources, LLC; Claim 1: Yes.</p> <p>10 Claim 2: Yes.</p> <p>11 CERT Operations V, LLC; Claim 1: Yes. Claim 2:</p> <p>12 Yes;.</p> <p>13 Buffington Partners, LLC; Claim 1: Yes.</p> <p>14 Claim 2: Yes.</p> <p>15 Question 2(a): Have Plaintiffs proven by a</p> <p>16 preponderance of the evidence that any Defendant listed</p> <p>17 below is liable for contributory infringement of any</p> <p>18 asserted claim of the '114 patent by a power plant?</p> <p>19 Defendant Senescence Energy Products, LLC;</p> <p>20 Claim 25: Yes. Claim 26: Yes.</p> <p>21 Bascobert (A) Holdings, LLC; Claim 25: Yes.</p> <p>22 Claim 26: Yes.</p> <p>23 Larkwood Energy, LLC; Claim 25: Yes. Claim 26:</p> <p>24 Yes.</p> <p>25 Rutledge Products, LLC; Claim 25: Yes.</p>

<p style="text-align: right;">1316</p> <p>1 Claim 26: Yes. 2 Cottbus Associates, LLC; Claim 25: Yes. 3 Claim 26: Yes. 4 Marquis Industrial Company, LLC; Claim 25: Yes. 5 Claim 26: Yes. 6 Springhill Resources, LLC; Claim 25: Yes. 7 Claim 26: Yes. 8 Buffington Partners, LLC; Claim 25: Yes. 9 Claim 26: Yes. 10 Question 2(b): Have Plaintiffs proven by a 11 preponderance of the evidence that any Defendant listed 12 below is liable for contributory infringement of any 13 asserted claims of the '517 patent by a power plant? 14 Defendant Senescence Energy Products, LLC; 15 Claim 25: Yes. Claim 26: Yes. 16 Bascobert (A) Holdings, LLC; Claim 25: Yes. 17 Claim 26: Yes. 18 Larkwood Energy, LLC; Claim 25: Yes. Claim 26: 19 Yes. 20 Rutledge Products, LLC; Claim 25: Yes. 21 Claim 26: Yes. 22 Cottbus Associates, LLC; Claim 25: Yes. 23 Claim 26: Yes. 24 Marquis Industrial Company, LLC; Claim 25: Yes. 25 Claim 26: Yes.</p>	<p style="text-align: right;">1318</p> <p>1 Senescence Energy Products, LLC: Amount, 2 2,129,349. 3 Bascobert (A) Holdings, LLC: Amount, 1,296,829. 4 Larkwood Energy, LLC: Amount, 20 -- I'm sorry 5 20,017,888. 6 Rutledge Products, LLC: 615,338. 7 Cottbus Associates, LLC: 11,282,514. 8 CERT Operations II, LLC: 11,119,113. 9 Marquis Industrial Company, LLC: 11,119,113. 10 CERT Operations IV, LLC: \$447,025. 11 Springhill Resources, LLC: 447,025. 12 CERT Operations V, LLC: 10,173,949. 13 Buffington Partners, LLC: 10,173,949. 14 Signed by the foreperson on March 1, 2024. 15 THE COURT: Thank you very much. 16 Do Plaintiffs wish for the jury to be polled? 17 MR. CALDWELL: No, Your Honor. 18 THE COURT: Do Defendants wish for the jury to 19 be polled? 20 MR. SYKES: No, Your Honor. 21 THE COURT: All right, then, ladies and 22 gentlemen of the jury, I want to thank you very, very much 23 for your time and your efforts in this case. If you're 24 willing, when you go back to the jury room to collect your 25 things, I'd ask if you wait a few minutes because I'd love</p>
<p style="text-align: right;">1317</p> <p>1 Springhill Resources, LLC; Claim 25: Yes. 2 Claim 26: Yes. 3 Buffington Partners, LLC; Claim 25: Yes. 4 Claim 26: Yes. 5 Question 3: For each Defendant, you have found 6 to infringe at least one claim, have Plaintiffs proven by a 7 preponderance of the evidence that such Defendants' 8 infringement was willful? 9 Defendant CERT Operations RCB, LLC: Yes. 10 Senescence Energy Products, LLC: Yes. 11 Bascobert (A) Holdings, LLC: Yes. 12 Larkwood Energy, LLC: Yes. 13 Rutledge Products, LLC: Yes. 14 Cottbus Associates, LLC: Yes. 15 CERT Operations II, LLC: Yes. 16 Marquis Industrial Company, LLC: Yes. 17 CERT Operations IV, LLC: Yes. 18 And Springhill Resources, LLC: Yes. 19 I'm sorry. CERT Operations V, LLC: Yes. 20 Buffington Partners, LLC: Yes. 21 Question 4: For each Defendant you have found 22 to infringe at least one claim, what is the amount of money 23 that Plaintiffs have proven by preponderance of the evidence 24 that would compensate for such Defendants' infringement? 25 Defendant CERT Operations, LLC: \$35,341,918.</p>	<p style="text-align: right;">1319</p> <p>1 to come back and talk to you and say a few words. You're 2 not obligated to wait. It's only a few minutes with the 3 lawyers here, and I'll come back and get you on the way 4 today. 5 I guess the bottom line is we couldn't have the 6 federal system here in our court without the service of 7 jurors like you. It's essential. You worked long and hard 8 this week, and on behalf of everybody, we sincerely 9 appreciate your efforts. We'll lead you book to the jury 10 room and get your things, and I'll speak to you in a minute. 11 I'll ask the courtroom deputy to lead you out. 12 (The jury exited the courtroom.) 13 THE COURT: All right. You may be seated. Let 14 me just say a few brief words. 15 First, I want to thank you, counsel, for a 16 well-trying case, and I want do reiterate what I said last 17 night at the prayer conference. I appreciate how counsel on 18 both sides treated each other in the courtroom when the jury 19 was here and otherwise with respect, and it made for a much 20 easier trial week as a result of that, so I thank you very 21 much in all those regards. 22 I'd ask that the parties submit -- I believe it 23 would be a joint submission but could be separate if it 24 needs to be -- they submit a proposed form of judgment by no 25 later than close of business on Tuesday next week.</p>

1 And with regard to post-trial motions, I would
2 ask the parties to follow Rule 50 and local rules with
3 regard to briefing and filing.

4 With all that said, is there anything else we
5 need to take up at this time before we conclude on
6 Plaintiffs' side, Mr. Caldwell?

7 MR. CALDWELL: Not for Plaintiff. Thank you.

8 THE COURT: And on Defendants' side, Mr. Sykes?

9 MR. SYKES: Not at this time, Your Honor.

10 THE COURT: Thank you. I wish everyone safe
11 travels for our out-of-town folks and I wish everyone a very
12 good weekend, and thank you again for all your work. The
13 Court will stand in recess.

14 (The proceedings were adjourned at 3:04 p.m.)

15 **C E R T I F I C A T E**

16 I, Deanna L. Warner, a Certified Shorthand Reporter,
17 do hereby certify that as such Certified Shorthand Reporter,
18 I was present at and reported in Stenotype shorthand the
19 above and foregoing proceedings.

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Deanna L. Warner, RPR, CSR
Official Court Reporter
U.S. Federal Court

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