IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF IOWA
CENTRAL DIVISION

MIDWEST ENERGY EMISSIONS CORP.,

Plaintiff,

v.

BERKSHIRE HATHAWAY ENERGY COMPANY, MIDAMERICAN ENERGY COMPANY, PACIFICORP, ALLIANT ENERGY CORPORATION, INTERSTATE POWER AND LIGHT COMPANY, and WISCONSIN POWER AND LIGHT COMPANY,

Defendants.

Case No. 4:24-cv-00243-SHL-WPK

PLAINTIFF ME2C'S BRIEF IN SUPPORT OF ITS MOTION FOR PRELIMINARY INJUNCTION

JURY TRIAL DEMANDED

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I. INTRODUCTION

Plaintiff ME2C respectfully requests a preliminary injunction against Defendants BHE, MidAmerican, PacifiCorp, Alliant, IPL, and WPL to restrain their ongoing infringement of claim 1 of U.S. Patent No. 10,596,517 ("the '517 patent"). This patent claims a method of capturing mercury pollution at coal-fired power plants by using a combination of bromine additives and activated carbon. Defendants use this technology at several coal-fired power plants located in Iowa, Wyoming, and Wisconsin.

ME2C previously sued several of Defendants' suppliers for mercury-capture related products. Those suppliers ultimately shut down their operations and agreed to pay a license fee for past infringement. ME2C then reached out to those Defendants to offer ME2C's own products. Defendants declined, refusing to do business with ME2C, instead choosing to continue using ME2C's technology with support from different suppliers. Under these circumstances, an injunction is particularly appropriate to put an end to this infringement.

While ME2C requests that Defendants be enjoined from using its technology without permission, the injunction would not stop Defendants from meeting their environmental obligations. As explained below, ME2C has significant experience taking over supply contracts for formerly infringing power plants. If Defendants want to continue using ME2C's technology, they need only purchase the necessary input products from ME2C, under commercially reasonable terms, consistent with ME2C's patent rights.

II. STATEMENT OF FACTS

A. The EPA's Call for New Mercury Capture Technologies.

In 1990, Congress resolved to significantly reduce air pollution through an amendment to the Clean Air Act. Dkt. No. 1 at ¶ 52. That law required the U.S. Environmental Protection Agency (EPA) to study the impact of various air pollutants. Dkt. No. 1 at ¶ 53. After a multi-year

study, the EPA reported to Congress on the pressing need to reduce mercury emissions from coal-fired power plants. It also reported that existing technologies could not achieve the EPA's goals for mercury capture for power plants burning low rank coals, e.g., "PRB" coal. Dkt. No. 1 at ¶ 55. The gaseous mercury present in that coal-exhaust gas was simply too difficult to capture using the conventional pollution control equipment available at the time.

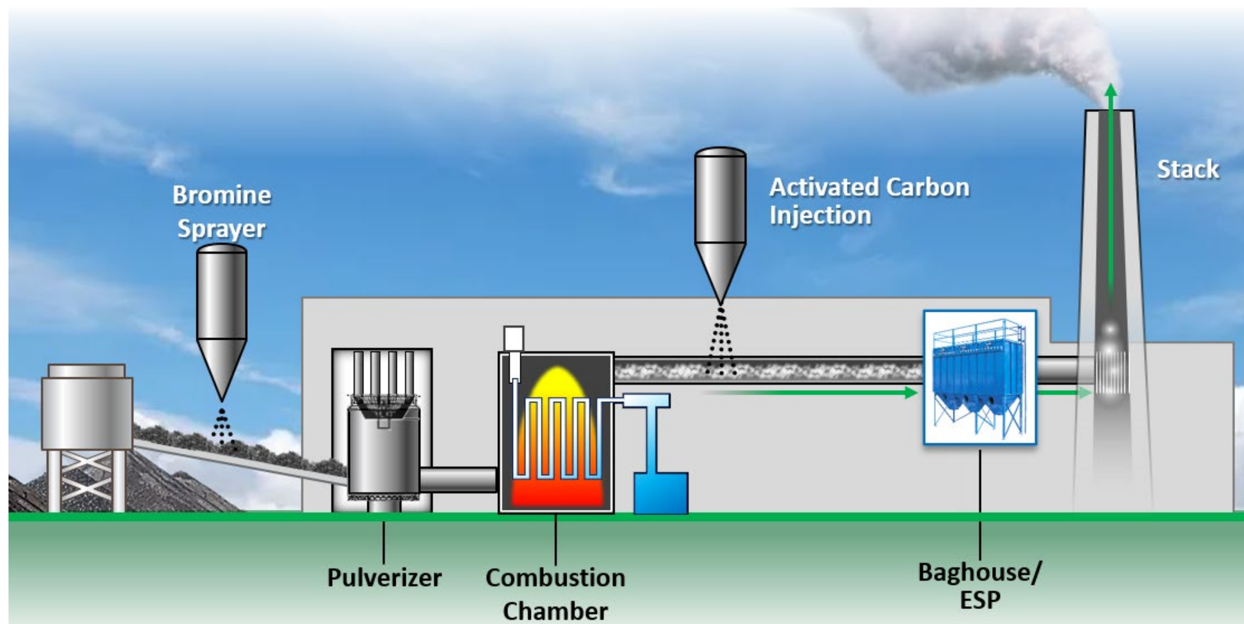
In the wake of the EPA's report, various governmental and industry organizations injected millions of dollars into scientific research and experimental studies in search of new mercury capture technologies. Dkt. No. 1 at ¶ 56. The inventors of the '517 patent solved that problem. Dkt. No. 1 at ¶ 57. They discovered that combusting coal with added bromine, and then injecting activated carbon into the resulting exhaust gas, causes a chemical reaction with the mercury in the gas—making it much easier to capture using the power plant's pre-existing pollution control equipment, as explained more fully below. Ex. 12, Trial Tr. at 315:25-316:22.[1]

B. Overview of the Patented Technology

A coal-fired power plant operates by burning coal to generate steam, and then using the steam to turn an electricity producing turbine. A modern coal plant also includes a number of pollution control systems. Prior to 1990, these systems were primarily designed to capture particulates and gases that cause smog and acid rain, not heavy metals like mercury. The patented technology supplements those systems with a two-step process. As shown in the illustration below, bromine is added to the coal as it is conveyed to the boiler or directly into the

[1] As explained below, ME2C recently obtained a jury verdict of infringement involving power plants similar to those at issue in this case. *Midwest Energy Emissions Corp. et al. v. Arthur J. Gallagher & Co.*, et al., No. 1:19-cv-01334-CJB ("the Delaware Case"). At that trial, ME2C's CEO Richard MacPherson testified regarding the history of ME2C and the harm caused by infringement. ME2C's CTO and inventor of the '517 patent John Pavlish testified regarding the invention and operation of the patented technology as well as the technical benefits of the technology. Citations to "Ex. 12, Tr." refer to testimony from that trial.

boiler (the "Bromine Step").[2] This bromine converts to a gas in the boiler and flows downstream through the power plant's pollution control equipment along with the coal combustion exhaust gas. Activated carbon (also referred to as "sorbent") is then added to the exhaust gas (the "Carbon Step"). *See, e.g.,* '517 patent at 32:50-61, fig. 11.



Performing the Bromine Step and Carbon Step causes a chemical reaction with the naturally occurring mercury in the coal exhaust gas. The mercury binds to particles of activated carbon that is then captured in filtering equipment (a "baghouse" or "ESP").

This process has proven to be particularly useful for power plants that burn low-rank "PRB" coal. PRB coal produces a high proportion of elemental mercury, a very non-reactive form of mercury. Adding bromine before or during combustion, and adding activated carbon after combustion, has proven to be a highly effective method for capturing this otherwise-difficult-to-capture elemental mercury. *See* Ex. 12, Tr. at 248:14-250:1.

[2] The figure illustrates bromine being mixed with the coal before it is pulverized and fed into the combustion chamber. However, the patents teach that bromine can be mixed with the coal at any time before or during the combustion process. In addition, iodine-based additives may also be used and ME2C also has patents covering the use of iodine-based additives.

C. ME2C Proves the Viability of its Technology, but Contends with Infringement.

Throughout the late 2000s, the inventors demonstrated the technological success of the patented two-step mercury-capture process. In 2008, ME2C was formed to commercialize the technology, and it spent the next several years performing tests and educating power plants to demonstrate the viability of the technology. Ex. 12, Tr. at 445:19-449:18. This work was important because in 2013, the EPA made clear that it intended to issue very strict regulations requiring power plants to capture 90% of the mercury produced from the combustion of coal. Ex. 12, Tr. at 326:17-327:1. For power plants burning PRB coal, ME2C's patented technology is the most economical method for achieving such a high level of mercury capture.

When the EPA's new mercury regulations (referred to as "MATS") became mandatory for all U.S. power plants in 2016, ME2C's technology became the go-to solution for many power plants throughout the United States. Ex. 12, Tr. at 452:25-454:24.

D. ME2C Files the Delaware Case.

ME2C maintained a successful business with several power plants, but some power plants that were using its technology without permission. Many were purchasing "refined coal" (coal with added bromine), instead of purchasing ME2C's bromine products. The refined coal suppliers did not directly infringe ME2C's patents because they did not perform both the Bromine Step and the Carbon Step, but they did encourage and facilitate widespread infringement in the marketplace. *See generally* Ex. 12, Tr. at 757:25-758:5 (expert testimony explaining that refined coal operations were "essentially keeping Midwest, the plaintiff here, from being able to make sales to those [power plant] entities").

ME2C attempted to compete despite this infringement. Ultimately, it concluded that it needed to file a lawsuit. In 2019, ME2C filed a case in Delaware against the largest refined coal suppliers in the country as well as several power plant operators (the "Delaware Case").

The Defendants in this case are different than those in the Delaware case. But the conduct of several of the Defendants here was still relevant to that case. *ME2C accused the refined coal suppliers of inducing infringement at some of the same power plants at issue in this case—the Walter Scott, Louisa, George Neal North, George Neal South, and Columbia power plants.* If those power plants did not infringe, the refined coal suppliers could not have induced infringement. As a result, ME2C marshalled evidence to prove that those power plants—operated by several of the Defendants in this case—directly infringed its patents.

In 2022, while the Delaware Case was still pending, the refined coal suppliers for those power plants stopped selling refined coal and later settled with ME2C. Nonetheless, the operators of those power plants—Defendants BHE, MidAmerican, Alliant, and WPL—chose to continue infringing with other suppliers.

Overall, the Delaware Case proved to be highly successful for ME2C. In addition to the settlement agreement mentioned above, all of the power plant operator defendants in that case agreed to settlement terms with ME2C, and ME2C significantly increased its customer base.[3] ME2C CEO Richard MacPherson explained ME2C's situation with the power plant defendants:

> Q. Did you have to enforce your rights against some of your own power plant customers?
>
> A. Yeah. I mean, that was really tough, and nobody ever wants to sue the people that they're doing business with, but we couldn't find any other way to get them to take notice, so we had to -- we had to file suit against them.
>
> Q. Did you meet with them?

---

[3] The two largest power plant operator defendants in that case—Vistra and NRG—are ME2C customers. The defendant AEP also settled with ME2C, but shut down its coal-fired power plants pursuant to its plan to transition from coal power. The final defendant, Talen, is not a current customer of ME2C. In all cases, when a power plant requests a license from ME2C, ME2C requires that the agreement contain commercial terms to facilitate a supply agreement, e.g., bidding rights, rights of first refusal, financial penalties, etc. Trettel Decl. at ¶ 6.

> A. Yes, as soon as I could. You know, we made the filing, and then we immediately reached out to them and said, Look, we'd rather find a business solution to this. Since I started the company, we've always just wanted to do business with the power plants.
>
> [. . .]
>
> So in all of the cases that we have licenses with power plants, we actually have a supply side to it, and our biggest client right now is the first ones that we had sued that did a license with us, and now they're our best clients in terms of product supply.

Ex. 12, Tr. at 463:9-464:16. By 2024, ME2C had resolved its claims with all of the defendants in the Delaware Case except one refined coal supplier—CERT. The case proceeded to trial against CERT and the jury found infringement, that the infringement was intentional and willful, and awarded damages totaling $57 million. This equates to a royalty fee of $1.00 per ton of infringing coal. Ex. 12, Tr. at 760:20-761:3. The Court also granted JMOL that CERT failed to prove the patents invalid. Ex. 12, Tr. at 1119:23-1120:8.[4]

E. ME2C Files the Present Lawsuit

As part of ME2C's settlement agreement with the refined coal suppliers, it agreed that it would not seek past damages from the power plant operators that had burned the refined coal at issue. However, ME2C reserved the right to enforce its patents against any power plant that continued to use its patented technology after the refined coal suppliers stopped selling refined coal. Accordingly, ME2C attempted to negotiate supply agreements with the Defendants in this case that had been using refined coal from the Delaware Case refined coal suppliers. Dkt. No. 1 at ¶¶ 186-190. Defendants refused. Left with no other option, ME2C filed the present lawsuit.

The Defendants in this case are shown in the table below:

[4] All of the defendants in the Delaware Case either settled with ME2C or, like CERT, shut down operations such that ME2C did not need to seek a permanent injunction.

Parent Co. Defendant	**Subsidiary Defendant**	**Power Plants**
BHE	MidAmerican	Walter Scott With IPL: Louisa, George Neal North, George Neal South, Ottumwa
	PacifiCorp	Wyodak, Jim Bridger, Dave Johnston
Alliant	IPL	Prairie Creek With MidAmerican: Louisa, George Neal North, George Neal South, Ottumwa
	WPL	Columbia, Edgewater

All of these Defendants burn at least some PRB coal, which is the type of coal particularly well-suited for use with ME2C's technology. And publicly available information indicates that each of these Defendants has used bromine additives and activated carbon at their respective power plants.[5] *See infra* IV.A. While none of these power plants were at issue in the Delaware Case trial, the jury in that case found that power plants burning PRB coal with bromine additives and activated carbon injection—as Defendants' power plants do—committed direct infringement. There is no reason to believe there will be any different result here.

III. LEGAL FRAMEWORK

"A plaintiff seeking a preliminary injunction must establish that he is likely to succeed on the merits, that he is likely to suffer irreparable harm in the absence of preliminary relief, that the balance of equities tips in his favor, and that an injunction is in the public interest." *Winter v. Nat. Res. Def. Council, Inc.*, 555 U.S. 7, 20 (2008).

[5] Counsel for IPL contends that it mostly stopped using bromine additives at Ottumwa in 2021. Ex. 13. However, if IPL has the relevant equipment on site it could start infringing again at any time, e.g., if it increases load and needs to add bromine. When asked during the meet and confer for this motion, IPL would not agree to stop using the infringing process.

IV. ARGUMENT

A. *Winter* Factor 1: Likelihood of Success on the Merits

1. ME2C Will More Likely Than Not Prove Infringement.

The applicable standard for showing likelihood of success on the merits is governed by Federal Circuit law. *See Revision Mil., Inc. v. Balboa Mfg. Co.*, 700 F.3d 524, 526 (Fed. Cir. 2012). A patentee must show that it will "more likely than not" prevail on the merits. *Id.*

For at least claim 1 of the '517 patent, ME2C is more likely than not to succeed on the merits. Claim 1 of the '517 patent has two limitations: the power plant must combust coal with added bromine, and it must collect mercury by adding activated carbon sorbent to the gas:

> 1. A method for reducing mercury in a mercury-containing gas, the method comprising:
>
> combusting coal in a combustion chamber, the coal comprising an additive comprising Br_2, HBr, a bromide compound, or a combination thereof, to form the mercury- containing gas; and
>
> collecting mercury in the mercury-containing gas with a sorbent added to the mercury-containing gas, the sorbent comprising activated carbon.

In connection with the Delaware Case, ME2C collected evidence that several of the power plants at issue in this case infringe this claim. For example, MidAmerican, one of the Defendants here, confirmed that it combusted refined coal (coal with added bromide, Ex. 12, Tr. at 565:3-12, and that it injected activated carbon into the resulting gas to capture mercury, Ex. 12, Tr. at 521:3-8. It also explained that the operating permits for these power plants require them to use this process to meet their mercury emissions limits:

> Q. MidAmerican has had coal purchase agreements with refined coal suppliers for Louisa, George Neal North, George Neal South, and Walter Scott; is that right?
>
> A. Yes.
>
> Q. And did those power plants combust the refined [coal] they received?

> A. Yes.
>
> Q. Is the fact that the activated carbon is listed in title five permit mean that this power plant is required to operate the activated carbon injection equipment?
>
> A. Yes, and it's an acknowledgment that that is what we need to do to meet our emission requirements and that it's an improved part of our emission controls.

Ex. 12, Tr. at 523:10-524:5. More recent environmental data for MidAmerican power plants indicate continued use of calcium bromide and activated carbon. Trettel Decl. at ¶ 18.

In addition, Jim Trettel, ME2C's VP of Operations and an engineer with extensive experience dealing with mercury capture at power plants, has reviewed publicly reported environmental data and operating permits and explained that each of Defendants PacifiCorp, WPL, and IPL all employ bromine additives and activated carbon injection. Trettel Decl. at ¶ 18. This same evidence—combustion of brominated coal and activated carbon use—was found sufficient to support a verdict of infringement in the Delaware case for the power plants at issue in that case. For the same reasons that the jury found infringement in that case, it is more likely than not that the Defendants here will be found liable.

2. <u>Defendants Will More Likely Than Not Fail to Prove Patent Invalidity.</u>

A patent is presumed valid, including at the preliminary-injunction stage. *Canon Computer Sys., Inc. v. Nu–Kote Int'l, Inc.*, 134 F.3d 1085, 1088 (Fed. Cir. 1998). Thus, if a patentee moves for a preliminary injunction and the alleged infringer does not challenge validity, the existence of the patent satisfies the patentee's burden of showing a likelihood of success on the validity issue. *See Purdue Pharma L.P. v. Boehringer Ingelheim GmbH*, 237 F.3d 1359, 1365 (Fed. Cir. 2001). If the alleged infringer responds to the preliminary-injunction motion by launching an attack on the validity of the patent, the burden is on the challenger to come forward

with clear and convincing evidence that the patent is invalid. *See Titan Tire Corp. v. Case New Holland, Inc.*, 566 F.3d 1372, 1377 (Fed. Cir. 2009).

ME2C's '517 patent has already been tested for validity and found valid. In the Delaware Case, the defendants moved for summary judgment of invalidity, but that motion was denied. Delaware Case, Dkt. No. 614. Nearly all of the defendants in that case also settled with ME2C, paid tens of millions of dollars to ME2C, and in many cases became ME2C customers, thus further confirming that ME2C's patents are valid. As to the one remaining defendant group that challenged the validity of ME2C's patents at trial, CERT's case was so weak that it did not even oppose ME2C's motion for JMOL of patent validity. The Court granted the motion before the issue of validity was even submitted to the jury. Ex. 12, Tr. at 1119:23-1120:8.

Defendants may believe that they can succeed where so many others have failed. But at this preliminary stage, it is more likely than not that ME2C's asserted patents are valid. Because Plaintiff has established that it is likely to succeed, the first *Winter* factor favors an injunction.

B. *Winter* Factor 2: Irreparable Harm in the Absence of Preliminary Relief

ME2C is an operating company that competes with bromine and activated carbon suppliers. It sells a variety of bromine additives and activated carbon, and, as ME2C's CEO Rick MacPherson explained at trial and Mr. Trettel explained in his declaration, it has significant experience taking over supply contracts at power plants that switched from using infringing suppliers to ME2C supplied products. Ex. 12, Tr. at 463:9-464:16; *See* J. Trettel Decl. at ¶ 6. During the meet and confer for this motion, Defendants again confirmed that they would continue infringing rather than do business with ME2C. Their decisions to infringe results in many of the long-recognized categories of irreparable harm, including the violation of the right to exclude, lost market share, lost brand recognition, and lost good will.

1. Based on the Traditional Principles of Equity, Defendants' Infringement Itself Is Irreparable Harm

Patents grant the patent owner a right to exclude. Infringement violates that right, and payment in damages does not fully repair it. Thus, the Supreme Court has explained that ongoing infringement supports a finding of irreparable harm. *See Cont'l Paper Bag Co. v. E. Paper Bag Co.*, 210 U.S. 405, 430 (1908) ("It hardly needs to be pointed out that the right can only retain its attribute of exclusiveness by a prevention of its violation. Anything but prevention takes away the privilege which the law confers upon the patentee."). The Supreme Court has continued to uphold this principle explaining that a Court may not deny an injunction merely because the patentee failed to show some other commercial harm from the infringement. *See eBay v. MercExchange, L.L.C.*, 547 U.S. 388, 393 (2006) (rejecting lower court holding that a plaintiff's willingness to license its patents or lack of commercial activity are sufficient to establish lack of irreparable harm); *see also Hybritech Inc. v. Abbott Lab'ys*, 849 F.2d 1446, 1456-57 (Fed. Cir. 1988) ("It is well-settled that, because the principal value of a patent is its statutory right to exclude, the nature of the patent grant weighs against holding that monetary damages will always suffice to make the patentee whole.").

This Supreme Court guidance in patent cases is consistent with its general injunction jurisprudence. It has explained that motions for injunctive relief must be decided based on "the principles of the system of judicial remedies which had been devised or were being administered by the English Court of Chancery at the time of the separation of the two countries." *Atlas Life Ins. Co. v. W.I. Southern, Inc.*, 306 U.S. 563, 568 (1939); *see also Grupo Mexicano de Desarrollo S.A. v. Alliance Bond Fund, Inc.*, 527 U.S. 308 (1999) (reconfirming *Atlas Life*). This "body of doctrine" from 1789 is not merely "power or authority to hear and decide" but instead must "guide [the court's] decisions." *Atlas Life*, 306 U.S. at 568.

Under the relevant body of doctrine, ongoing infringement itself is irreparable harm for which legal remedies were inadequate under the traditional principles of equity. For example, the Chancery in *Horton v. Maltby* ruled as a general principle that any infringements that would occur while a case was being litigated constituted irreparable injury. Likening patent infringement to copyright infringement, the Court noted that the accused infringer "may in the mean time print of a number of copies to the irreparable injury of the Owner." *Horton v. Maltby*, LI Misc MS 112, p. 10 (Ch. 1783). Treatises on this country's early equity practice concur. 1 Justice Story & A.E. Randall, *Commentaries on Equity Jurisprudence* § 932 (Sweet and Maxwell, Limited, 3d ed. 1920 ("mere damages would give no adequate relief"); 4 Pomeroy & Pomeroy, *Equity Jurisprudence* § 1352 ("From the nature of the right and of the wrong,—the violation being a continuous act,—the legal remedy is necessarily inadequate.").

Because ongoing infringement itself is irreparable injury, the typical Chancery practice was to grant preliminary injunctions upon an adequate showing on merits.[6] The denial of a preliminary injunction in patent-infringement cases "appears to have occurred only when the court had doubts about the merits of a plaintiff's case and concerns over the hardship of an injunction." *See* Ex. 15, H. Tomás Gómez-Arostegui & Sean Bottomley, *The Traditional Burdens for Final Injunctions in Patent Cases c.1789 and Some Modern Implications*, 71 Case W. Rsrv. L. Rev. 403, 420 n.70 (2020) (citing *Stationers v. Carnan* (Ch. 1774); *Liardet v. Johnson* (Ch. 1777)). As the Court explained in *Liardet v. Johnson* (Ch. 1780), "[t]he ordinary

[6] The required showing in Chancery was largely consistent with the current formulation of a likelihood of success on the merits, if not a slightly lower burden. *See Donaldson v. Becket* (H.L. 1774), 17 *The Parliamentary History of England from the Earliest Period to the Year 1803*, at 953, 989 (William Cobbett ed., London, 1813) (De Grey, C.J.) ("To obtain such an injunction, it is by no means necessary that the plaintiff should make out a clear indisputable title. It may be granted on a reasonable pretense, and a doubtful right.").

relief in Case of Rights upon Patents is [an] Injunction & an Account. [Equity] [s]eldom refuse[s] [to grant an] Injunction till [the] hearing [i.e., a preliminary injunction].” *Id.*; *see also* Ex. 16, *Horton v. Maltby*, LI Misc MS 112 (Ch. 1783), *as printed in* H. Tomás Gómez-Arostegui & Sean Bottomley, *Patent-Infringement Suits and the Right to a Jury Trial*, 72 Am. U. L. Rev. 1293, 1344 n. 250 (2023) (“[T]he usual way of proceeding in these [invention] Cases [i]s to get an interim Injunction on Affidavit—then . . . [before the bench trial in Chancery, the Chancery] sends them to Law—If plaintiff prevail[s], he comes back here, & has his Account [of profits] &c.”).

As outlined above with respect to *Winter* Factor 1, Defendants’ have refused to stop infringing, and ME2C is likely to succeed on the merits of its infringement case. Thus, on this basis alone, ME2C has established that it is likely to suffer irreparable harm in the absence of preliminary relief.

2. Defendants’ Infringement also Causes ME2C’s Irreparable Harm under More Recent, Heightened Requirements

Notwithstanding the Supreme Court’s pronouncements above, some courts have demanded a heightened showing above the requirements of the traditional principles of equity in patent cases.[7] Even under those heightened requirements, ME2C is suffering the type of collateral commercial harm that all courts at all times have deemed irreparable.

[7] Prior to 2006, the Federal Circuit had created patent specific “categorical rules” to streamline motions for injunctive relief in patent cases. This included a presumption of irreparable harm for motions requesting a preliminary injunction. In *eBay*, the Supreme Court explained that patent specific rules were inappropriate, and that Courts must apply “traditional equitable principles” in all cases, including patent cases. *eBay*, 547 U.S. at 393.
Later, in *Robert Bosch LLC v. Pylon Mfg. Corp.*, 659 F.3d 1142, 1154 (Fed. Cir. 2011), the Federal Circuit stated, in *dicta*, that lower courts should no longer apply categorical rules, including the presumption of irreparable harm. However, neither *eBay* nor *Robert Bosch* actually analyzed the traditional equitable practice regarding irreparable harm. The end result is that lower courts have misunderstood these cases as calling for heightened evidence of irreparable

A party seeking a preliminary injunction may establish irreparable harm via collateral harm from the infringement. In doing so, it must demonstrate a causal nexus between the infringement and the collateral harm. *See Apple Inc. v. Samsung Elecs. Co.*, 735 F.3d 1352, 1360 (Fed. Cir. 2013). Where an injury cannot be quantified, the harm is therefore irreparable. *Metalcraft of Mayville, Inc. v. The Toro Co.*, 848 F.3d 1358, 1368 (Fed. Cir. 2017).

When infringement causes a patent owner to lose a potential customer, that loss may constitute irreparable harm. The Federal Circuit has explained that "it is impossible to quantify the damages caused by the loss of a potentially lifelong customer." *Id.* This is particularly true where one company's customers will continue to buy that company's products and recommend them to others." *Id.* (citing *Apple Inc. v. Samsung Elecs. Co.*, 809 F.3d 633, 641, 645 (Fed. Cir. 2015)). Indeed, the Federal Circuit has held that failure to consider loss of customers as irreparable harm may constitute abuse of discretion. *See Robert Bosch LLC v. Pylon Mfg. Corp.*, 659 F.3d 1142, 1154 (Fed. Cir. 2011).

In this case, ME2C seeks an injunction prohibiting the infringing power plants from performing the patented methods with non-ME2C products, i.e., combusting coal with bromine additive while injecting activated carbon to effect mercury capture. As discussed, ME2C sells a variety of bromine additives and activated carbon, and it has significant experience taking over supply contracts at power plants that switched from using infringing suppliers to ME2C supplied products. As discussed, ME2C has also analyzed the coal type burned at Defendants' power plants, as well as publicly available information about the bromine and activated carbon products used there. It is fully capable of supplying these plants. *See* J. Trettel Decl. at ¶ 22. This loss of

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harm, when they actually just required district courts to consider traditional equity practice. In a currently pending appeal, the Federal Circuit has been asked to clear up this confusion. *See* Ex. 14, *VidStream LLC v. Twitter*, No. 2024-226.

market share, especially inflicted on a small company, is irreparable harm by any definition. *See i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 862 (Fed. Cir. 2010), *aff'd*, 564 U.S. 91 (2011) ("In this case, a small company was practicing its patent, only to suffer a loss of market share, brand recognition, and customer goodwill as the result of the defendant's infringing acts. Such losses may frequently defy attempts at valuation, particularly when the infringing acts significantly change the relevant market, as occurred here.").

An injunction will provide more than just profits from the sale of products. As ME2C's Vice President of Operations has explained:

> If ME2C were to take over supply of mercury control products for these power plants, the benefits to ME2C would be enormous. The increase in revenue for ME2C would be significant, and could contribute to continued business. The utility industry is a relatively small community and supply deals like this could encourage increased business from other operators. Moreover, these power plants use a substantial amount of product to achieve mercury compliance. Supply contracts with these power plants would also allow ME2C to negotiate for more favorable terms with its suppliers for the ingredients in its products, allowing increased margins.

See J. Trettel Decl. at ¶ 23. Moreover, an injunction would assist in ME2C's research and development efforts so that it can continue to innovate and bring new environmental technologies to market. *Id.*

Preliminary relief is particularly important in this case. The patent is due to expire in August 2025. If the Court denies preliminary relief, it is likely that the patent will expire before a jury trial can occur. ME2C will be forever deprived the opportunity of building supply relationships with these power plants without competition from its own invention. *See Atlas Powder Co. v. Ireco Chemicals*, 773 F.2d 1230, 1232 (Fed. Cir. 1985) ("The fact that the patent has only one year to run is not a factor in favor of [the defendant] in the balance of equities. Patent rights do not peter out as the end of the patent term [approaches]."). After firmly

establishing its rights through lengthy litigation, ME2C should at least be given the time that remains to gain and maintain market share using its technology as a point of differentiation.

The granting of an injunction will also provide a powerful message to other infringing power plants and will assist ME2C in obtaining further supply contracts with other power plants. As the Federal Circuit explained in *MetalCraft*, *Apple*, *i4i*, and *Atlas Powder*, these benefits are impossible to quantify as after-the-fact damages.

Finally, ME2C is not seeking to enjoin a broad range of conduct based on an ancillary patented feature. Rather, ME2C is seeking a narrow injunction specifically limited to performance of the patented method claim. As established at length in the Delaware trial, this technology is critical for compliance with mercury-capture regulations for the power plants at issue. Ex. 12, Tr. at 325:13-19 (inventor testimony explaining: "we have the best technology so. If they're going to use activated carbon, they're going to need bromine on the coal as well in order to meet the mercury and air toxic standard"); 756:3-10 (expert testimony explaining that power plants could not implement alternatives to the patented technology because "they were very expensive, they would result in a lot of capital needing to be put in place or they just simply didn't do the same type of thing that the technology in this case does").

3. An Injunction Will Protect Against an Un-Collectable Judgment.

A patentee may also demonstrate irreparable harm based on the risk that the Defendant will be unable to satisfy the judgment. *Robert Bosch LLC*, 659 F.3d at 1155 ("A district court should assess whether a damage remedy is a meaningful one in light of the financial condition of the infringer before the alternative of money damages can be deemed adequate."). ME2C has alleged that PacifiCorp is undercapitalized and noted PacifiCorp's public filings indicating that "BHE has warned that it may exercise its control over PacifiCorp to the detriment of potential creditors." Dkt. No. 1 at 7-8. PacifiCorp does not deny this risk. In its recently filed motion to

dismiss PacifiCorp merely argues that it was not undercapitalized *at its formation*, and that BHE's exercise of control "only" poses a risk "with respect to creditors." Dkt. No. 45-1 at 11. But that is no comfort to ME2C who may be a judgment creditor after its patents expire. Given the close relationship between BHE and its subsidiaries PacifiCorp and MidAmerican, and BHE's willingness to avoid its debts, this risk weighs in favor of an injunction against all three entities.

C. *Winter* Factor 3: The Balance of Hardships

The third *Winter* factor considers the hardship the plaintiff would face in the absence of injunctive relief versus the hardship the defendant would face if enjoined. *See Winter*, 555 U.S. at 26; *see also i4i*, 598 F.3d at 862 (recognizing that "the 'balance of hardships' assesses the relative effect of granting or denying an injunction on the parties"). Chancery practice is no less relevant for balance-of-the-hardships as it is for irreparable harm.

Traditional principles of equity provide for a no-nonsense view of a defendant's hardship in ceasing its infringement:

> Where it restrains in Cases of Patents it takes nothing from the Individuals restrained which is their right. It only hinders them from invading another's [right] . . . . As to tying up the Party[,] the Right to do so is established.
>
> [As to the argument] that it will be a hardship to tie the Defendant up for ever from making this Cement[,] ... if the Plaintiffs have established their Right at Law, they are intitled to tie him up. This is not different from other Injunctions in like Cases.

Ex. 15, *Liardet v. Johnson* (Ch. 1780), *as printed in* 71 Case W. Rsrv. L. Rev. at 431; *accord Windsurfing Int'l Inc. v. AMF, Inc.*, 782 F.2d 995, 1003 n.12 (Fed. Cir. 1986) ("One who elects to build a business on a product found to infringe cannot be heard to complain if an injunction against continuing infringement destroys the business so elected."). In sharp contrast, the hardship faced by Plaintiff in the absence of an injunction is irreparable harm. The more certain

it is that the plaintiff will prevail on the merits, the more certain the irreparable harm.

In addition, a Court may also consider the parties' relative sizes, products, and sources of revenue. *i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 862 (Fed. Cir. 2010), *aff'd*, 564 U.S. 91 (2011). Where a patent is central to a patent owner's business, and the defendant has a variety of other operations, this fact weighs in favor of an injunction. *Id.* (granting injunction where patent owner used technology in most of its products, but the defendant Microsoft had multiple other products). Moreover, a district court must disregard a defendants' sunk costs, or costs associated with switching to a non-infringing alternative. The Federal Circuit explained:

> The district court's analysis properly ignored the expenses Microsoft incurred in creating the infringing products. Similarly irrelevant are the consequences to Microsoft of its infringement, such as the cost of redesigning the infringing products. As we explained in *Broadcom*, neither commercial success, nor sunk development costs, shield an infringer from injunctive relief. Microsoft is not entitled to continue infringing simply because it successfully exploited its infringement.

Id. (internal citations omitted). In this case, the patented technology is central to ME2C's business. Indeed, the company was built around it. ME2C CEO Richard Macpherson explained:

> Q. Tell us about the company[,] what kind of company is Midwest Energy?
>
> A. Midwest Energy Emissions is an environmental technology company that I started back in 2008, and its main purpose was to be able to continue developing technology to remove mercury emissions from coal fire plants which is what we've gone on to do.

Ex. 12, Tr. at 435:16-22; J. Trettel Decl. at ¶ 4. ME2C's CTO and inventor of the '517 patent further explained that ME2C's goals have been frustrated by infringement:

> Q. Have there been any times in the last several years when you're trying to commercialize the product as you described but you've run into commercial headaches that relate to this case?
>
> A. Yes. The major headache is when you run into some other business entity that's essentially using your technology and so we have to compete with that business so we can sell our technology

> which is the same technology. So yeah, it's -- I guess that's one of the major challenges.
>
> Q. How does that make you feel?
>
> A. Makes me frustrated. It's sometimes maddening. You have other entities out there that are taking advantage of all of the development work and effort you put into developing the technology and proving it out and essentially they're just using it without permission, and beyond that it makes it much more difficult for us, obviously, ME2C, to take on more business.

Ex. 12, Tr. at 322:10-324:24. An injunction would greatly aid ME2C's core business and support its R&D efforts. And while the technology is important to Defendants for mercury capture, that is just one aspect of their endeavor to produce and deliver electricity. Defendants cannot now complain of logistical troubles or increased costs from switching to non-infringing supply of products from the rightful patent owner. This is particularly true where ME2C is ready and willing to fill a supply gap. Indeed, it has done so with other power plants that agreed to pay only a modest increase in prices. J. Trettel Decl. at ¶ 6.

Finally, ME2C is willing to post a bond of $100,000 if the Court determines that security is appropriate under Fed. R. Civ. P. 65(c) to address any hardships faced by Defendants in the event they are later found to have been wrongfully enjoined. *See* Curry Decl. at ¶ 3. Rule 65(c) vests wide discretion in the trial court in setting bonds. In the Eighth Circuit, "[t]he amount of the bond rests within the sound discretion of the trial court and will not be disturbed on appeal in the absence of an abuse of that discretion." *Stockslager v. Carroll Elec. Co-op. Corp.*, 528 F.2d 949, 951 (8th Cir. 1976). In sum, the balance of the equities under the third *Winter* factor tilts heavily in favor of granting a preliminary injunction.

D. *Winter* Factor 4: The Public's Interest

The fourth *Winter* factor considers the impact of the injunction on the public interest. *See Winter*, 555 U.S. at 24. The Supreme Court's decision in *eBay* is instructive on this factor. There,

the Supreme Court explained that evaluation of this requirement requires a flexible approach. *See eBay*, 547 U.S.at 394. In doing so, it cited an earlier Federal Circuit opinion, *Roche Prod., Inc. v. Bolar Pharm. Co.*, 733 F.2d 858, 865 (Fed. Cir. 1984). The section of *Roche Products* that was favorably cited by *eBay* discusses the role of public interest in dispensing equitable relief, and it concludes by recognizing that federal courts have the power to modify or deny equitable relief as part of "adjustment and reconciliation between the public interest and private needs as well as between competing private claims." *Roche*, 733 F.2d at 866-67 (quoting *Hecht Co. v. Bowles*, 321 U.S. 321, 329-30 (1944)). As such, the Court should consider how the public interest might be affected by the proposed injunction and whether the injunction should be modified or denied to reconcile the public interest with the plaintiff's exclusionary right.

If an injunction will promote the protection of the patentee's private rights without causing adverse effects on the public, this factor weighs in favor of an injunction. *See i4i*, 598 F.3d at 863 (affirming injunction that prevented infringing sales to new parties but did not disrupt operations of third parties). For example, if a patentee can supply products in place of the enjoined products, this factor weighs in favor of an injunction. *See Natera, Inc. v. NeoGenomics Lab'ys, Inc.*, 106 F.4th 1369, 1380 (Fed. Cir. 2024) (affirming grant of injunction where patentee could supply the same cancer treatment drug in place of the enjoined infringing drug).

An injunction would prevent Defendants from using third-party suppliers to perform the patented methods, but it would not adversely affect the services that Defendants provide to the public. Defendants will be free to implement an alternative mercury capture method, if feasible, or they can obtain the patented technology from ME2C. Thus, this factor favors an injunction.

V. CONCLUSION

Plaintiff has satisfied the prerequisites for obtaining a preliminary injunction and respectfully asks that its proposed injunction against Defendants be granted.

DATED: October 11, 2024

Respectfully submitted,

/s/ Jeffrey D. Harty

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ATTORNEYS FOR PLAINTIFF MIDWEST ENERGY EMISSIONS CORP.

CERTIFICATE OF CONFERENCE

Pursuant to Local Rule 7(k), I, counsel for Plaintiff ME2C, certify that I met and conferred with counsel for all Defendants on October 8, 2024, regarding this motion. During that call, I asked whether Defendants could identify any power plants at issue in this case that either do not use, or have stopped using, bromine additives with activated carbon injection. Counsel for IPL identified the Ottumwa power plant as having stopped using this process, but would not commit to continuing to refrain from using the process. Counsel for PacifiCorp identified the Naughton power plant as never having used this process. Defendants did not identify any other power plants at issue that would be outside the scope of the proposed injunction. I also asked whether Defendants would voluntarily agree to stop using bromine additives with activated carbon injection at any of their power plants for the remaining life of the patents. All Defendants refused to do so. Accordingly, the parties are at an impasse, and ME2C requests the relief specified in this motion.

/s/ Justin Nemunaitis
Justin Nemunaitis