

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

<p>MIDWEST ENERGY EMISSIONS CORP.,</p> <p>Plaintiff,</p> <p>v.</p> <p>BERKSHIRE HATHAWAY ENERGY COMPANY, MIDAMERICAN ENERGY COMPANY, PACIFICORP, ALLIANT ENERGY CORPORATION, INTERSTATE POWER AND LIGHT COMPANY, and WISCONSIN POWER AND LIGHT COMPANY,</p> <p>Defendants.</p>	<p>Case No. _____</p> <p>COMPLAINT FOR PATENT INFRINGEMENT</p> <p>JURY TRIAL DEMANDED</p>
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Plaintiff Midwest Energy Emissions Corp. (“ME2C”) files this Complaint against Defendants Berkshire Hathaway Energy Company, MidAmerican Energy Company, PacifiCorp, Alliant Energy Corporation, Interstate Power and Light Company, and Wisconsin Power and Light Company (individually and collectively, “Defendants”) for patent infringement under 35 U.S.C. § 271. ME2C alleges, based on its own personal knowledge with respect to its own actions and based upon information and belief with respect to all others’ actions, as follows:

THE PARTIES

1. Midwest Energy Emissions Corp. is a Delaware corporation with its principal place of business at 1810 Jester Drive, Corsicana, Texas 75109.

2. Defendant Berkshire Hathaway Energy Company (“BHE”) is an Iowa corporation with a principal place of business at 666 Grand Avenue, Des Moines, Iowa 50309. Berkshire Hathaway Energy Company has designated C T Corporation System, 400 E Court Ave, Ste. 100, Des Moines, IA, 50309, as its agent for service of process.

3. Defendant MidAmerican Energy Company (“MidAmerican”) is an Iowa corporation with a principal place of business at 666 Grand Avenue, Des Moines, Iowa 50309. MidAmerican Energy Company has designated C T Corporation System, 400 E Court Ave, Ste. 100, Des Moines, IA, 50309, as its agent for service of process.

4. Defendant PacifiCorp is an Oregon corporation with a regular and established place of business at 666 Grand Avenue, Des Moines, Iowa 50309, and a principal place of business at 825 N.E. Multnomah Street, Suite 1900 Portland, Oregon 97232. PacifiCorp has designated C T Corporation System, 780 Commercial Street SE, Suite 100, Salem, OR, 97301, as its agent for service of process.

5. Defendant Alliant Energy Corporation (“Alliant”) is a Wisconsin corporation with a regular and established place of business at Ottumwa Generating Station, 20527-20583 Power Plant Rd, Ottumwa, IA 52501, and a principal place of business at 4902 N. Biltmore Lane, Madison, Wisconsin 53718. Alliant Energy Corporation has designated Corporation Service Company, 33 East Main Street, Suite 610, Madison, WI 53703, as its agent for service of process.

6. Defendant Interstate Power and Light Company (“IPL”) is an Iowa corporation with a principal place of business at Alliant Energy Tower, 200 1st St. SE, Cedar Rapids, IA 52401. Interstate Power and Light Company has designated Corporation Service Company, 505 5th Ave. Ste. 729, Des Moines, IA, 50309, as its agent for service of process.

7. Defendant Wisconsin Power and Light Company (“WPL”) is a Wisconsin corporation with a principal place of business at 4902 N. Biltmore Lane, Madison, Wisconsin 53718. Wisconsin Power and Light Company is registered to do business in Iowa and has designated Corporation Service Company, 505 5th Ave. Ste. 729, Des Moines, IA, 50309, as its agent for service of process.

JURISDICTION AND VENUE

8. This action includes a claim of patent infringement arising under the patent laws of the United States, 35 U.S.C. §§ 1 *et seq.* This Court has jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

9. The Court has general personal jurisdiction over BHE, MidAmerican, and IPL because each of their affiliations with the State of Iowa are so systematic and continuous as to render each essentially at home in this state. In particular, each of BHE, MidAmerican, and IPL is incorporated in or organized under the laws of Iowa, has an agent for service of process in Iowa, and has a principal place of business in Iowa.

10. The Court has general personal jurisdiction over Alliant because each of its affiliations with the State of Iowa are so systematic and continuous as to render it essentially at home in this state. In particular, Alliant services utility customers and operates power plants in only two states: Wisconsin and Iowa. The majority of its customers are located in Iowa. Alliant has offices, operates power plants, and supplies power throughout the state of Iowa, including within this forum.¹ Alliant also maintains one of its two largest offices in Cedar Rapids, Iowa at the Alliant Energy Tower, the largest skyscraper in Cedar Rapids, and employs hundreds of people in this state. Alliant also maintains a website for interacting with customers and investors in this state to sell utility services, pay bills, and provide information about Alliant.

11. The Court also has general personal jurisdiction over BHE, MidAmerican, IPL, and WPL because they have consented to jurisdiction by maintaining registered agents in this state.

12. In addition or in the alternative, this Court has specific personal jurisdiction over Defendants because they have established minimum contacts with this forum such that the exercise

¹ Alliant Energy, *Communities we serve* (last visited July 12, 2024), <https://www.alliantenergy.com/aboutus/howeare/communitiesweserve?state=iowa#filters>

of jurisdiction over Defendants would not offend traditional notions of fair play and substantial justice.

13. Specifically, Defendants BHE, MidAmerican, Alliant, and IPL own and/or operate within this state the coal-fired power plants to commit the acts of infringement alleged below.

14. Moreover, Defendants BHE and Alliant have induced infringement at power plants and/or exercised control over infringement at power plants in this state by exercising control over their subsidiaries (MidAmerican and IPL, respectively) to intentionally cause infringement in this state.

15. In addition, Defendant Alliant has induced infringement at power plants and/or exercised control over infringement at power plants operated in the bordering state of Wisconsin. Because of interconnections between the Iowa and Wisconsin electrical grids, electricity generated while using ME2C's patented methods is sent into Iowa from those power plants.

16. BHE subsidiaries MidAmerican and PacifiCorp rely on employees and administrative services provided by BHE and its subsidiaries to operate its coal-fired power plants to commit the acts of infringement alleged below. On information and belief, these employees and services are performed in or by individuals located in this state.

17. Similarly, Alliant subsidiaries IPL and WPL rely on employees and administrative services provided by Alliant and its subsidiaries to operate its coal-fired power plants to commit the acts of infringement alleged below. On information and belief, these employees and services are performed in or by individuals located in this state.

18. In addition or in the alternative, BHE and Alliant infringe vicariously by profiting from the direct infringement of their subsidiaries despite having the right and ability to stop that infringement.

19. In addition or in the alternative, BHE is the alter ego of its subsidiaries MidAmerican and PacifiCorp, and Alliant is the alter ego of its subsidiaries IPL and WPL, as explained below.

20. Accordingly, the contacts of their subsidiaries are attributable to the parent companies BHE and Alliant.

21. Venue is proper in this district pursuant to 28 U.S.C. § 1400(b) with respect to BHE, MidAmerican, and IPL, because they each reside in this district, and because these Defendants have committed acts of infringement and have a regular and established place of business at one or more power plants located within this district. For example, they have performed the patented methods at least at the Louisa Generating Station and/or the Ottumwa Generating Stations located in this district.

22. Venue is also proper in this district pursuant to 28 U.S.C. § 1400(b) with respect to Alliant because it has committed acts of infringement and has a regular and established place of business at one or more power plants or offices located within this forum. Alliant maintains offices in Marshalltown, Iowa and at the Ottumwa Generating Station. In addition, Alliant has committed acts of infringement in this district by exercising direction and control over its subsidiary IPL, using IPL as its agent, and by inducing IPL to perform the patented methods at least at the Ottumwa Generating Station. Alliant is also the alter ego of IPL and vicariously liable with respect to IPL such that IPL's acts of infringement in this district are attributable to Alliant.

23. Venue is proper in this district pursuant to 28 U.S.C. § 1400(b) with respect to PacifiCorp based on the fact that PacifiCorp is the agent and/or alter ego of BHE and otherwise acts under the direction and control of BHE such that performance of the patented methods by PacifiCorp are attributable to BHE. BHE exercises this control from within this district.

24. PacifiCorp maintains a regular and established place of business within this district at least at BHE's principal place of business in Des Moines, Iowa.

25. PacifiCorp, MidAmerican, BHE, and other of BHE's subsidiaries are parties to an intercompany administrative services agreement and a mutual assistance agreement. Amounts charged to PacifiCorp under this agreement have totaled in the hundreds of millions of dollars per year.

26. On information and belief, PacifiCorp relies on BHE employees working out of facilities located in this district to operate its business, and thus maintains a regular and established place of business in this district.

27. In addition, PacifiCorp relies on BHE employees to act as its officers and directors. For example, PacifiCorp has relied on Scott W. Thon to act as its CEO and Chairman of the Board of Directors despite the fact that Mr. Thon was employed by and paid by BHE while acting as BHE's president of operations. Additionally, PacifiCorp has relied on Calvin W. Haack and Natalie Hocken to act as a directors while also acting as CFO and general counsel of BHE, respectively. On information and belief, these individuals have worked in, and work in, facilities in this district. By participating in, inducing, and approving the conduct giving rise to infringement in this case, these individuals' acts of infringement occurred in this district.

28. PacifiCorp has also committed acts of infringement within this district by virtue of the fact that it is the agent and alter ego of, and otherwise acts under the direction and control of, BHE.

29. Specifically, and as noted above, PacifiCorp relies on BHE to provide the officers and employees to operate PacifiCorp's business, including the power plants accused of infringement in this case.

30. In addition, BHE, MidAmerican, and PacifiCorp tout the fact that MidAmerican and PacifiCorp are subsidiaries of BHE, part of the portfolio of BHE, and contribute to the consolidated financials of BHE.²

31. BHE also touts that it makes decisions regarding the operation of coal-fired power plants owned by MidAmerican and PacifiCorp, including power plants where acts of infringement have occurred.³

32. Although BHE and PacifiCorp are incorporated as separate entities, BHE maintains “unrestricted cash and other assets” that it may transfer to and from PacifiCorp and its other affiliated companies.⁴

33. PacifiCorp is undercapitalized relative to its outstanding liabilities. It has explained:

These changes in PacifiCorp’s credit ratings have and are expected to continue to have a material impact on PacifiCorp’s liquidity and may result in, among other things, PacifiCorp being unable to maintain sufficient levels of cash or to obtain necessary short- and long-term financing to fund its operations and financial obligations, capital investments and potential future settlements associated with the Wildfires.⁵

34. Moreover, BHE has warned that it may exercise its control over PacifiCorp to the

² Berkshire Hathaway Energy, 2024 Corporate Brochure, https://prdbhegtscom-cactbhecoracloud.ocecdn.oraclecloud.com/content/published/api/v1.1/assets/CONT63EBCAD93FCF48A7A1B34159EFC0A3CB/native/2024+BHE+Corporate+Brochure_FINAL.pdf?channelToken=43656b04884643bc9fe334ad550d375f&download=false.

³ Berkshire Hathaway Energy, 2022 Fixed-Income Investor Conference Presentation, https://www.brkenenergy.com/content/published/api/v1.1/assets/CONT5DA865379DCC4636AA0D1C00FA771EC2/native?cb=_cache_37c9&download=true&channelToken=43656b04884643bc9fe334ad550d375f

⁴ BHE’s Form 10-K for 2023 at 113, <https://www.sec.gov/Archives/edgar/data/1081316/000108131624000003/bhe-20231231.htm> (“It should not be assumed that the assets of any subsidiary will be available to satisfy BHE's obligations or the obligations of its other subsidiaries. However, unrestricted cash or other assets which are available for distribution may, subject to applicable law, regulatory commitments and the terms of financing and ring-fencing arrangements for such parties, be advanced, loaned, paid as dividends or otherwise distributed or contributed to BHE or affiliates thereof.”).

⁵ BHE’s Form 10-K for 2023 at 77, <https://www.sec.gov/Archives/edgar/data/1081316/000108131624000003/bhe-20231231.htm>.

detriment of potential creditors (which would include ME2C as a judgment creditor):

BHE indirectly owns all of the common stock of PacifiCorp BHE is also the sole member of MidAmerican Funding and, accordingly, indirectly owns all of MidAmerican Energy's common stock. As a result, BHE has control over all decisions requiring shareholder approval, including the election of directors. In circumstances involving a conflict of interest between BHE and the creditors of the Subsidiary Registrants [including MidAmerican and PacifiCorp], BHE could exercise its control in a manner that would benefit BHE to the detriment of the Subsidiary Registrants' creditors.⁶

35. Accordingly, PacifiCorp is the alter ego of, and otherwise acts under the direction and control of, BHE. Thus, venue for BHE may be attributable to PacifiCorp.

36. Venue is proper in this district pursuant to 28 U.S.C. § 1400(b) with respect to WPL based on the fact that WPL is the agent and/or alter ego of Alliant and otherwise acts under the direction and control of Alliant such that performance of the patented methods by WPL are attributable to Alliant.

37. Alliant, IPL and WPL tout the fact that IPL and WPL are subsidiaries of Alliant, part of the portfolio of Alliant, and contribute to the consolidated financials of Alliant.⁷

38. Alliant also touts that it makes decisions regarding the operation of coal-fired power plants owned by IPL and WPL, including power plants where acts of infringement have occurred.⁸

39. All of WPL's and IPL's officers and directors are employed as officers or directors of Alliant. Specifically, the individuals ultimately responsible for the acts of infringement at issue

⁶ BHE's Form 10-K for 2023 at 76, <https://www.sec.gov/Archives/edgar/data/1081316/000108131624000003/bhe-20231231.htm>.

⁷ Alliant Energy, *About our operations, compliance and values* (last visited July 12, 2024), <https://www.alliantenergy.com/aboutus/whoweare/whoweare>.

⁸ See Iulia Gheorghiu, *Alliant, We Energies walk back Wisconsin coal retirement plans in light of MISO's expected capacity shortfalls*, UTILITYDIVE (June 24, 2022), <https://www.utilitydive.com/news/wisconsin-utilities-coal-retirement-miso-delay/626005/>; Cindy Toopes, *Ottumwa Generating Station a 'shining star' in Alliant's fleet*, OTTUMWA COURIER (Aug. 4, 2012), https://www.ottumwacourier.com/news/local_news/ottumwa-generating-station-a-shining-star-in-alliant-s-fleet/article_59da4c54-27b5-5088-8cfb-3cfa1a76c3dd.html.

in this case, including WPL's CEO Lisa Barton, WPL's CFO Robert Durian, and Chairman of the Board John Larsen, are officers and/or directors of Alliant.

40. Alliant negotiates intellectual property and commercial agreements related to performance of the patented methods at infringing power plants even if those power plants are nominally owned by IPL or WPL. Moreover, Alliant investigates, oversees, and controls operation of the patented methods at those power plants. For example, ME2C negotiations related to use of the patented methods at WPL power plants were conducted with Alliant. In addition, Alliant employees Michael Li, Jeff Hanson, and Jeff Jaeckels have investigated and advised regarding the use of additives and sorbents used in the infringing acts performed at power plants owned or operated by IPL and WPL. They have also interacted with state regulators regarding environmental regulations related to the patented methods for power plants owned or operated by IPL and WPL. In addition, Alliant managers operate as plant managers responsible for operating the IPL and WPL power plants accused of infringement in this case.

41. Accordingly, WPL is the agent and alter ego of, and otherwise acts under the direction and control of, Alliant. Thus, venue for Alliant may be attributable to WPL.

ASSERTED PATENTS

42. On July 9, 2019, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 10,343,114 (the "'114 patent") entitled "Sorbents for the Oxidation and Removal of Mercury." A copy of the '114 patent is attached as Exhibit A.

43. On March 17, 2020, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 10,589,225 (the "'225 patent") entitled "Sorbents for the Oxidation and Removal of Mercury." A copy of the '225 patent is attached as Exhibit B.

44. On March 24, 2020, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 10,596,517 (the "'517 patent") entitled "Sorbents for the Oxidation and

Removal of Mercury.” A copy of the ’517 patent is attached as Exhibit C.

45. On June 2, 2020, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 10,668,430 (the “’430 patent”) entitled “Sorbents for the Oxidation and Removal of Mercury.” A copy of the ’430 patent is attached as Exhibit D.

46. On February 23, 2021, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 10,926,218 (the “’218 patent”) entitled “Sorbents for the Oxidation and Removal of Mercury.” A copy of the ’218 patent is attached as Exhibit E.

47. On March 2, 2021, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 10,933,370 (the “’370 patent”) entitled “Sorbents for the Oxidation and Removal of Mercury.” A copy of the ’370 patent is attached as Exhibit F.

48. ME2C obtained an assignment of the Patents-in-Suit from the Energy & Environmental Research Center at the University of North Dakota (“EERC”) including any rights retained by the EERC to receive past damages. Thus, during the time period of alleged infringement, ME2C held all substantial rights in the patents-in-suit.

FACTUAL ALLEGATIONS

I. The Federal Government Resolves to Regulate Mercury Emissions from Power Plants

49. In 1990, Congress passed the Clean Air Act Amendments of 1990.

50. That law required the U.S. Environmental Protection Agency (“EPA”) to study the impact of various air pollutants, including mercury.

51. To assist in the research, in 1992, the EPA established a National Center for Excellence at the EERC referred to as the Center for Air Toxic Metals (“CATM”).

52. In 1997 and 1998, the EPA issued two reports to Congress: Mercury Study Report to Congress (issued December 1997) and Study of Hazardous Air Pollutant Emissions from

Electric Utility Steam (issued February 1998). As an outcome of these studies, the EPA found a pressing need for regulation of mercury pollution from coal-fired power plants. Unfortunately, it also found that no existing technologies were up to the task of significantly reducing the mercury pollution from those plants.

53. In the wake of these reports, various governmental and industry organizations injected millions of dollars into basic scientific research and experimental studies in the search for new mercury capture technologies.

II. The Inventors of the Patents-in-Suit Develop Mercury Capture Solutions

54. Researchers at the EERC were instrumental in developing new techniques for studying this problem and ultimately solving it.

55. In 2002, the EPA surveyed the state of research in this field and produced a follow-up report: Control of Mercury Emissions from Coal-Fired Electric Utility Boilers: Interim Report. This report identified some promising areas of research, and it noted that some technologies were available for reducing mercury emissions. However, the EPA recognized that there was no universal solution to this problem and that more work remained to be done.

56. During this time, the inventors of the patents-in-suit were researching the issue of mercury capture at the EERC. Through their work, they uncovered some of the complex chemistry that occurs in a coal-fired boiler.

57. They further discovered a number of methods for improving mercury capture. In particular, they found that applying a halogen additive such as bromine and bromide compounds onto coal or into a combustion chamber, when combined with sorbent injection, could dramatically reduce the mercury content of coal-fired power plant emissions.

58. By 2004, the inventors filed a provisional application that would lead to the patents in suit. This application, and the subsequently issued patents, cover some of their discoveries and

various applications of their discoveries. In particular, the inventors discovered, and ultimately proved, the benefits of combining halogen treatments (*e.g.*, bromine containing materials) in-flight with backend sorbents (*e.g.*, activated carbon).

59. In 2011, the EPA finalized the first national standards to reduce mercury and other toxic air pollution from coal-fired plants (the Mercury and Air Toxics Standards or “MATS”). Most coal-fired power plants were required to comply with this rule by 2016.

III. Congress Creates the Section 45 Refined Coal Tax Credit

60. While the EPA was working on addressing the issue of mercury emissions, Congress also took action. In 2004, Congress passed the American Jobs Act, which created a new tax credit related to the production of refined coal (referred to as “Section 45 tax credits”).

61. Under this law, a refined coal producer can receive an inflation-adjusted tax credit for each ton (\$/ton) of refined coal sold to a power plant that results in a 40% reduction in mercury emissions and a 20% reduction in NOx emissions.

62. Because of this highly lucrative law, companies jumped at the chance to collect the tax credits. Indeed, the refined coal tax credit program resulted in companies receiving hundreds of millions of dollars in tax credits each year.

63. The Section 45 tax credit program expired on December 31, 2021, and was not renewed or extended.

IV. ME2C Attempts to Compete in the Market for Mercury Capture Technologies

64. ME2C is the commercial extension of the patented technology.

65. ME2C develops, markets, and sells products and services that practice the patented technology.

66. ME2C’s product development efforts have been led by named inventor and Chief Technology Officer John Pavlish. ME2C has developed both sorbent enhancement additives and

activated carbon sorbents for practicing the technology described in the patents-in-suit and for practicing other patented methods owned by ME2C.

67. ME2C has also publicized its patent portfolio and explained the scope of the patented technology through its website, its interactions with customers and potential customers, and through presentations at industry events such as the MEGA Symposium, the Energy, Utility & Environment Conference, Lignite Energy Conference, and the Air Quality Conference.

68. ME2C has attempted to compete in the market for mercury capture technologies. In particular it attempted to negotiate supply contracts with coal-fired power plants in anticipation of MATS regulations that became effective in 2015 and 2016, and also periodically afterwards as plants re-evaluate their MATS compliance strategies.

69. However, ME2C was at an unfair disadvantage with respect to the refined coal entities that encouraged power plants to use ME2C's patented technology instead of developing new technologies for refined coal. As proven to the jury in the Delaware case discussed below, refined coal providers have induced power plant operators to infringe the patents-in-suit by offering the technology at no or artificially low costs to the plant.

70. In addition, even after the expiration of the refined coal tax credits, power plants connected to a refined coal facility—which were provided to the plants for free or low cost—can now purchase various materials from different suppliers at low prices and employ them in a manner that infringes ME2C's patents.

71. Despite these difficulties, ME2C has sold its products and services to various power plants throughout the country.

V. ME2C Receives Jury Verdict in its Favor on Refined Coal Producers' Infringement of the Patents-In-Suit

72. In July 2019, ME2C filed a complaint for patent infringement in the United States

District Court for the District of Delaware against various entities involved in producing refined coal and coal-fired power plant operators that used ME2C's patented technology, alleging infringement of multiple patents, including four of the Patents-in-Suit (the "Delaware Case").

73. In relevant part, ME2C alleged that the coal-fired power plants at issue directly infringed the asserted patents by (1) burning coal with added halide (*e.g.*, calcium bromide), (2) injecting activated carbon into the flue gas downstream of the power plants' boilers, and (3) using electrostatic precipitators ("ESPs") or baghouses to capture particulate matter, including activated carbon bound to pollutants like mercury in the flue or exhaust.

74. ME2C also alleged that the refined coal entities indirectly infringed the asserted patents by making and selling refined coal, and by inducing power plants that purchased that refined coal to practice ME2C's patented methods without permission in the manner described in the previous paragraph.

75. Before trial, all of the accused power plant operators and most of the accused refined coal entities, including refined coal suppliers for most of the Accused Coal Plants,⁹ settled with ME2C and were voluntarily dismissed from the case. The remaining defendants were a group of affiliated refined coal entities, referred to herein as "CERT."¹⁰

76. On March 1, 2024, following a five-day trial, the jury found CERT liable for contributory and induced infringement of the '517 and '114 Patents, and found that CERT's infringement was willful. Implicit in the jury's finding (and, in fact, required by the jury

⁹ This includes the Walter Scott Jr., Energy Center, the George Neal Energy Center, and the Louisa Energy Center.

¹⁰ The CERT entities include CERT Operations II LLC, CERT Operations IV LLC, CERT Operations V LLC, CERT Operations RCB LLC, Senescence Energy Products LLC, Bascobert (A) Holdings LLC, Buffington Partners LLC, Larkwood Energy LLC, Rutledge Products LLC, Cottbus Associates LLC, Springhill Resources LLC, and Marquis Industrial Company LLC.

instructions and controlling law) was a finding that the power plants to which CERT provided refined coal directly infringed the '517 and '114 patents.

VI. Defendants' Accused Power Plants and Acts of Infringement

77. The Walter Scott Jr., Energy Center ("Walter Scott") is a coal-fired power plant in Council Bluffs, Iowa.

78. Defendant MidAmerican owns a majority stake in and operates Units 3 and 4 of Walter Scott.

79. Defendant MidAmerican is a wholly-owned subsidiary of BHE.

80. On information and belief, MidAmerican owns and operates Walter Scott for the benefit of BHE. Profits made by MidAmerican in connection with Walter Scott are paid to BHE.

81. During operation, Walter Scott burns coal and added Br₂, HBr, and/or a bromide compound in the combustion chamber.

82. During operation, Walter Scott injects activated carbon sorbent downstream of the combustion chamber.

83. During operation, Walter Scott employs a baghouse and/or electrostatic precipitator to collect mercury with bromine and activated carbon.

84. The Louisa Energy Center ("Louisa") is a coal-fired power plant in Muscatine, Iowa.

85. Defendant MidAmerican owns a majority stake of and operates Louisa.

86. Defendant IPL owns a minority share of Louisa.

87. On information and belief, MidAmerican owns and operates Louisa for the benefit of BHE. Profits made by MidAmerican in connection with Louisa are paid to BHE.

88. On information and belief, IPL owns its share of Louisa for the benefit of Alliant. Profits made by IPL in connection with Louisa are paid to Alliant.

89. During operation, Louisa burns coal and added Br₂, HBr, and/or a bromide compound in the combustion chamber.

90. During operation, Louisa injects activated carbon sorbent downstream of the combustion chamber.

91. During operation, Louisa employs a baghouse and/or electrostatic precipitator to collect mercury with bromine and activated carbon.

92. The George Neal Energy Center (“George Neal”) refers to a pair of coal-fired power plants in Sergeant Bluff, Iowa (“George Neal North”), and Salix, Iowa (“George Neal South”).

93. Defendant MidAmerican owns a majority stake of and operates Units 3 and 4 of George Neal.

94. Defendant IPL owns a minority share of Units 3 and 4 of George Neal.

95. On information and belief, MidAmerican owns and operates George Neal for the benefit of BHE. Profits made by MidAmerican in connection with George Neal are paid to BHE.

96. On information and belief, IPL owns its share of George Neal for the benefit of Alliant. Profits made by IPL in connection with George Neal are paid to Alliant.

97. During operation, Units 3 and 4 of George Neal burns coal and added Br₂, HBr, and/or a bromide compound in the combustion chamber.

98. During operation, Units 3 and 4 of George Neal inject activated carbon sorbent downstream of the combustion chamber.

99. During operation, Units 3 and 4 of George Neal employ baghouses and/or electrostatic precipitators to collect mercury with bromine and activated carbon.

100. The Ottumwa Generating Station (“Ottumwa”) is a coal-fired power plant in

Ottumwa, Iowa.

101. Defendant MidAmerican owns a majority stake of and operates Ottumwa.

102. Defendant IPL owns a minority share of Ottumwa.

103. On information and belief, IPL owns and operates Ottumwa for the benefit of BHE.

Profits made by MidAmerican in connection with Ottumwa are paid to BHE.

104. On information and belief, IPL owns its share of Ottumwa for the benefit of Alliant.

Profits made by IPL in connection with Ottumwa are paid to Alliant.

105. During operation, Ottumwa burns coal and added Br₂, HBr, and/or a bromide compound in the combustion chamber.

106. During operation, Ottumwa injects activated carbon sorbent downstream of the combustion chamber.

107. During operation, Ottumwa employs a baghouse and/or electrostatic precipitator to collect mercury with bromine and activated carbon.

108. The Wyodak Power Plant (“Wyodak”) is a coal-fired power plant in Gillette, Wyoming.

109. Defendant PacifiCorp owns a majority stake of and operates Wyodak.

110. On information and belief, PacifiCorp owns and operates Wyodak for the benefit of BHE. Profits made by PacifiCorp in connection with Wyodak are paid to BHE.

111. During operation, Wyodak burns coal and added Br₂, HBr, and/or a bromide compound in the combustion chamber.

112. During operation, Wyodak injects activated carbon sorbent downstream of the combustion chamber.

113. During operation, Wyodak employs a baghouse and/or electrostatic precipitator to

collect mercury with bromine and activated carbon.

114. The Jim Bridger Power Plant (“Jim Bridger”) is a coal-fired power plant in Rock Springs, Wyoming.

115. Defendant PacifiCorp owns a majority stake of and operates Jim Bridger.

116. On information and belief, PacifiCorp owns and operates Jim Bridger for the benefit of BHE. Profits made by PacifiCorp in connection with Jim Bridger are paid to BHE.

117. During operation, Jim Bridger burns coal and added Br₂, HBr, and/or a bromide compound in the combustion chamber.

118. During operation, Jim Bridger injects activated carbon sorbent downstream of the combustion chamber.

119. During operation, Jim Bridger employs a baghouse and/or electrostatic precipitator to collect mercury with bromine and activated carbon.

120. The Naughton Power Plant (“Naughton”) is a coal-fired power plant in Fontenelle, Wyoming.

121. Defendant PacifiCorp owns a majority stake of and operates Naughton.

122. On information and belief, PacifiCorp owns and operates Naughton for the benefit of BHE. Profits made by PacifiCorp in connection with Naughton are paid to BHE.

123. Profits made by PacifiCorp in connection with Naughton are paid to BHE.

124. During operation, Naughton burns coal and added Br₂, HBr, and/or a bromide compound in the combustion chamber.

125. During operation, Naughton injects activated carbon sorbent downstream of the combustion chamber.

126. During operation, Naughton employs a baghouse and/or electrostatic precipitator

to collect mercury with bromine and activated carbon.

127. The Dave Johnston Power Plant (“Dave Johnston”) is a coal-fired power plant in Glenrock, Wyoming.

128. Defendant PacifiCorp owns a majority stake of and operates Dave Johnston.

129. On information and belief, PacifiCorp owns and operates Dave Johnston for the benefit of BHE. Profits made by PacifiCorp in connection with Dave Johnston are paid to BHE.

130. During operation, Dave Johnston burns coal and added Br₂, HBr, and/or a bromide compound in the combustion chamber.

131. During operation, Dave Johnston injects activated carbon sorbent downstream of the combustion chamber.

132. During operation, Dave Johnston employs a baghouse and/or electrostatic precipitator to collect mercury with bromine and activated carbon.

133. The Columbia Energy Center (“Columbia”) is a coal-fired power plant near Portage, Wisconsin.

134. Defendant WPL owns a majority stake of and operates Columbia.

135. On information and belief, WPL owns and operates Columbia for the benefit of Alliant. Profits made by WPL in connection with Columbia are paid to Alliant.

136. During operation, Columbia burns coal and added Br₂, HBr, and/or a bromide compound in the combustion chamber.

137. During operation, Columbia injects activated carbon sorbent downstream of the combustion chamber.

138. During operation, Columbia employs a baghouse and/or electrostatic precipitator to collect mercury with bromine and activated carbon.

139. The Edgewater Generating Station (“Edgewater”) is a coal-fired power plant in Sheboygan, Wisconsin.

140. Defendant WPL owns a majority stake of and operates Edgewater.

141. On information and belief, WPL owns and operates Edgewater for the benefit of Alliant. Profits made by WPL in connection with Edgewater are paid to Alliant.

142. During operation, Edgewater burns coal and added Br₂, HBr, and/or a bromide compound in the combustion chamber.

143. During operation, Edgewater injects activated carbon sorbent downstream of the combustion chamber.

144. During operation, Edgewater employs a baghouse and/or electrostatic precipitator to collect mercury with bromine and activated carbon.

145. The “Accused Coal Plants” include at least Walter Scott, George Neal, Louisa, Ottumwa, Wyodak, Jim Bridger, Naughton, Dave Johnston, Columbia, Edgewater, and any other coal-fired power plants owned or operated, at least in part, by a Defendant that combusts coal in a combustion chamber with bromine, bromide, iodine, and/or iodide that has been added to the coal and/or that has been provided to the combustion chamber, and where they inject a sorbent material comprising activated carbon downstream of the combustion chamber and collect mercury bound to activated carbon in a particulate collection device (e.g., baghouse or ESP).

146. In doing so, the Defendants, by operating and controlling the Accused Coal Plants, perform the methods claimed by the Patents-in-Suit, and thus directly infringe the Patents-in-Suit at the Accused Coal Plants.

147. As the parent and controller of PacifiCorp and MidAmerican, BHE also induces PacifiCorp and MidAmerican to perform the steps of the patented methods.

148. On information and belief, BHE does so by exercising control over PacifiCorp and MidAmerican, providing technical, administrative, logistical and/or financial services to PacifiCorp and MidAmerican.

149. PacifiCorp and MidAmerican are both wholly owned subsidiaries of BHE.

150. PacifiCorp and MidAmerican share directors and/or managers, which are themselves officers and/or directors of BHE.

151. As stated in BHE's Form 10-K for 2023:

BHE indirectly owns all of the common stock of PacifiCorp . . . BHE is also the sole member of MidAmerican Funding and, accordingly, indirectly owns all of MidAmerican Energy's common stock. As a result, BHE has control over all decisions requiring shareholder approval, including the election of directors. In circumstances involving a conflict of interest between BHE and the creditors of the Subsidiary Registrants [including MidAmerican and PacifiCorp], BHE could exercise its control in a manner that would benefit BHE to the detriment of the Subsidiary Registrants' creditors.¹¹

152. PacifiCorp, MidAmerican, BHE, and other of BHE's subsidiaries are parties to an intercompany administrative services agreement and a mutual assistance agreement. Amounts charged to PacifiCorp and MidAmerican under these agreements have totaled in the hundreds of millions of dollars per year.

153. Furthermore, BHE publicly touts its control over its subsidiaries, including its plans to retire coal plants owned by PacifiCorp and MidAmerican by 2049.¹²

154. In light of the above, MidAmerican and PacifiCorp are agents of BHE.

155. Also in light of the above, because of its complete domination and control over its

¹¹ BHE's Form 10-K for 2023 at 76, <https://www.sec.gov/Archives/edgar/data/1081316/000108131624000003/bhe-20231231.htm>.

¹² Berkshire Hathaway Energy, 2022 Fixed-Income Investor Conference Presentation, https://www.brkenenergy.com/content/published/api/v1.1/assets/CONT5DA865379DCC4636AA0D1C00FA771EC2/native?cb=_cache_37c9&download=true&channelToken=43656b04884643bc9fe334ad550d375f.

subsidiaries, BHE is the alter ego of MidAmerican and PacifiCorp.

156. As the parent and controller of IPL and WPL, Alliant also induces IPL and WPL to perform the steps of the patented methods.

157. On information and belief, Alliant does so by exercising control IPL and WPL, providing technical, administrative, logistical and/or financial services to IPL and WPL, and/or negotiating standard form or bulk agreements for products and services related to mercury control.

158. On information and belief, the engineers, sales staff, and other employees that work on behalf of IPL and WPL at or on projects in connection with the Accused Coal Plants are Alliant employees or hold themselves out as Alliant employees.

159. IPL and WPL are both wholly owned subsidiaries of Alliant.

160. IPL, WPL, and Alliant share the same directors and officers. For example, Lisa M. Barton serves as Chief Executive Officer of each IPL, WPL, and Alliant; Robert J. Durian serves as Executive Vice President and Chief Financial Officer of each IPL, WPL, and Alliant; and Benjamin M. Bilitz serves as Chief Accounting Officer and Controller of each IPL, WPL, and Alliant. These and other common officers and/or employees are responsible for the infringing acts at the coal plants owned and/or operated by IPL and WPL.

161. On information and belief, Alliant exercises control over IPL and WPL regarding the infringing conduct at issue in this case. For example, Alliant employees Michael Li, Jeff Hanson, and Jeff Jaeckels have investigated and advised regarding the use of additives and sorbents used in the infringing acts performed at power plants owned or operated by IPL and WPL. They have also interacted with state regulators regarding environmental regulations related to the patented methods for power plants owned or operated by IPL and WPL. In addition, Alliant managers operate as plant managers responsible for operating the IPL and WPL power plants and

the accused infringing acts at those power plants.

162. Alliant touts its control over power plants operated by IPL and WPL. For example, Alliant describes IPL's Ottumwa power plant where accused infringing acts are performed in this case as the "'shining star' of Alliant's generating fleet."¹³

163. In light of the above, IPL and WPL are agents of Alliant.

164. Also in light of the above, because of its complete domination and control over its subsidiaries, Alliant is the alter ego of IPL and WPL.

165. Defendants BHE and Mid-American are jointly and severally liable for the acts of infringement committed with respect to coal-fired power plants owned or operated by Mid-American.

166. Defendants BHE and PacifiCorp are jointly and severally liable for the acts of infringement committed with respect to coal-fired power plants owned or operated by PacifiCorp.

167. Defendants Alliant and IPL are jointly and severally liable for the acts of infringement committed with respect to coal-fired power plants owned or operated by IPL.

168. Defendants Alliant and WPL are jointly and severally liable for the acts of infringement committed with respect to coal-fired power plants owned or operated by WPL.

169. Defendants BHE, Mid-American, Alliant, and IPL are jointly and severally liable for the acts of infringement committed with respect to coal-fired power plants jointly owned or operated by Mid-American and IPL.

170. Defendants MidAmerican and BHE directly infringe by performing the methods

¹³ Cindy Toopes, *Ottumwa Generating Station a 'shining star' in Alliant's fleet*, OTTUMWA COURIER (Aug. 4, 2012), https://www.ottumwacourier.com/news/local_news/ottumwa-generating-station-a-shining-star-in-alliant-s-fleet/article_59da4c54-27b5-5088-8cfb-3cfa1a76c3dd.html.

claimed in each of the patents-in-suit at least at Walter Scott, Louisa, George Neal, and Ottumwa.

171. Defendants IPL and Alliant directly infringe by performing the methods claimed in each of the patents-in-suit at least at Louisa, George Neal, and Ottumwa.

172. In addition or in the alternative, Defendants BHE, IPL, and Alliant directly infringe by virtue of their direct or indirect ownership of Louisa, George Neal, and (in BHE's case only) Walter Scott, and by delegating performance of the methods claimed in each of the patents-in-suit at Louisa, George Neal, and (in BHE's case only) Walter Scott to their operating agent MidAmerican.

173. In addition or in the alternative, Defendants BHE, IPL, and Alliant induce infringement by causing, encouraging, assisting, or otherwise inducing MidAmerican to perform the patented methods claimed in each of the patents-in-suit at least at Louisa, George Neal, and (in BHE's case only) Walter Scott.

174. On information and belief, they do so by enlisting MidAmerican as operating agent and by directing MidAmerican and paying MidAmerican to perform the patented methods to ensure that Louisa, George Neal, and (in BHE's case only) Walter Scott remain in compliance with applicable mercury regulations, and thus remain operational.

175. In addition or in the alternative, Defendants BHE, MidAmerican, and Alliant induce infringement by causing, encouraging, assisting, or otherwise inducing IPL to perform the patented methods claimed in each of the patents-in-suit at least at Ottumwa.

176. On information and belief, they do so by enlisting IPL as operating agent and by directing IPL and paying IPL to perform the patented methods to ensure that Ottumwa remain in compliance with applicable mercury regulations, and thus remain operational.

177. Defendants PacifiCorp and BHE directly infringe by performing the methods

claimed in each of the patents-in-suit at least at Wyodak, Jim Bridger, Naughton, and Dave Johnston.

178. In addition or in the alternative, Defendant BHE directly infringes by virtue of its direct or indirect ownership of Wyodak, Jim Bridger, Naughton, and Dave Johnston, and by delegating performance of the methods claimed in each of the patents-in-suit at Wyodak, Jim Bridger, Naughton, and Dave Johnston to its operating agent PacifiCorp.

179. In addition or in the alternative, Defendant BHE induces infringement by causing, encouraging, assisting, or otherwise inducing PacifiCorp to perform the patented methods claimed in each of the patents-in-suit at least at Wyodak, Jim Bridger, Naughton, and Dave Johnston.

180. On information and belief, BHE does so by enlisting PacifiCorp as operating agent and by directing PacifiCorp and paying PacifiCorp to perform the patented methods to ensure that Wyodak, Jim Bridger, Naughton, and Dave Johnston remain in compliance with applicable mercury regulations, and thus remain operational.

181. Defendants WPL and Alliant directly infringe by performing the methods claimed in each of the patents-in-suit at least at Columbia and Edgewater.

182. In addition or in the alternative, Defendant Alliant directly infringes by virtue of its direct or indirect ownership of Columbia and Edgewater, and by delegating performance of the methods claimed in each of the patents-in-suit at Columbia and Edgewater to its operating agent WPL.

183. In addition or in the alternative, Defendant Alliant induces infringement by causing, encouraging, assisting, or otherwise inducing WPL to perform the patented methods claimed in each of the patents-in-suit at least at Columbia and Edgewater.

184. On information and belief, Alliant does so by enlisting WPL as operating agent and

by directing WPL and paying WPL to perform the patented methods to ensure that Columbia and Edgewater remain in compliance with applicable mercury regulations, and thus remain operational.

185. Questions of fact common to all Defendants will arise in this action, including at least facts related to infringement by performing the same infringing methods of the patents at locations where Defendants are jointly and severally liable, facts related to the supply of the same bromine and/or iodine based additives and activated carbon sorbents to multiple power plants at issue in this case, facts related to control of related corporate entities, facts related to ownership and/or operation of jointly owned power plants, and facts related to infringement and validity of the patents.

186. Representatives from ME2C have contacted representatives from Defendants and attempted to negotiate a commercial agreement with respect to Defendants' practicing ME2C's patented processes.

187. Representatives from ME2C contacted representatives from Defendant Alliant on February 5, 2021, and attempted to negotiate an agreement with respect to Alliant's practicing ME2C's patented processes, including Alliant's practicing of the patents-in-suit. At that time, Alliant was unwilling to enter into an agreement with ME2C which would include permission to use ME2C's patented technology.

188. Representatives from ME2C again contacted representatives from Defendant Alliant on January 16, 2024, and attempted to negotiate an agreement. At that time, Alliant was unwilling to enter into an agreement with ME2C, thus, leaving ME2C no choice but to file this lawsuit.

189. Representatives from ME2C contacted representatives from Defendant MidAmerican on January 16, 2024, and attempted to negotiate an agreement with respect to

MidAmerican's practicing ME2C's patented processes, including MidAmerican's practicing of the patents-in-suit. At that time, MidAmerican was unwilling to enter into an agreement with ME2C which would include permission to use ME2C's patented technology, thus, leaving ME2C no choice but to file this lawsuit.

190. In addition, Defendants MidAmerican and Alliant were subpoenaed in connection with the Delaware Case on August 11, 2021, and a corporate representative of MidAmerican was deposed in the Delaware Case on June 28, 2022.

191. In addition, ME2C is one of a small number of companies that provides bromine-containing additives and activated carbon sorbents for mercury control at coal-fired power plants. It is reasonable to infer that Defendants have done at least some due diligence on potential suppliers. During that process, it is likely that they would have discovered the patents-in-suit from the U.S. Patent Office, Google Patents, ME2C publications and product literature, and/or ME2C's website.

192. It is also reasonable to infer that Defendants would have reviewed the prosecution history for the ME2C patents known to Defendants and would be generally aware of other patents in the same family.

193. Defendants are each aware of the Patents-in-Suit and knew or showed willful blindness that their actions would cause infringement.

194. Defendants' infringement has occurred with knowledge of the Patents-in-Suit and has been willful and deliberate since at least that time.

195. Defendants may not avail themselves of 35 U.S.C. § 287 as a defense because ME2C is under no obligation to mark performance of the patented methods.

196. Defendants' acts of infringement have been willful as of the date they became aware of the patented technology and the patents-in-suit, and in any event no later than the filing

of this Complaint and/or the date this Complaint was served upon each Defendant.

COUNT ONE: INFRINGEMENT OF THE '114 PATENT

197. ME2C incorporates by reference the preceding paragraphs as if fully set forth herein.

198. U.S. Patent No. 10,343,114 (the "'114 patent"), entitled "Sorbents for the Oxidation and Removal of Mercury", was issued on July 9, 2019, naming Edwin S. Olson, Michael J. Holmes and John H. Pavlish as the inventors. Exhibit A ('114 Patent).

199. ME2C owns all rights, title, and interest in the '114 Patent, and holds all substantial rights pertinent to this suit, including the right to sue and recover for all past, current, and future infringement.

200. The '114 Patent is valid and enforceable and directed to patentable subject matter.

201. Defendants infringe at least one of claims 1-30 of the '114 patent.

202. ME2C provides the following explanation of infringement with regard to an exemplary claim.

203. Claim 25 of the '114 patent recites: "A method of separating mercury from a mercury-containing gas."

204. The Defendants, in operating and controlling the Accused Coal Plants, perform this method in order to comply with federal and/or state mercury regulations.

205. Claim 25 of the '114 patent recites: "combusting coal in a combustion chamber to provide the mercury-containing gas, wherein the coal comprises added Br₂, HBr, a bromide compound, or a combination thereof, added to the coal upstream of the combustion chamber, or the combustion chamber comprises added Br₂, HBr, a bromide compound, or a combination thereof, or a combination thereof."

206. The Defendants, in operating and controlling the Accused Coal Plants, perform this

step by burning coal with an added Br₂, HBr, a bromide compound, or a combination thereof and/or by adding Br₂, HBr, a bromide compound, or a combination thereof to the combustion chamber.

207. Claim 25 of the '114 patent recites: "injecting a sorbent material comprising activated carbon into the mercury containing gas downstream of the combustion chamber."

208. The Defendants, in operating and controlling the Accused Coal Plants, perform this step by injecting activated carbon sorbent downstream of the combustion chamber.

209. Claim 25 of the '114 patent recites: "contacting mercury in the mercury-containing gas with the sorbent, to form a mercury/sorbent composition."

210. The Defendants, in operating and controlling the Accused Coal Plants, perform this step because mercury contained in the gas exiting the combustion chamber contacts the sorbent as all of this material is contained in the same gas.

211. The Defendants, in operating and controlling the Accused Coal Plants, Claim 25 of the '114 patent recites: "separating the mercury/sorbent composition from the mercury-containing gas, to form a cleaned gas."

212. The Defendants, in operating and controlling the Accused Coal Plants, perform this step using equipment, such as baghouses or electrostatic precipitators, to collect the mercury captured by the sorbent in order to comply with mercury regulations.

213. Defendants have and continue to directly infringe, literally and/or under the doctrine of equivalents, the '114 patent under 35 U.S.C. § 271(a).

214. In addition, Defendants BHE and Alliant induce their respective subsidiary Defendants to infringe under 35 U.S.C. § 271(b). BHE and Alliant are each aware of the '114 patent and knew or showed willful blindness that their actions would cause infringement. Specifically, they aid or encourage their subsidiaries to infringe by, on information and belief,

taking part in the supply contract process for activated carbon and bromine-containing additives at coal-fired power plants that directly infringe and signing, and/or aiding or encouraging their subsidiaries to sign, contracts with suppliers that provide the activated carbon and bromine-containing additives that lead to infringement.

215. Defendants' acts of infringement have caused damage to ME2C. ME2C is entitled to recover from Defendants the damages sustained by ME2C as a result of Defendants' wrongful acts in an amount subject to proof at trial.

216. In addition, the infringing acts and practices of Defendants have caused, are causing, and, unless such acts and practices are enjoined by the Court, will continue to cause immediate and irreparable harm to ME2C for which there is no adequate remedy at law, and for which ME2C is entitled to injunctive relief under 35 U.S.C. § 283.

COUNT TWO: INFRINGEMENT OF THE '517 PATENT

217. ME2C incorporates by reference the preceding paragraphs as if fully set forth herein.

218. U.S. Patent No. 10,596,517(the "'517 patent"), entitled "Sorbents for the Oxidation and Removal of Mercury", was issued on March 24, 2020, naming Edwin S. Olson, Michael J. Holmes and John H. Pavlish as the inventors. Exhibit C ('517 Patent).

219. ME2C owns by assignment all rights, title, and interest in the '517 Patent, and holds all substantial rights pertinent to this suit, including the right to sue and recover for all past, current, and future infringement.

220. The '517 Patent is valid and enforceable and directed to patentable subject matter.

221. Defendants infringe at least one of claims 1-30 of the '517 patent.

222. ME2C provides the following explanation of infringement with regard to an exemplary claim.

223. Claim 1 of the '517 patent recites: "A method for reducing mercury in a mercury-containing gas."

224. The Defendants, in operating and controlling the Accused Coal Plants, perform this method in order to comply with federal and/or state mercury regulations.

225. Claim 1 of the '517 patent recites: "combusting coal in a combustion chamber, the coal comprising an additive comprising Br₂, HBr, a bromide compound, or a combination thereof, to form the mercury-containing gas."

226. The Defendants, in operating and controlling the Accused Coal Plants, perform this step because they combust coal with an additive comprising Br₂, HBr, a bromide compound, or a combination thereof to form mercury-containing gas.

227. Claim 1 of the '517 patent recites: "collecting mercury in the mercury-containing gas with a sorbent added to the mercury-containing gas, the sorbent comprising activated carbon."

228. The Defendants, in operating and controlling the Accused Coal Plants, perform this step by adding sorbent containing activated carbon to the gas that exits the combustion chamber. The mercury in the gas is then collected by equipment, such as baghouses or electrostatic precipitators.

229. Defendants have and continue to directly infringe, literally and/or under the doctrine of equivalents, the '517 patent under 35 U.S.C. § 271(a).

230. In addition, Defendants BHE and Alliant induce their respective subsidiary Defendants to infringe under 35 U.S.C. § 271(b). BHE and Alliant are each aware of the '517 patent and knew or showed willful blindness that their actions would cause infringement. Specifically, they aid or encourage their subsidiaries to infringe by, on information and belief, taking part in the supply contract process for activated carbon and bromine-containing additives

at coal-fired power plants that directly infringe and signing, and/or aiding or encouraging their subsidiaries to sign, contracts with suppliers that provide the activated carbon and bromine-containing additives that lead to infringement.

231. Defendants' acts of infringement have caused damage to ME2C. ME2C is entitled to recover from Defendants the damages sustained by ME2C as a result of Defendants' wrongful acts in an amount subject to proof at trial.

232. In addition, the infringing acts and practices of Defendants have caused, are causing, and, unless such acts and practices are enjoined by the Court, will continue to cause immediate and irreparable harm to ME2C for which there is no adequate remedy at law, and for which ME2C is entitled to injunctive relief under 35 U.S.C. § 283.

COUNT THREE: INFRINGEMENT OF THE '225 PATENT

233. ME2C incorporates by reference the preceding paragraphs as if fully set forth herein.

234. U.S. Patent No. 10,589,225 (the "'225 patent"), entitled "Sorbents for the Oxidation and Removal of Mercury", was issued on March 17, 2020, naming Edwin S. Olson, Michael J. Holmes and John H. Pavlish as the inventors. Exhibit B ('225 Patent).

235. ME2C owns by assignment all rights, title, and interest in the '225 Patent, and holds all substantial rights pertinent to this suit, including the right to sue and recover for all past, current, and future infringement.

236. The '225 Patent is valid and enforceable and directed to patentable subject matter.

237. Defendants infringe at least one of claims 1-29 of the '225 patent.

238. ME2C provides the following explanation of infringement with regard to an exemplary claim.

239. Claim 1 of the '225 patent recites: "A method for treating a mercury-containing

gas.”

240. The Defendants, in operating and controlling the Accused Coal Plants, perform this method in order to comply with federal and/or state mercury regulations.

241. Claim 1 of the '225 patent recites: “combusting a mixture comprising coal, pyrolysis char, and an additive comprising HBr, a bromide compound, or a combination thereof, to form the mercury-containing, gas.”

242. The Defendants, in operating and controlling the Accused Coal Plants, perform this step because they combust coal, pyrolysis char, and an additive comprising HBr, a bromide compound, or a combination thereof.

243. Claim 1 of the '225 patent recites: “adding a particulate sorbent material comprising activated carbon into the mercury-containing gas.”

244. The Defendants, in operating and controlling the Accused Coal Plants, perform this step by adding sorbent containing activated carbon to the gas that exits the combustion chamber.

245. Defendants have and continue to directly infringe, literally and/or under the doctrine of equivalents, the '225 patent under 35 U.S.C. § 271(a).

246. In addition, Defendants BHE and Alliant induce their respective subsidiary Defendants to infringe under 35 U.S.C. § 271(b). BHE and Alliant are each aware of the '225 patent and knew or showed willful blindness that their actions would cause infringement. Specifically, they aid or encourage their subsidiaries to infringe by, on information and belief, taking part in the supply contract process for activated carbon and bromine-containing additives at coal-fired power plants that directly infringe and signing, and/or aiding or encouraging their subsidiaries to sign, contracts with suppliers that provide the activated carbon and bromine-containing additives that lead to infringement.

247. Defendants' acts of infringement have caused damage to ME2C. ME2C is entitled to recover from Defendants the damages sustained by ME2C as a result of Defendants' wrongful acts in an amount subject to proof at trial.

248. In addition, the infringing acts and practices of Defendants have caused, are causing, and, unless such acts and practices are enjoined by the Court, will continue to cause immediate and irreparable harm to ME2C for which there is no adequate remedy at law, and for which ME2C is entitled to injunctive relief under 35 U.S.C. § 283.

COUNT FOUR: INFRINGEMENT OF THE '430 PATENT

249. ME2C incorporates by reference the preceding paragraphs as if fully set forth herein.

250. U.S. Patent No. 10,668,430 (the "'430 patent"), entitled "Sorbents for the Oxidation and Removal of Mercury", was issued on March 24, 2020, naming Edwin S. Olson, Michael J. Holmes and John H. Pavlish as the inventors. Exhibit D ('430 Patent).

251. ME2C owns by assignment all rights, title, and interest in the '430 Patent, and holds all substantial rights pertinent to this suit, including the right to sue and recover for all past, current, and future infringement.

252. The '430 Patent is valid and enforceable and directed to patentable subject matter.

253. Defendants infringe at least one of claims 1-29 of the '430 patent.

254. ME2C provides the following explanation of infringement with regard to an exemplary claim.

255. Claim 1 of the '430 patent recites: "A method of separating mercury from a mercury-containing gas."

256. The Defendants, in operating and controlling the Accused Coal Plants, perform this method in order to comply with federal and/or state mercury regulations.

257. Claim 1 of the '430 patent recites: “combusting coal in a combustion chamber, to provide the mercury-containing gas, wherein the coal comprises an additive comprising Br₂, HBr, a bromide compound, or a combination thereof, wherein the additive is added to the coal before the coal enters the combustion chamber, or the combustion chamber comprises an additive comprising Br₂, HBr, a bromide compound, or a combination thereof or a combination thereof.”

258. The Defendants, in operating and controlling the Accused Coal Plants, perform this step because they combust coal with an additive comprising Br₂, HBr, a bromide compound, or a combination thereof to form mercury-containing gas.

259. Claim 1 of the '430 patent recites: “injecting a sorbent comprising activated carbon into the mercury-containing gas downstream of the combustion chamber.”

260. The Defendants, in operating and controlling the Accused Coal Plants, perform this step by injecting sorbent containing activated carbon downstream of the combustion chamber.

261. Claim 1 of the '430 patent recites: “contacting mercury in the mercury-containing gas with the sorbent.”

262. The Defendants, in operating and controlling the Accused Coal Plants, perform this step because mercury contained in the gas exiting the combustion chamber contacts the sorbent as all of this material is contained in the same gas.

263. Claim 1 of the '430 patent recites: “separating the sorbent contacted with the mercury from the mercury-containing gas.”

264. The Defendants, in operating and controlling the Accused Coal Plants, perform this step using equipment such as baghouses or electrostatic precipitators to collect the mercury captured by the sorbent in order to comply with mercury regulations.

265. Defendants have and continue to directly infringe, literally and/or under the

doctrine of equivalents, the '430 patent under 35 U.S.C. § 271(a).

266. In addition, Defendants BHE and Alliant induce their respective subsidiary Defendants to infringe under 35 U.S.C. § 271(b). BHE and Alliant are each aware of the '430 patent and knew or showed willful blindness that their actions would cause infringement. Specifically, they aid or encourage their subsidiaries to infringe by, on information and belief, taking part in the supply contract process for activated carbon and bromine-containing additives at coal-fired power plants that directly infringe and signing, and/or aiding or encouraging their subsidiaries to sign, contracts with suppliers that provide the activated carbon and bromine-containing additives that lead to infringement.

267. Defendants' acts of infringement have caused damage to ME2C. ME2C is entitled to recover from Defendants the damages sustained by ME2C as a result of Defendants' wrongful acts in an amount subject to proof at trial.

268. In addition, the infringing acts and practices of Defendants have caused, are causing, and, unless such acts and practices are enjoined by the Court, will continue to cause immediate and irreparable harm to ME2C for which there is no adequate remedy at law, and for which ME2C is entitled to injunctive relief under 35 U.S.C. § 283.

COUNT FIVE: INFRINGEMENT OF THE '218 PATENT

269. ME2C incorporates by reference the preceding paragraphs as if fully set forth herein.

270. U.S. Patent No. 10,926,218 (the "'218 patent"), entitled "Sorbents for the Oxidation and Removal of Mercury", was issued on February 23, 2021, naming Edwin S. Olson, Michael J. Holmes and John H. Pavlish as the inventors. Exhibit E ('218 Patent).

271. ME2C owns by assignment all rights, title, and interest in the '218 Patent, and holds all substantial rights pertinent to this suit, including the right to sue and recover for all past, current,

and future infringement.

272. The '218 Patent is valid and enforceable and directed to patentable subject matter.

273. Defendants PacifiCorp and BHE infringe at least one of claims 1-26 of the '218 patent.

274. ME2C provides the following explanation of infringement with regard to an exemplary claim.

275. Claim 1 of the '218 patent recites: "A method of separating mercury from a mercury-containing gas, the method comprising."

276. Defendants PacifiCorp and BHE perform, at least at the Jim Bridger Plant, this method in order to comply with federal and/or state mercury regulations.

277. Claim 1 of the '218 patent recites: "combusting coal in a combustion chamber, to provide the mercury-containing gas, wherein the coal comprises added HI, an iodide salt, or a combination thereof, added to the coal before the coal enters the combustion chamber, or the combustion chamber comprises added HI, an iodide salt, or a combination thereof, or a combination thereof."

278. Defendants PacifiCorp and BHE perform, at least at the Jim Bridger Plant, this step because it combusts coal with an additive comprising HI, an iodide salt, or a combination thereof.

279. Claim 1 of the '218 patent recites: "injecting a sorbent comprising activated carbon into the mercury-containing gas downstream of the combustion chamber, wherein a weight ratio of the HI, iodide salt, or the combination thereof added to the coal, added to the combustion chamber, or a combination thereof, to an amount of the sorbent injected into the mercury-containing gas is from about 1:100 to about 30:100."

280. Defendants PacifiCorp and BHE perform, at least at the Jim Bridger Plant, this step

because it adds a particulate sorbent material comprising activated carbon to the mercury-containing flue gas, and the weight ratio of the additive comprising HI, iodide salt, or the combination thereof to the amount of sorbent is from about 1:100 to about 30:100.

281. Claim 1 of the '218 patent recites: “contacting mercury in the mercury-containing gas with the sorbent.”

282. Defendants PacifiCorp and BHE perform, at least at the Jim Bridger Plant, this step because mercury contained in the gas exiting the combustion chamber contacts the sorbent as all of this material is contained in the same gas.

283. Claim 1 of the '218 patent recites: “separating the sorbent contacted with the mercury from the mercury-containing gas.”

284. Defendants PacifiCorp and BHE perform, at least at the Jim Bridger Plant, this step using equipment such as baghouses or electrostatic precipitators to collect the mercury captured by the sorbent in order to comply with mercury regulations.

285. PacifiCorp and BHE have and continue to directly infringe, literally and/or under the doctrine of equivalents, the '218 patent under 35 U.S.C. § 271(a).

286. In addition, Defendant BHE induces PacifiCorp to infringe under 35 U.S.C. § 271(b). BHE is aware of the '218 patent, and knew or showed willful blindness that its actions would cause infringement. Specifically, BHE aids or encourages PacifiCorp to infringe by, on information and belief, taking part in the supply contract process for activated carbon and bromine-containing additives at coal-fired power plants that directly infringe and signing, and/or aiding or encouraging PacifiCorp to sign, contracts with suppliers that provide the activated carbon and bromine-containing additives that lead to infringement.

287. Defendants' acts of infringement have caused damage to ME2C. ME2C is entitled

to recover from Defendants the damages sustained by ME2C as a result of Defendants' wrongful acts in an amount subject to proof at trial.

288. In addition, the infringing acts and practices of Defendants have caused, are causing, and, unless such acts and practices are enjoined by the Court, will continue to cause immediate and irreparable harm to ME2C for which there is no adequate remedy at law, and for which ME2C is entitled to injunctive relief under 35 U.S.C. § 283.

COUNT SIX: INFRINGEMENT OF THE '370 PATENT

289. ME2C incorporates by reference the preceding paragraphs as if fully set forth herein.

290. U.S. Patent No. 10,933,370 (the "'370 patent"), entitled "Sorbents for the Oxidation and Removal of Mercury", was issued on March 3, 2021, naming Edwin S. Olson, Michael J. Holmes and John H. Pavlish as the inventors. Exhibit F ('370 Patent).

291. ME2C owns by assignment all rights, title, and interest in the '370 Patent, and holds all substantial rights pertinent to this suit, including the right to sue and recover for all past, current, and future infringement.

292. The '370 Patent is valid and enforceable and directed to patentable subject matter.

293. Defendants infringe at least one of claims 1-29 of the '370 patent.

294. ME2C provides the following explanation of infringement with regard to an exemplary claim.

295. Claim 1 of the '370 patent recites: "A method for separating mercury from a mercury-containing gas, the method comprising."

296. The Defendants, in operating and controlling the Accused Coal Plants, perform this method in order to comply with federal and/or state mercury regulations.

297. Claim 1 of the '370 patent recites: "combusting a mixture of coal and an additive

in a combustion chamber, to form the mercury-containing gas, wherein the additive is chosen from halides, halogens, salts thereof, and combinations thereof.”

298. The Defendants, in operating and controlling the Accused Coal Plants, perform this step because they combust coal with an additive comprising halides, halogens, salts thereof, or combinations thereof.

299. Claim 1 of the ‘370 patent recites: “adding a particulate sorbent material comprising activated carbon into the mercury-containing gas, wherein a weight ratio of the additive added to the coal, added to the combustion chamber, or a combination thereof, to an amount of the sorbent material added to the mercury-containing gas is from about 1:100 to about 30:100.”

300. The Defendants, in operating and controlling the Accused Coal Plants, perform this step because they add a particulate sorbent material comprising activated carbon to the mercury-containing flue gas, and the weight ratio of the additive comprising halides, halogens, salts thereof, or combinations thereof to the amount of sorbent is from about 1:100 to about 30:100.

301. Claim 1 of the ‘370 patent recites: “contacting mercury in the mercury-containing gas with the sorbent material, to form a mercury-sorbent.”

302. The Defendants, in operating and controlling the Accused Coal Plants, perform this step because mercury contained in the gas exiting the combustion chamber contacts the sorbent as all of this material is contained in the same gas.

303. Claim 1 of the ‘370 patent recites: “separating the mercury-sorbent from the mercury-containing gas.”

304. The Defendants, in operating and controlling the Accused Coal Plants, perform this step using equipment such as baghouses or electrostatic precipitators to collect the mercury captured by the sorbent in order to comply with mercury regulations.

305. Defendants have and continue to directly infringe, literally and/or under the doctrine of equivalents, the '370 patent under 35 U.S.C. § 271(a).

306. In addition, Defendants BHE and Alliant induce their respective subsidiary Defendants to infringe under 35 U.S.C. § 271(b). BHE and Alliant are each aware of the '370 patent, but nonetheless aid or encourage their subsidiaries to infringe by, on information and belief, taking part in the supply contract process for activated carbon and bromine-containing additives at coal-fired power plants that directly infringe and signing, and/or aiding or encouraging their subsidiaries to sign, contracts with suppliers that provide the activated carbon and bromine-containing additives that lead to infringement. Defendants BHE and Alliant were aware of the '370 patent and knew or showed willful blindness that their actions would cause infringement.

307. Defendants' acts of infringement have caused damage to ME2C. ME2C is entitled to recover from Defendants the damages sustained by ME2C as a result of Defendants' wrongful acts in an amount subject to proof at trial.

308. In addition, the infringing acts and practices of Defendants have caused, are causing, and, unless such acts and practices are enjoined by the Court, will continue to cause immediate and irreparable harm to ME2C for which there is no adequate remedy at law, and for which ME2C is entitled to injunctive relief under 35 U.S.C. § 283.

JURY DEMAND

Plaintiff hereby demands a trial by jury on all issues so triable.

PRAYER FOR RELIEF

WHEREFORE Plaintiff Midwest Energy Emissions Corp. asks this Court for an order granting the following relief:

a. A judgment in favor of Plaintiff that Defendants have infringed, either literally and/or under the doctrine of equivalents, the '114, '517, '225, '430, '218, and '370 patents;

- b. A judgment and order finding that Defendants' infringement has been willful;
- c. A preliminary injunction prohibiting Defendants from further acts of infringement;
- d. A permanent injunction prohibiting Defendants from further acts of infringement;
- e. A judgment and order requiring Defendants to pay Plaintiff its damages, costs, expenses, and any enhanced damages to which Plaintiff is entitled for Defendants' infringement;
- f. A judgment and order requiring Defendants to provide an accounting and to pay supplemental damages to Plaintiff, including without limitation, pre-judgment and post-judgment interest;
- g. A judgment and order finding that this is an exceptional case within the meaning of 35 U.S.C. § 285 and awarding Plaintiff its reasonable attorneys' fees against Defendants; and
- h. Any and all other relief as the Court may deem appropriate and just under the circumstances.

Dated: July 17, 2024

Respectfully submitted,

/s/ Jeffrey D. Harty

Jeffrey D. Harty
NYEMASTER GOODE, P.C.
700 Walnut Street, Suite 1300
Des Moines, Iowa 50309
T: (515) 283-3100
F: (515) 283-3108
E: jharty@nyemaster.com

Bradley W. Caldwell (*pro hac vice* forthcoming)
Texas State Bar No. 24040630
Email: bcaldwell@caldwellcc.com
Justin T. Nemunaitis (*pro hac vice* forthcoming)
Texas State Bar No. 24065815
Email: jnemunaitis@caldwellcc.com
Richard A. Cochrane (*pro hac vice* forthcoming)
Texas State Bar No. 24116209
Email: rcochrane@caldwellcc.com
CALDWELL CASSADY & CURRY P.C.
2121 N Pearl Street, Suite 1200
Dallas, Texas 75201
Telephone: (214) 888-4848
Facsimile: (214) 888-4849

**ATTORNEYS FOR PLAINTIFF MIDWEST
ENERGY EMISSIONS CORP.**