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# Exhibit No. 20

Ameren – Exhibit 20 Karl Moor Surrebuttal Testimony File No. ER-2022-0337

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#### **MISSOURI PUBLIC SERVICE COMMISSION**

#### FILE NO. ER-2022-0337

### SURREBUTTAL TESTIMONY

#### OF

#### KARL R. MOOR

#### ON

#### **BEHALF OF**

### UNION ELECTRIC COMPANY

#### d/b/a AMEREN MISSOURI

St. Louis, Missouri March 2023

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#### SURREBUTTAL TESTIMONY

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| 1  |  | I. INTRODUCTION  |  |  |  |
|----|--|--|--|--|--|
| 2  | Q.   | Please state your name.  |  |  |  |
| 3  | А.   | Karl R. Moor.  |  |  |  |
| 4  | Q.   | Are you the same Karl R. Moor who previously provided                    |  |  |  |
| 5  | testimony i  | n this case?   |  |  |  |
| 6  | А.   | Yes.   |  |  |  |
| 7  | Q.   | What is the purpose of your surrebuttal testimony?                       |  |  |  |
| 8  | А.   | The purpose of my surrebuttal testimony is to respond to the rebuttal    |  |  |  |
| 9  | testimony of   | Staff witnesses Claire Eubanks and Keith Majors.                         |  |  |  |
| 10 | Q.   | Do Ms. Eubanks and Mr. Majors accurately characterize your               |  |  |  |
| 11 | opinions in  | this matter?   |  |  |  |
| 12 | А.   | No. I did not and do not offer any opinion on whether Ameren             |  |  |  |
| 13 | Missouri vie   | plated the Clean Air Act's New Source Review ("NSR") provisions.         |  |  |  |
| 14 | That has already been established by the District Court, and is not at issue in this |  |  |  |  |
| 15 | proceeding.  | Instead, the question I address is whether it was reasonable at the time |  |  |  |
| 16 | in question (  | 2005-2010) for Ameren Missouri to believe that its Rush Island projects  |  |  |  |
| 17 | would not t  | rigger NSR. As I stated in my direct testimony, Ameren Missouri          |  |  |  |
| 18 | reasonably b   | believed that it was applying the NSR rules to the projects it undertook |  |  |  |

at Rush Island. The decisions to proceed with the Rush Island projects were based
upon the understanding that they did not trigger NSR, and in my experience that
understanding was consistent across the industry. For example, the decisions that
Mr. Birk made, as senior production officer for Ameren Missouri, were consistent
with those of the four chief operating production officers in Mississippi, Alabama,
Georgia, and Florida and Southern's overall President of Generation, with whom I
worked.

8 Q. Are there distinct legal and factual circumstances that existed for 9 Ameren Missouri that make your conclusion that Ameren Missouri acted 10 reasonably even stronger?

11 A. Absolutely. Legally, Ameren Missouri had the benefit of the Missouri SIP, the text of which required that a project first increase potential emissions before 12 13 any construction permit (including PSD permit) would be required. And as a factual 14 matter, the Missouri Department of Natural Resources (MDNR) had specifically 15 applied that language in the Missouri SIP to determine that comparable boiler 16 component replacement projects undertaken by units in Missouri did not require any 17 preconstruction permitting. Given my experience as Senior Vice President and Chief Environmental Counsel to Southern Company, it would have been 18 19 unreasonable to abandon this state law and accept without question or challenge 20 EPA's newly devised enforcement theories.

Q. Do the District Court litigation and the resulting opinions, cited
by Ms. Eubanks and Mr. Majors, support your conclusions?

1 Yes, in several respects. First, the history of that litigation A. 2 demonstrates that Ameren Missouri had a solid case for believing what it did. When 3 EPA filed suit in January 2011, it did not even include the 2007 and 2010 projects 4 in its Complaint, despite the fact that EPA had investigated the plant for the prior 5 three years. Instead, EPA filed suit on other projects (performed at Rush Island in 6 2001 and 2003) which EPA later dropped. EPA did not add the 2007 and 2010 7 projects to the litigation until June 2011. Then, after extensive discovery, EPA 8 moved for summary judgment, asking the District Court to find that the Unit 2 projects in 2010 constituted a major modification. The District Court denied that 9 10 motion in 2016, finding that a trial was necessary because the facts were in dispute. 11 United States v. Ameren Missouri, No. 4:11-cv-00077-RWS (E.D. Mo.)<sup>1</sup>, ECF No. 12 724 at 16 ("I cannot say that no reasonable factfinder could find for Ameren"). 13 EPA's re-shuffling of its claims, and the District Court's conclusion at summary 14 judgment that reasonable minds could differ concerning Ameren Missouri's liability 15 under the Clean Air Act, underscore that Ameren Missouri had solid grounds for 16 believing as it did.

Second, after the full liability trial, the District Court made several important
factual findings that support the prudency of Ameren Missouri's decisions. The
first such finding was that Ameren Missouri evaluated the Rush Island projects for
NSR applicability before undertaking them. 229 F. Supp. 3d at 926 (FOF 385).

<sup>&</sup>lt;sup>1</sup> Unless otherwise noted, all references to deposition, exhibits and declarations herein refer to materials produced in the Ameren Missouri litigation in the U.S. District Court for the Eastern District of Missouri. <u>United States v. Ameren Missouri</u>, No. 4:11-cv-00077 (E.D. Mo.).

1 Ameren Missouri did not ignore NSR requirements. Second, that evaluation 2 included a consideration of whether the projects would cause an emissions increase. Id. at 926-27 (FOF 391, 395).<sup>2</sup> Third, Ameren Missouri did not believe that a 3 4 component replacement project would cause an annual emissions increase if the unit 5 was capable of generating the higher level of emissions before the project. Id. at 6 978, 981 (FOF 403, 423, 426). Finally, the District Court found that Ameren 7 Missouri's compliance process was based upon "a fundamental misunderstanding 8 of the PSD program," in that it did not reflect the Court's understanding of the 9 program in 2017. Id. at 1010. Nowhere did the District Court find that Ameren 10 Missouri failed to act in good faith in its attempts to comply with the law as it 11 understood that law at the time, or in asserting its right to contest EPA's claims 12 based upon positions that had been accepted by other courts.

13

Q.

Does the District Court's determination at the liability trial that

14 Ameren Missouri had "a fundamental misunderstanding of the PSD program"

15 mean that Ameren Missouri was imprudent?

A. No. The District Court's rejection of Ameren Missouri's understanding of the law does not mean that Ameren Missouri was unreasonable in its position on what the law was at the time it made its decisions. After all, in other cases, that very same understanding of the NSR program that Ameren Missouri

<sup>&</sup>lt;sup>2</sup> Although the District Court did not address Ameren Missouri's pre-project evaluation that found the Rush Island projects excluded from permitting requirements as routine maintenance, repair or replacement ("RMRR"), the testimony cited by Ms. Eubanks and the District Court made it clear that Ameren Missouri in fact made such a determination. Eubanks Rebuttal Test. at 12 (citing Birk Dep. at 220, lines 14-21).

shared with industry was upheld by both district courts and circuit courts across the
 country. Those cases supported Ameren Missouri's pre-project permitting
 decisions.

4

#### II. COMMENTS ON STAFF'S METHODOLOGY

5

6

# Q. How would you characterize the approach that Staff takes in criticizing your testimony and that of Mr. Holmstead and Mr. Birk?

7 A. The testimony that both Ms. Eubanks and Mr. Majors provide, 8 asserting that Ameren Missouri was imprudent to make the decisions it did, is 9 legally flawed and factually incorrect. First, Staff stray from the relevant standard: 10 the reasonableness of Ameren Missouri's permitting decision must be based upon 11 the facts available to Ameren Missouri at the time, without reliance on hindsight. 12 Associated Nat. Gas Co. v. Pub. Serv. Comm'n of Missouri, 954 S.W.2d 520, 529 13 (Mo. App. W.D. 1997). The Staff testimony does not provide any facts from which 14 one could conclude that a reasonable person would have acted differently at the time 15 in question (2005-2010). My testimony demonstrates that reasonable and 16 responsible decisionmakers similarly situated to Ameren Missouri made the same 17 decisions that Mr. Birk made, and that those types of decisions were upheld by other 18 courts in the relevant time period.

# 19 Q. Can you provide other examples of legal flaws in the Staff's20 approach?

A. Yes. The Staff argues that the District Court's decision that the Rush
Island projects triggered NSR pre-determines that Ameren Missouri was imprudent

1 for defending its position that it had not triggered NSR. To make this claim, Staff 2 seizes upon the word "reasonable" in the District Court's opinion and asserts that 3 the court's finding determines for this Commission that Ameren Missouri was 4 imprudent in litigating on behalf of its customers and its environmental and utility 5 regulators. But that is not the case. The District Court found that Ameren Missouri 6 has "a fundamental misunderstanding of the PSD program" and accordingly its 7 "method of assessing PSD does not comply with the rules, EPA's instructions or the 8 case law." 229 F. Supp. 3d at 1010, 1011. Because Ameren Missouri's NSR 9 analysis did not comply with the District Court's view of the applicable NSR 10 requirements, that analysis "therefore was not reasonable under the law." Id. at 11 1012. This does not resolve the question of whether Ameren Missouri's understanding of the law was reasonable at the time that it made the pre-project 12 13 decisions on NSR applicability. That is the key question I addressed in my direct 14 testimony, and it is in no way rebutted.

Q. What would the Staff have to show in order to prove to the
Commission that Ameren Missouri was imprudent in its decision-making
between 2005 and 2010?

A. As noted, Ameren Missouri had three independent questions it asked to determine whether a project required a PSD permit in Missouri: 1) would the project increase potential annual emissions; 2) would the project increase actual annual emissions; and 3) was the project excluded from NSR permitting as routine? Ameren Missouri's leaders, relying on the best judgment of an experienced staff,

and counsel concluded that under any one of these three independent inquiries, no
permit was required under the state SIP. To show that Ameren Missouri's decision
to proceed without seeking a state permit was imprudent, Staff must demonstrate
that *each and every one* of these decisions was unreasonable based on the facts
known to the company at the time it made its decisions. But the Staff does not
evaluate any of the facts on which the company based its decisions at the time.

7

8

#### III. COMMENTS ON STAFF ERRORS

Q. In addition to your views about the flawed approach Staff take in

#### 9 its approach to prudence, are there specific factual errors Staff makes?

10 A. Yes. I have noted three major flaws in Staff's attempt to demonstrate 11 imprudence. First, I disagree with the Staff that Ameren Missouri's awareness of 12 the enforcement initiative meant that Ameren Missouri was imprudent for not 13 seeking permits for its projects. Staff wants to rely upon the mere existence of the 14 enforcement initiative, whereas Ameren Missouri and other utilities at the time were 15 looking at the results of these cases when EPA's claims were put to the test in court. 16 Second, I disagree with the idea that an EPA NOV establishes an NSR violation that 17 no reasonable utility could or should contest. Neither EPA nor utilities treat NOVs 18 as establishing legal requirements. Finally, I disagree with the assertion that 19 Ameren Missouri could not rely on MDNR's interpretation of the Missouri SIP. 20 The fact that MDNR read the Missouri SIP in precisely the same manner as Ameren 21 Missouri demonstrates that Ameren Missouri acted prudently.

| 1  | 1. <u>Staff's Flawed "Notice" Argument.</u>   |
|----|---|
| 2  | Q. Let's take these one by one. Is Staff correct that knowledge of                            |
| 3  | the enforcement initiative meant that Ameren Missouri was imprudent for                       |
| 4  | not seeking permits for its projects?   |
| 5  | A. No. In the relevant timeframe (2005-2010), our industry certainly had                      |
| 6  | an understanding of the NSR enforcement initiative, EPA's litigation theories, and            |
| 7  | the methodologies that EPA's hired expert witnesses were employing to claim near-             |
| 8  | universal non-compliance. But the Commission should also understand that the                  |
| 9  | Koppe-Sahu emissions methodology used in all these cases was not a product of a               |
| 10 | notice-and-comment rulemaking-it was devised for litigation by EPA. Moreover,                 |
| 11 | the Koppe-Sahu formula can only show an increase in emissions—it cannot predict               |
| 12 | a decrease-because it excludes from consideration all other factors that go into              |
| 13 | dispatch of a unit, which is contrary to the plain language of the NSR regulations.           |
| 14 | 40 C.F.R. § 52.21(b)(41)(ii) (requiring operator to consider "all relevant                    |
| 15 | information" in making its emissions projections). For these reasons, the testimony           |
| 16 | of Koppe and Sahu was challenged in every case brought against a defendant                    |
| 17 | utility. <sup>3</sup> And in the 2005 to 2010 time period, the utilities were winning as many |
| 18 | cases as they were losing.  |
| 10 |   |

19

20

Although Ameren Missouri was aware of the NSR enforcement initiative and EPA's use of the Koppe-Sahu formula within it, that body of law as a whole cannot

<sup>&</sup>lt;sup>3</sup> The District Court's liability opinion supports the conclusion that it was reasonable for utilities, including Ameren Missouri, to challenge the Koppe-Sahu methodology. 229 F. Supp. 3d at 1014 (noting that after-the-fact emissions calculations performed for the purpose of litigation may lack credibility).

0.

show that Ameren Missouri's decisions were unreasonable or imprudent. This is uniquely true because none of those cases involved the Missouri SIP or a similar requirement in state law that limits PSD permitting to the modification causing an increase in potential emissions. The Missouri SIP put Ameren Missouri in a stronger legal position that most other utilities in the enforcement initiative.

6

#### 2. <u>Staff's Mistake in Equating NOVs with Federal Law</u>

7

#### Can you explain why Staff's use of EPA NOVs is wrong?

8 A. Staff apparently believes that when a utility received a notice of 9 violation pursuant to the NSR enforcement initiative, it had to comply with it and 10 no other course of action could be prudent. But a notice of violation does not have 11 the weight of law. It is simply an allegation, as courts have recognized. See e.g., 12 Luminant Generation Co. v. EPA, 757 F.3d 439, 442-43 (5th Cir. 2014) (noting the 13 "intermediate, inconclusive" nature of an EPA NOV, that "no legal consequences 14 flow from the issuance of [a] notice," and that "it makes no sense to say that an 15 entity must comply with a notice"). If the Commission were to disregard the law 16 and gives a NOV the weight Staff does, it would set a dangerous precedent: we 17 would all lose the right of due process to challenge federal interpretations of 18 established law. Staff's approach also would make every EPA-issued NOV a blank 19 check that this Commission must honor. Mr. Majors implies that this approach is 20 currently the Commission's default approach, asserting the Commission has been 21 supportive of any of "these large expenditures to comply with environmental law 22 and regulations." (Majors Rebuttal Test. at 20.) But NOVs are not "law and

regulations," they are the assertions of an advocate in contested matters. One should
 keep in mind that at the time Ameren Missouri undertook its projects, other courts
 had rejected allegations of violations and found that the same types of projects did
 not trigger NSR.

5

6

# Q. Does it make any difference that Ameren Missouri received an NOV while the Unit 2 outage was in progress?

7 A. No, for three reasons. First, EPA issued the NOV after the Unit 2 8 project started. But Ameren Missouri was required to, and did, make its compliance 9 determinations pre-project. Because the NOV was not available at that time, it is not relevant to whether the pre-project decisions were reasonable.<sup>4</sup> The District 10 11 Court confirms this fact in finding that pre-project analyses are the ones that matter. 12 229 F.3d at 1014 (rejecting "afterthought analyses"). Second, the January 2010 13 NOV cited by Ms. Eubanks did not allege any violation in the ongoing outage at 14 Unit 2. In fact, EPA kept changing the alleged violations over the course of the 15 litigation, adding new ones and dropping others. This inconsistency reinforces the 16 fact that no particular weight should be placed on any allegations made in an NOV. 17 Third, many utilities have successfully contested EPA's NOVs, and as a result 18 EPA's allegations have frequently failed to result in the imposition of any additional

<sup>&</sup>lt;sup>4</sup> The same is true for the emission calculations by Michael Hutcheson, which Ms. Eubanks criticizes. The Hutcheson calculations were not part of the pre-project evaluations Ameren Missouri performed to decide whether permitting requirements applied. 229 F. Supp. 3d at 978 (FOF 398). Rather, they were done later at the request of the legal department. <u>Id.</u> (FOF 399). Given the context of EPA's ongoing investigation of Ameren Missouri, it was reasonable for the Ameren Missouri legal department to have requested an evaluation of certain projects from EPA's perspective.

| 1  | controls. This is illustrated in Schedule KRM-s1 (attached), which summarizes the     |  |  |  |  |
|----|---|--|--|--|--|
| 2  | NOVs issued by EPA to electric utilities for alleged NSR violations prior to January  |  |  |  |  |
| 3  | 1, 2010, and the results of any resolution of those claims within that period. Of the |  |  |  |  |
| 4  | 39 companies receiving an NOV for an alleged NSR violation between November           |  |  |  |  |
| 5  | 3, 1999 and January 1, 2010, only a third of them (13) had settled with EPA—and       |  |  |  |  |
| 6  | most of these settlements were only partial, leaving some NOV allegations against     |  |  |  |  |
| 7  | the settling company unresolved. Schedule KRM-s1. Of the over 260 units alleged       |  |  |  |  |
| 8  | to have triggered NSR in the pre-2010 NOVs, only 65 such units (i.e., 25%) had        |  |  |  |  |
| 9  | their NSR claims settled by the start of 2010. Id.                                    |  |  |  |  |
| 10 | For all these reasons, the fact that EPA issued an NOV after the relevant time        |  |  |  |  |
| 11 | period, in which Ameren Missouri made the necessary decisions, is irrelevant in       |  |  |  |  |
| 12 | determining the reasonableness of the company's permitting decisions.                 |  |  |  |  |
| 13 | Q. Mr. Majors cites the Westar Energy response to an EPA NOV                          |  |  |  |  |
| 14 | and subsequent litigation, and suggests that Ameren Missouri should have              |  |  |  |  |
| 15 | followed suit. How do you respond?  |  |  |  |  |
| 16 | A. This is wrong. First, Westar Energy announced this settlement after                |  |  |  |  |
| 17 | Ameren Missouri started the Unit 2 outage in 2010. It was not part of the landscape   |  |  |  |  |
| 18 | when Ameren Missouri made its permitting decisions. Here again, Staff uses            |  |  |  |  |
| 19 | hindsight rather than the facts available at the time to judge the reasonableness of  |  |  |  |  |
| 20 | Ameren Missouri's decisions. Second, and more fundamentally, Mr. Majors               |  |  |  |  |
| 21 | incorrectly assumes that the proper and prudent thing to do in every instance is to   |  |  |  |  |

| 1  | settle and meet an EPA demand early, so as to gain some savings benefit. <sup>5</sup> The |  |  |  |  |  |
|----|---|--|--|--|--|--|
| 2  | history of EPA's enforcement initiative provides many counter-examples.                   |  |  |  |  |  |
| 3  | Moreover, because state law can and does vary under approved SIPs, comparing the          |  |  |  |  |  |
| 4  | decision that Westar Energy made in Kansas with the decisions made by Ameren              |  |  |  |  |  |
| 5  | Missouri under the Missouri SIP is meaningless.   |  |  |  |  |  |
| 6  | 3. <u>Staff's Disregard of MDNR and the Missouri SIP</u>                                  |  |  |  |  |  |
| 7  | Q. Let's move to your third point. Ms. Eubanks suggests that the                          |  |  |  |  |  |
| 8  | interpretation and application of state agencies such as MDNR is irrelevant.              |  |  |  |  |  |
| 9  | How do you respond?   |  |  |  |  |  |
| 10 | A. The Staff's dismissiveness toward MDNR and the state SIP is                            |  |  |  |  |  |
| 11 | disturbing. Ameren Missouri was not wrong to believe in and rely upon the                 |  |  |  |  |  |
| 12 | importance of the state SIP, even after the launch of the NSR enforcement                 |  |  |  |  |  |
| 13 | initiative. The Missouri SIP was and remains the source of authority over a state's       |  |  |  |  |  |
| 14 | utilities, and all other industries. Even EPA, in its NOVs to Ameren Missouri,            |  |  |  |  |  |
| 15 | relied upon the state SIP as stating the rule of law applicable to Ameren Missouri.       |  |  |  |  |  |
| 16 | As demonstrated in my direct testimony, MDNR's interpretation of the SIP was              |  |  |  |  |  |
| 17 | consistent with Ameren Missouri's understanding of the law in Missouri. Staff             |  |  |  |  |  |
| 18 | does nothing to undermine this central point. If Ameren Missouri and MDNR had             |  |  |  |  |  |
| 19 | the same understanding, and Ms. Moore's testimony makes clear that they did,              |  |  |  |  |  |
| 20 | then Ameren Missouri's understanding cannot be unreasonable.                              |  |  |  |  |  |

<sup>&</sup>lt;sup>5</sup> Although Mr. Majors speculates that there might have been some benefit to customers had Ameren Missouri settled the claims asserted by EPA in 2010 (Majors Rebuttal Test. at 29), he provides no evidence that this would have in fact been the case.

# Q. Does Ms. Eubanks deal at all with Ms. Moore's testimony on the meaning of the Missouri SIP?

| 3  | A. No. She includes some quotes from Ms. Moore's deposition, but                    |  |  |  |  |  |
|----|---|--|--|--|--|--|
| 4  | none of these is relevant here. For example, Ms. Eubanks quotes Ms. Moore as        |  |  |  |  |  |
| 5  | saying that an EPA interpretation would control if it conflicts with an MDNR        |  |  |  |  |  |
| 6  | interpretation of the SIP. (Eubanks Rebuttal Test. at 11.) That is not correct, and |  |  |  |  |  |
| 7  | certainly cannot be taken as a general rule or proposition as Ms. Eubanks claims.   |  |  |  |  |  |
| 8  | EPA's ability to get deference for its interpretation of regulations is tightly     |  |  |  |  |  |
| 9  | circumscribed, as my direct testimony demonstrates. (Moor Direct Test. at 41-42     |  |  |  |  |  |
| 10 | and n.5.)   |  |  |  |  |  |
| 11 | Ms. Eubanks also quotes Ms. Moore on "conversations with EPA staff"                 |  |  |  |  |  |
| 12 | that the "routine" exclusion for NSR is "fairly narrow in interpretation." (Eubanks |  |  |  |  |  |
| 13 | Rebuttal Test. at 17.) Such hearsay has no value here, as Staff cannot show that    |  |  |  |  |  |
| 14 | Ameren Missouri was aware of such conversations with the unnamed EPA staff.         |  |  |  |  |  |
| 15 | What Ameren Missouri did know, as did the rest of industry, was that EPA            |  |  |  |  |  |
| 16 | publicly took the position that RMRR covered more than just "de minimis"            |  |  |  |  |  |
| 17 | maintenance, repair and replacement activities. See Moor Direct Test. at 26-30.     |  |  |  |  |  |
| 18 | IV. COMMENTS ON STAFF'S MISCHARACTERIZATIONS  |  |  |  |  |  |
| 19 | Q. Staff cites several papers and studies from the 2007-2009 time                   |  |  |  |  |  |
| 20 | period that refer to "NSR" as a potential driver for the retrofit of scrubbers.     |  |  |  |  |  |
| 21 | Do any of these documents suggest that Ameren Missouri secretly believed            |  |  |  |  |  |

#### 1 that it had triggered NSR at Rush Island and that it would therefore need to

#### 2 install scrubbers if found liable in the future?

- 3 A. No. In the context of enormous regulatory changes, known in the 4 industry vernacular as the "train wreck" of converging regulatory requirements 5 within tight timeframes, the installation of scrubbers at Rush Island had to be 6 studied as part of proper utility planning. 7 О. What do you mean by "the train wreck"? 8 A. Ameren Missouri explained it as follows: 9 During the time U.S. EPA was developing CAIR, a number of 10 other regulations expected to affect coal-fired steam electric 11 generating units were being developed, including air pollution 12 standards for emissions of mercury and other hazardous air 13 pollutants from electric generating units; performance standards 14 for emissions of greenhouse gases from electric generating units; 15 national ambient air quality standards for SO2 and three other pollutants; rules governing cooling water intake structures; 16 17 wastewater effluent guidelines; and rules for management of coal combustion byproducts, such as fly ash, under U.S. EPA's solid 18 waste program. Collectively, these rules were popularly referred 19 20 to as a "train wreck" affecting the utility industry. (See generally, 21 "EPA's Regulation of Coal-Fired Power: Is a 'Train Wreck' 22 Coming?," Congressional Research Service, Aug. 8, 2011 23 (available at 24 www3.epa.gov/region1/npdes/merrimackstation/pdfs/ar/AR-25 1162.pdf).) 26 United States v. Ameren Missouri, ECF No. 1042-12 at 45 (¶ 39). Amidst all of these initiatives, EPA's NSR enforcement initiative was a random variable 27 28 confounding good utility planning processes.
- 29 Q. How did Ameren Missouri respond to the train wreck?

A. Ameren Missouri did what, in my experience, all utilities did in
 these circumstances. It evaluated the potential regulatory requirements coming
 into effect for its system, and considered whether a settlement with EPA of its
 NSR claims could be obtained within the overall compliance plan required for the
 CAA programs.

6

### Q. What was EPA's settlement demand of Ameren Missouri?

7 A. EPA was demanding controls on every unit owned by Ameren 8 Corporation subsidiaries. United States v. Ameren Missouri, ECF No. 1070 at 5-9 6. EPA began by focusing on all the Ameren units in Illinois, sending Ameren 10 Missouri's Illinois affiliates a settlement demand in July 2008 demanding the 11 installation of wet FGD (i.e., scrubbers) on all units. Id. As documents produced 12 by EPA showed, until 2010 (after the Unit 1 projects were done and the Unit 2 13 projects had already begun), EPA's main target was the Illinois units. These internal EPA documents show that EPA specifically discussed serving a Section 14 15 114 request on the Ameren Missouri system to "put pressure" on Ameren to settle 16 in Illinois. ECF No. 1070-1, Ex. A at EPA7A AME295302. As Judge Hopkins 17 found in the Alabama Power NSR case, EPA's enforcement initiative was "a 18 sport" rather than "what one would expect to find in a national regulatory 19 enforcement program." United States v. Ala. Power Co., 372 F. Supp. 2d 1283, 20 1306 n.44 (N.D. Ala. 2005), order vacated in part on other grounds, No. 2:01-cv-21 00152-VEH, 2008 WL 11383702 (N.D. Ala. Feb. 25, 2008).

| 1  | Q. Do Ameren Missouri's internal discussions somehow show that                     |
|----|--|
| 2  | its decision to undertake the Rush Island projects was made in bad faith to        |
| 3  | game the regulatory system?  |
| 4  | A. No. As discussed above, the District Court found that Ameren                    |
| 5  | Missouri had a compliance process and applied it to the evaluation of the Rush     |
| 6  | Island projects. The problem the District Court found was that Ameren Missouri     |
| 7  | "had a fundamental misunderstanding of the law" that was inconsistent with the     |
| 8  | Court's understanding in 2017—not that the company was intentionally evading it.   |
| 9  | Q. Can you give us some examples of where the Staff attempted to                   |
| 10 | use references to "NSR" to imply bad faith on the part of Ameren Missouri          |
| 11 | decision makers?   |
| 12 | A. Yes. Take, for example, the Staff's reference to "NSR" in the Black             |
| 13 | & Veatch papers, where a generic description of NSR in a study of future scrubber  |
| 14 | installation is used by Staff to imply evasion of the law. None of these generic   |
| 15 | references to "NSR" concerns NSR liability at Rush Island—EPA issued no such       |
| 16 | NOV for Rush Island until 2010. Instead, the references to "NSR" in the Black &    |
| 17 | Veatch papers and other Ameren Missouri documents from 2008-2009 simply            |
| 18 | recognize that if EPA were to allege NSR violations against Ameren Missouri and    |
| 19 | if a settlement with EPA was warranted, any such settlement would likely result in |
| 20 | installation of scrubbers at numerous Ameren Missouri plants. Ameren Missouri      |
| 21 | was considering that potential driver at the same time that it was devising the    |
| 22 | overall Environmental Compliance Plan submitted to this Commission, Callahan       |

- 1 Dep. at 28, 96-97, 105-06, 170-71, 190-91, 231-36, just as every other utility did
- 2 when confronting the uncertainty of the "regulation through litigation" approach
- 3 EPA was pursuing in its "initiative."
- 4 Q. Does this conclude your surrebuttal testimony?
- 5 A. Yes, it does.

| NOV Date  | Company   | Units Named<br>(State)  | Consent Decrees<br>Entered before<br>Jan. 2010   | System-Wide<br>Resolution? | Units Covered by the<br>Settlement |
|-----------|---|---|--|----------------------------|------------------------------------|
| 11/3/1999 | American Electric<br>Power Service<br>Corp.;<br>Indiana Michigan<br>Power Company,<br>d/b/a American<br>Electric Power<br>(AEP);<br>Ohio Power Company,<br>d/b/a AEP;<br>Appalachian Power<br>Company,<br>d/b/a AEP<br>Columbus & Southern<br>Ohio<br>Electric Company,<br>d/b/a AEP;<br>Cardinal Operating<br>Company;<br>Central Operating<br>Company | Cardinal Power<br>Plant (OH) Unit 1<br>Cardinal Power<br>Plant (OH) Unit 2<br>Cardinal Power<br>Plant (OH) Unit 2<br>Cardinal Power<br>Plant (OH) Unit 3<br>Conesville Power<br>Plant (OH) Unit 2<br>Conesville Power<br>Plant (OH) Unit 2<br>Conesville Power<br>Plant (OH) Unit 3<br>Mitchell Plant<br>(WV) Unit 1<br>Mitchell Plant<br>(WV) Unit 2<br>Muskingum River<br>Station (OH)<br>Unit 1<br>Muskingum River<br>Station (OH)<br>Unit 2 | United States v.<br>American Electric<br>Power Service<br>Corp., No. 99-<br>1182 (and<br>consolidated<br>cases) (S.D. Ohio<br>lodged Oct. 9,<br>2007, Order<br>directing entry<br>Dec. 13, 2007) | Yes, for AEP east          | All                                |

#### Notices of Violation (NOVs) Issued by EPA to Electric Utility Companies from 1999 to December 31, 2009 and Resolutions of Such Claims Within That Period

| NOV Date | Company | Units Named<br>(State)   | Consent Decrees<br>Entered before<br>Jan. 2010 | System-Wide<br>Resolution? | Units Covered by the<br>Settlement |
|----------|---------|--|--|----------------------------|------------------------------------|
|          |         | Muskingum River<br>Station (OH)<br>Unit 3Muskingum River<br>Station (OH)<br>Unit 4Muskingum River<br>Station (OH)<br>Unit 5Philip Sporn Plant<br>(WV) Unit 1Philip Sporn Plant<br>(WV) Unit 2Philip Sporn Plant<br>(WV) Unit 3Philip Sporn Plant<br>(WV) Unit 3Philip Sporn Plant<br>(WV) Unit 4Philip Sporn Plant<br>(WV) Unit 5Tanners Creek Plant<br>(IN) Unit 2Tanners Creek Plant<br>(IN) Unit 3Tanners Creek Plant<br>(IN) Unit 3Tanners Creek Plant<br> |  |                            |                                    |

| NOV Date  | Company   | Units Named<br>(State)  | Consent Decrees<br>Entered before<br>Jan. 2010  | System-Wide<br>Resolution? | Units Covered by the<br>Settlement             |
|-----------|---|---|---|----------------------------|--|
| 11/3/1999 | Cinergy Corporation,<br>PSI Energy, Inc., and<br>Cincinnati Gas &<br>Electric Company | Beckjord Plant<br>(OH) Unit 1<br>Beckjord Plant<br>(OH) Unit 2<br>Beckjord Plant<br>(OH) Unit 3<br>Beckjord Plant<br>(OH) Unit 4<br>Beckjord Plant<br>(OH) Unit 5<br>Beckjord Plant<br>(OH) Unit 5<br>Beckjord Plant<br>(OH) Unit 6<br>Cayuga Plant (IN)<br>Unit 1<br>Cayuga Plant (IN)<br>Unit 2<br>Gallagher Plant (IN)<br>Unit 2<br>Gallagher Plant (IN)<br>Unit 2<br>Gallagher Plant (IN)<br>Unit 3<br>Gallagher Plant (IN)<br>Unit 4 | United States v.<br>Cinergy Corp.,<br>No. 99-1693<br>(S.D. Ind. lodged<br>Dec. 22, 2009,<br>entered Mar. 18,<br>2010) | No                         | Gallagher Units 1-4 (after<br>liability trial) |
|           |   | Wabash River Plant<br>(IN) Unit 1   |   |                            |  |

| NOV Date  | Company   | Units Named<br>(State)  | Consent Decrees<br>Entered before<br>Jan. 2010   | System-Wide<br>Resolution? | Units Covered by the<br>Settlement          |
|-----------|---|---|--|----------------------------|---|
|           |   | Wabash River Plant<br>(IN) Unit 2<br>Wabash River Plant<br>(IN) Unit 3<br>Wabash River Plant<br>(IN) Unit 4<br>Wabash River Plant<br>(IN) Unit 5<br>Wabash River Plant<br>(IN) Unit 6   |  |                            |   |
| 11/3/1999 | First Energy<br>Corporation,<br>Ohio Edison Company,<br>and Pennsylvania<br>Power Company | <ul> <li>W.H. Sammis Plant<br/>(OH) Unit 1</li> <li>W.H. Sammis Plant<br/>(OH) Unit 2</li> <li>W.H. Sammis Plant<br/>(OH) Unit 3</li> <li>W.H. Sammis Plant<br/>(OH) Unit 4</li> <li>W.H. Sammis Plant<br/>(OH) Unit 5</li> <li>W.H. Sammis Plant<br/>(OH) Unit 6</li> <li>W.H. Sammis Plant<br/>(OH) Unit 7</li> </ul> | United States v.<br>Ohio Edison Co.,<br>No. 99-1181<br>(S.D. Ohio lodged<br>Mar. 23, 2005,<br>Order directing<br>entry July 11,<br>2005) | No                         | Sammis Units 1-7 (after<br>liability trial) |
| 11/3/1999 | Illinois Power<br>Company   | Baldwin Plant (IL)<br>Unit 1  | United States v.<br>Illinois Power<br>Co., No. 99-833  | Yes                        | All (after liability trial)                 |

| NOV Date  | Company  | Units Named<br>(State)  | Consent Decrees<br>Entered before<br>Jan. 2010   | System-Wide<br>Resolution? | Units Covered by the<br>Settlement   |
|-----------|--|---|--|----------------------------|--|
|           |  | Baldwin Plant (IL)<br>Unit 2<br>Baldwin Plant (IL)<br>Unit 3  | (S.D. Ill. entered<br>May 27, 2005)  |                            |  |
| 11/3/1999 | Southern Company<br>Services, Inc. /<br>Alabama Power<br>Company | Barry Steam Plant<br>(AL) Unit 5<br>Gaston Steam Plant<br>(AL) Unit 5<br>Gorgas Steam Plant<br>(AL) Unit 10<br>Greene County<br>Plant (AL) Unit 2<br>Miller Plant (AL)<br>Unit 3<br>Miller Plant (AL)<br>Unit 4 | United States v.<br>Alabama Power<br>Co., No. 01-152<br>(N.D. Ala. lodged<br>Apr. 24, 2006,<br>entered June 19,<br>2006) | No                         | Miller Units 3, 4 (Note:<br>Miller involved "commence<br>construction" NSR claims) |
| 11/3/1999 | Southern Company<br>Services, Inc. / Georgia<br>Power Company    | Bowen Plant (GA)<br>Unit 2<br>Scherer Plant (GA)<br>Unit 3<br>Scherer Plant (GA)<br>Unit 4  |  |                            |  |

| NOV Date  | Company   | Units Named<br>(State)   | Consent Decrees<br>Entered before<br>Jan. 2010  | System-Wide<br>Resolution? | Units Covered by the<br>Settlement |
|-----------|---|--|---|----------------------------|------------------------------------|
| 11/3/1999 | Southern Company<br>Services, Inc. / Gulf<br>Power Company                      | Crist Plant (FL)<br>Unit 7   |   |                            |                                    |
| 11/3/1999 | Southern Company<br>Services, Inc. /<br>Mississippi Power<br>Company            | Watson Electric<br>Generating Plant<br>(MS) Unit 5   |   |                            |                                    |
| 11/3/1999 | Southern Company<br>Services, Inc. /<br>Savannah Electric &<br>Power<br>Company | Kraft Plant (GA)<br>Unit 3   |   |                            |                                    |
| 11/3/1999 | Southern Indiana Gas<br>and Electric Company<br>(SIGECO)                        | F.B. Culley Station<br>(IN) Unit 1<br>F.B. Culley Station<br>(IN) Unit 2<br>F.B. Culley Station<br>(IN) Unit 3 | United States v.<br>Southern Indiana<br>Gas & Elec. Co.,<br>No. 99-1692<br>(S.D. Ind. entered<br>Aug. 19, 2003) | No                         | Culley Units 1-3                   |
| 11/3/1999 | Tampa Electric<br>Company (TECO)  | Big Bend Station<br>(FL) Unit 1<br>Big Bend Station<br>(FL) Unit 2   | United States v.<br>Tampa Electric<br>Co., No. 99-2524<br>(M.D. Fla.<br>entered Feb. 29,<br>2000)               | Yes                        | All                                |

| NOV Date | Company                             | Units Named<br>(State)  | Consent Decrees<br>Entered before<br>Jan. 2010 | System-Wide<br>Resolution? | Units Covered by the<br>Settlement |
|----------|-------------------------------------|---|--|----------------------------|------------------------------------|
|          |                                     | Gannon Station<br>(FL) Unit 3<br>Gannon Station<br>(FL) Unit 4<br>Gannon Station<br>(FL) Unit 6   |  |                            |                                    |
| 3/9/2000 | Tennessee Valley<br>Authority (TVA) | Allen Steam Plant<br>(TN) Unit 3Bull Run Steam<br>Plant (TN) Unit 1Colbert Steam Plant<br>(AL) [no unit<br>number identified]Cumberland Steam<br>Plant (TN) Unit 1<br>Cumberland Steam<br>Plant (TN) Unit 2John Sevier Steam<br>Plant (TN) Unit 3Kingston Steam<br>Plant (TN) Unit 6<br>Kingston Steam<br>Plant (TN) Unit 8 |  |                            |                                    |

| NOV Date  | Company                                | Units Named<br>(State)  | Consent Decrees<br>Entered before<br>Jan. 2010   | System-Wide<br>Resolution? | Units Covered by the<br>Settlement                   |
|-----------|--|---|--|----------------------------|--|
|           |  | Paradise Steam<br>Plant (KY) Unit 1<br>Paradise Steam<br>Plant (KY) Unit 2<br>Paradise Steam<br>Plant (KY) Unit 3<br>Shawnee Steam<br>Plant (KY) Unit 1<br>Shawnee Steam<br>Plant (KY) Unit 1<br>Widows Creek<br>Steam Plant (AL)<br>Unit 5 |  |                            |  |
| 4/24/2000 | Virginia Electric and<br>Power Company | Mount Storm Power<br>Plant (WV) Unit 1<br>Mount Storm Power<br>Plant (WV) Unit 2<br>Mount Storm Power<br>Plant (WV) Unit 3  | United States v.<br>Virginia Elec. &<br>Power Co., No.<br>03-517 (E.D. Va.<br>entered Oct. 3,<br>2003) | Yes                        | All (note: Mount Storm<br>Units 1-3 already had FGD) |
| 5/9/2000  | Duke Energy<br>Corporation             | Allen Plant (NC)<br>Unit 1<br>Allen Plant (NC)<br>Unit 2  |  |                            |  |

| NOV Date | Company | Units Named<br>(State) | Consent Decrees<br>Entered before<br>Jan. 2010 | System-Wide<br>Resolution? | Units Covered by the<br>Settlement |
|----------|---------|------------------------|--|----------------------------|------------------------------------|
|          |         | Allen Plant (NC)       |  |                            |                                    |
|          |         | Unit 3                 |  |                            |                                    |
|          |         | Allen Plant (NC)       |  |                            |                                    |
|          |         | Unit 4                 |  |                            |                                    |
|          |         | Allen Plant (NC)       |  |                            |                                    |
|          |         | Unit 5                 |  |                            |                                    |
|          |         | Belews Creek Plant     |  |                            |                                    |
|          |         | (NC) Unit 1            |  |                            |                                    |
|          |         | Belews Creek Plant     |  |                            |                                    |
|          |         | (NC) Unit 2            |  |                            |                                    |
|          |         | Buck Steam Station     |  |                            |                                    |
|          |         | (NC) Unit 3            |  |                            |                                    |
|          |         | Buck Steam Station     |  |                            |                                    |
|          |         | (NC) Unit 4            |  |                            |                                    |
|          |         | Buck Steam Station     |  |                            |                                    |
|          |         | (NC) Unit 5            |  |                            |                                    |
|          |         | Cliffside Steam        |  |                            |                                    |
|          |         | Plant (NC) Unit 1      |  |                            |                                    |
|          |         | Cliffside Steam        |  |                            |                                    |
|          |         | Plant (NC) Unit 2      |  |                            |                                    |
|          |         | Cliffside Steam        |  |                            |                                    |
|          |         | Plant (NC) Unit 3      |  |                            |                                    |
|          |         | Cliffside Steam        |  |                            |                                    |
|          |         | Plant (NC) Unit 4      |  |                            |                                    |
|          |         | Cliffside Steam        |  |                            |                                    |
|          |         | Plant (NC) Unit 5      |  |                            |                                    |

| NOV Date  | Company   | Units Named<br>(State)  | Consent Decrees<br>Entered before<br>Jan. 2010 | System-Wide<br>Resolution? | Units Covered by the<br>Settlement |
|-----------|---|---|--|----------------------------|------------------------------------|
|           |   | Dan River Steam<br>Station (NC) Unit<br>3<br>Marshall Steam<br>Plant (NC) Unit 2<br>Marshall Steam<br>Plant (NC) Unit 3<br>Marshall Steam<br>Plant (NC) Unit 4<br>Riverbend Steam<br>Plant (NC) Unit 4<br>Riverbend Steam<br>Plant (NC) Unit 6<br>Riverbend Steam<br>Plant (NC) Unit 7<br>W.S. Lee Steam<br>Plant (SC) Unit 3 |  |                            |                                    |
| 6/28/2000 | Cinergy Corporation,<br>Cincinnati Gas and<br>Electric, and PSI<br>Energy, Inc. | Gibson Generating<br>Station (IN) Unit<br>1<br>Gibson Generating<br>Station (IN) Unit<br>2  |  |                            |                                    |

| NOV Date  | Company                             | Units Named<br>(State)   | Consent Decrees<br>Entered before<br>Jan. 2010  | System-Wide<br>Resolution? | Units Covered by the<br>Settlement                                |
|-----------|-------------------------------------|--|---|----------------------------|---|
|           |                                     | Miami Fort<br>Generating Sta-<br>tion (OH) Unit 5<br>Miami Fort<br>Generating Sta-<br>tion (OH) Unit 7 |   |                            |   |
| 6/30/2000 | Dayton Power and<br>Light Company   | J.M. Stuart<br>Generating Station<br>(OH) – four units   | Sierra Club v.<br>Dayton Power &<br>Light Co., Duke<br>Energy Ohio,<br>Inc., & Columbus<br>Southern Power<br>Co., No. 04-905<br>(S.D. Ohio<br>entered Oct. 23,<br>2008) | No                         | Stuart Units 1-4  |
| 6/17/2002 | Minnkota Power<br>Cooperative, Inc. | Milton R. Young<br>Station (ND) Unit<br>1<br>Milton R. Young<br>Station (ND) Unit<br>2                 | United States v.<br>Minnkota Power<br>Coop., No. 06-34<br>(D.N.D. entered<br>July 27, 2006)   | No                         | Milton R. Young Units 1-2<br>(Note: units already had<br>one FGD) |
| 6/26/2002 | Xcel Energy                         | Comanche Station<br>(CO) Unit 1<br>Comanche Station<br>(CO) Unit 2                                     |   |                            |   |

| NOV Date  | Company                            | Units Named<br>(State)                          | Consent Decrees<br>Entered before<br>Jan. 2010   | System-Wide<br>Resolution? | Units Covered by the<br>Settlement |
|-----------|------------------------------------|---|--|----------------------------|------------------------------------|
|           |                                    | Pawnee Station<br>(CO) – has one<br>boiler unit |  |                            |                                    |
| 1/24/2003 | East Kentucky Power<br>Cooperative | Spurlock (KY) Unit<br>2                         | United States v.<br>East Kentucky<br>Power Coop., No.<br>04-34 (E.D. Ky.<br>entered Sept. 24,<br>2007)   | Yes                        | All                                |
| 7/2/2003  | East Kentucky Power<br>Cooperative | Dale (KY) Unit 3<br>Dale (KY) Unit 4            | United States v.<br>East Kentucky<br>Power Coop., No.<br>04-34 (E.D. Ky.<br>entered Sept. 24,<br>2007)   | Yes                        | All                                |
| 1/22/2004 | Mirant Potomac River,<br>LLC       | Potomac River<br>Power Plant (VA)               | United States v.<br>Mirant Potomac<br>River, LLC, No.<br>04-1136 (E.D.<br>Va. lodged Sept.<br>27, 2004,<br>amended consent<br>decree entered<br>Apr. 20, 2007) | No                         | Potomac River Units 3-5            |

| NOV Date  | Company   | Units Named<br>(State)   | Consent Decrees<br>Entered before<br>Jan. 2010 | System-Wide<br>Resolution? | Units Covered by the<br>Settlement |
|-----------|---|--|--|----------------------------|------------------------------------|
| 1/22/2004 | Westar Energy, Inc.   | Jeffrey Energy<br>Center Unit 1<br>Jeffrey Energy<br>Center Unit 2<br>Jeffrey Energy<br>Center Unit 3  |  |                            |                                    |
| 4/1/2004  | Cinergy Corporation;<br>PSI Energy, Inc.; and<br>Cincinnati Gas &<br>Electric Company | Gallagher Unit 1<br>Gallagher Unit 3<br>Gibson Unit 2<br>Miami Fort Unit 7   |  |                            |                                    |
| 4/1/2004  | Cinergy Services, Inc.  | Beckjord Plant<br>(OH) Unit 1<br>Beckjord Plant<br>(OH) Unit 2<br>Beckjord Plant<br>(OH) Unit 3<br>Beckjord Plant<br>(OH) Unit 4<br>Beckjord Plant<br>(OH) Unit 5<br>Beckjord Plant<br>(OH) Unit 5<br>Beckjord Plant<br>(OH) Unit 6<br>Cayuga Plant (IN)<br>Unit 1 |  |                            |                                    |

| NOV Date | Company | Units Named<br>(State)   | Consent Decrees<br>Entered before<br>Jan. 2010 | System-Wide<br>Resolution? | Units Covered by the<br>Settlement |
|----------|---------|--|--|----------------------------|------------------------------------|
|          |         | Cayuga Plant (IN)<br>Unit 2  |  |                            |                                    |
|          |         | Gallagher Plant (IN)<br>Unit 1<br>Gallagher Plant (IN)<br>Unit 2<br>Gallagher Plant (IN)<br>Unit 3<br>Gallagher Plant (IN)<br>Unit 4 |  |                            |                                    |
|          |         | Gibson Plant (IN)<br>Unit 1<br>Gibson Plant (IN)<br>Unit 2   |  |                            |                                    |
|          |         | Miami Fort Plant<br>(OH) Unit 5<br>Miami Fort Plant<br>(OH) Unit 7   |  |                            |                                    |
|          |         | Wabash River Plant<br>(IN) Unit 1<br>Wabash River Plant<br>(IN) Unit 2<br>Wabash River Plant<br>(IN) Unit 3                          |  |                            |                                    |

| NOV Date  | Company   | Units Named<br>(State)  | Consent Decrees<br>Entered before<br>Jan. 2010   | System-Wide<br>Resolution? | Units Covered by the<br>Settlement |
|-----------|---|---|--|----------------------------|------------------------------------|
|           |   | Wabash River Plant<br>(IN) Unit 4<br>Wabash River Plant<br>(IN) Unit 5<br>Wabash River Plant<br>(IN) Unit 6   |  |                            |                                    |
| 6/18/2004 | American Electric<br>Power Service<br>Corp.;<br>Indiana Michigan<br>Power Company,<br>d/b/a American<br>Electric Power<br>(AEP);<br>Ohio Power Company,<br>d/b/a AEP;<br>Appalachian Power<br>Company,<br>d/b/a AEP<br>Columbus & Southern<br>Ohio<br>Electric Company,<br>d/b/a AEP;<br>Cardinal Operating<br>Company;<br>Central Operating<br>Company | Cardinal Power<br>Plant (OH) Unit 1<br>Cardinal Power<br>Plant (OH) Unit 2<br>Conesville Power<br>Plant (OH) Unit 5<br>Conesville Power<br>Plant (OH) Unit 6<br>John Amos Power<br>Plant (WV) Unit 2<br>Kammer Power<br>Plant (WV) Unit 1<br>Kammer Power<br>Plant (WV) Unit 2<br>Kammer Power<br>Plant (WV) Unit 2 | United States v.<br>American Electric<br>Power Service<br>Corp., No. 99-<br>1182 (and<br>consolidated<br>cases) (S.D. Ohio<br>lodged Oct. 9,<br>2007, order<br>directing entry<br>Dec. 13, 2007) | Yes                        | All                                |

| NOV Date  | Company  | Units Named<br>(State)   | Consent Decrees<br>Entered before<br>Jan. 2010 | System-Wide<br>Resolution? | Units Covered by the<br>Settlement |
|-----------|--|--|--|----------------------------|------------------------------------|
|           |  | Muskingum River<br>Station (OH)<br>Unit 1Muskingum River<br>Station (OH)<br>Unit 2Muskingum River<br>Station (OH)<br>Unit 3Muskingum River<br>Station (OH)<br>Unit 4Muskingum River<br>Station (OH)<br>Unit 4Muskingum River<br>Station (OH)<br>Unit 5Philip Sporn Plant<br>(WV) Unit 1Philip Sporn Plant<br>(WV) Unit 2Philip Sporn Plant<br>(WV) Unit 5Tanners Creek Plant<br> |  |                            |                                    |
| 9/29/2004 | Northern Indiana<br>Public Service<br>Company (NIPSCo) | Bailly Electric<br>Generating<br>Station Unit 7  |  |                            |                                    |

| NOV Date  | Company  | Units Named<br>(State)   | Consent Decrees<br>Entered before<br>Jan. 2010  | System-Wide<br>Resolution? | Units Covered by the<br>Settlement |
|-----------|--|--|---|----------------------------|------------------------------------|
|           |  | Bailly Electric<br>Generating<br>Station Unit 8                                    |   |                            |                                    |
|           |  | Michigan City<br>Station Unit 12   |   |                            |                                    |
|           |  | R.M. Schahfer<br>Station Unit 4<br>R.M. Schahfer<br>Station Unit 15                |   |                            |                                    |
| 2/15/2005 | Louisiana Generating,<br>L.L.C.                                  | Big Cajun II Power<br>Plant (LA) Unit 1<br>Big Cajun II Power<br>Plant (LA) Unit 2 |   |                            |                                    |
| 4/26/2006 | E. ON U.S. (Kentucky<br>Utilities)                               | E.W. Brown Plant<br>(KY) Unit 3  | United States v.<br>Kentucky Utilities<br>Co., No. 07-75<br>(E.D. Ky. entered<br>Mar. 17, 2009) | No                         | Brown Unit 3                       |
| 7/31/2007 | Midwest Generation,<br>LLC and<br>Commonwealth Edison<br>Company | Crawford Station<br>(IL) Unit 7<br>Crawford Station<br>(IL) Unit 8                 |   |                            |                                    |

| NOV Date | Company | Units Named<br>(State)   | Consent Decrees<br>Entered before<br>Jan. 2010 | System-Wide<br>Resolution? | Units Covered by the<br>Settlement |
|----------|---------|--|--|----------------------------|------------------------------------|
|          |         | Fisk Station (IL)<br>Unit 19   |  |                            |                                    |
|          |         | Joliet Station (IL)<br>Unit 6<br>Joliet Station (IL)<br>Unit 7   |  |                            |                                    |
|          |         | Powerton Station<br>(IL) Unit 5<br>Powerton Station<br>(IL) Unit 6   |  |                            |                                    |
|          |         | Waukegan Station<br>(IL) Unit 6<br>Waukegan Station<br>(IL) Unit 7<br>Waukegan Station<br>(IL) Unit 8  |  |                            |                                    |
|          |         | Will County Station<br>(IL) Unit 1<br>Will County Station<br>(IL) Unit 2<br>Will County Station<br>(IL) Unit 3<br>Will County Station<br>(IL) Unit 4 |  |                            |                                    |

| NOV Date  | Company   | Units Named<br>(State)   | Consent Decrees<br>Entered before<br>Jan. 2010 | System-Wide<br>Resolution? | Units Covered by the<br>Settlement |
|-----------|---|--|--|----------------------------|------------------------------------|
| 9/17/2007 | Allegheny Energy,<br>Inc.; Monongahela<br>Power d/b/a Allegheny<br>Energy; and West Penn<br>Power d/b/a Allegheny<br>Energy | Armstrong<br>Generating<br>Station (PA) Unit<br>1<br>Armstrong<br>Generating<br>Station (PA) Unit<br>2<br>Fort Martin (WV)<br>Unit 1<br>Fort Martin (WV)<br>Unit 2<br>Hatfields Ferry<br>(PA) Unit 1<br>Hatfields Ferry<br>(PA) Unit 2<br>Hatfields Ferry<br>(PA) Unit 3<br>Willow Island<br>(WV) Unit 2 |  |                            |                                    |
| 9/26/2007 | E.ON U.S. (Kentucky<br>Utilities)   | Ghent Station (KY)<br>Unit 1<br>Ghent Station (KY)<br>Unit 3   |  |                            |                                    |

| NOV Date  | Company   | Units Named<br>(State)  | Consent Decrees<br>Entered before<br>Jan. 2010 | System-Wide<br>Resolution? | Units Covered by the<br>Settlement |
|-----------|---|---|--|----------------------------|------------------------------------|
| 3/10/2008 | Duke Energy<br>Corporation                      | <ul> <li>W.H. Zimmer<br/>Generating<br/>Station (OH) Unit<br/>1</li> <li>W.H. Zimmer<br/>Generating<br/>Station (OH) Unit<br/>B006</li> <li>W.H. Zimmer<br/>Generating<br/>Station (OH) Unit<br/>B007</li> <li>W.H. Zimmer<br/>Generating<br/>Station (OH) Unit<br/>B008</li> </ul> |  |                            |                                    |
| 8/5/2008  | Allete Inc. d/b/a<br>Minnesota Power<br>Company | Boswell Generating<br>Station (MN)<br>Unit 1<br>Boswell Generating<br>Station (MN)<br>Unit 2<br>Boswell Generating<br>Station (MN)<br>Unit 3<br>Boswell Generating<br>Station (MN)<br>Unit 4  |  |                            |                                    |

| NOV Date   | Company   | Units Named<br>(State)  | Consent Decrees<br>Entered before<br>Jan. 2010 | System-Wide<br>Resolution? | Units Covered by the<br>Settlement |
|------------|---|---|--|----------------------------|------------------------------------|
|            |   | Laskin Generating<br>Station (MN)<br>Unit 2   |  |                            |                                    |
| 10/21/2008 | Consumers Energy  | J.H. Campbell Plant<br>(MI) Unit 1<br>J.H. Campbell Plant<br>(MI) Unit 2<br>B.C. Cobb Plant<br>(MI) Unit 4<br>B.C. Cobb Plant<br>(MI) Unit 5<br>D.E. Karn Plant<br>(MI) Unit 1<br>D.E. Karn Plant<br>(MI) Unit 2<br>J.C. Weadock Plant<br>(MI) Unit 8 |  |                            |                                    |
| 11/25/2008 | Unified Government of<br>Wyandotte<br>County/Kansas City,<br>Kansas, acting through<br>the Kansas City Board<br>of Public Utilities | Nearman Creek<br>Power Station<br>(KS) Unit 1   |  |                            |                                    |

| NOV Date  | Company   | Units Named<br>(State)   | Consent Decrees<br>Entered before<br>Jan. 2010 | System-Wide<br>Resolution? | Units Covered by the<br>Settlement |
|-----------|---|--|--|----------------------------|------------------------------------|
|           |   | Quindaro Power<br>Station (KS)<br>Unit 1<br>Quindaro Power<br>Station (KS)<br>Unit 2   |  |                            |                                    |
| 12/8/2008 | Nebraska Public Power<br>District (NPPD)            | Gerald Gentleman<br>Station (NE)<br>Unit 1<br>Gerald Gentleman<br>Station (NE)<br>Unit 2                                     |  |                            |                                    |
| 3/19/2008 | E.ON U.S. and<br>Kentucky Utilities<br>Company (KU) | Ghent Station (KY)<br>Unit 1<br>Ghent Station (KY)<br>Unit 2<br>Ghent Station (KY)<br>Unit 3<br>Ghent Station (KY)<br>Unit 4 |  |                            |                                    |
| 3/26/2009 | Richmond Power and<br>Light                         | Whitewater Valley<br>Generating<br>Station (IN) Unit<br>1<br>Whitewater Valley<br>Generating                                 |  |                            |                                    |

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|-----------|---|--|--|----------------------------|------------------------------------|
|           |   | Station (IN) Unit<br>2   |  |                            |                                    |
| 3/27/2009 | American Municipal<br>Power-Ohio, Inc. and<br>Elkem Metals, Inc.                                  | Richard H. Gorsuch<br>Generating<br>Station (4 units)  |  |                            |                                    |
| 4/16/2009 | Dominion Resources<br>Services, Inc.,<br>Commonwealth Edison<br>Company,<br>Mirant Americas, Inc. | Kincaid Generating<br>Station (IL) Unit 1<br>Kincaid Generating<br>Station (IL) Unit 2<br>State Line<br>Generating<br>Station (IN) Unit<br>3<br>State Line<br>Generating<br>Station (IN) Unit<br>4 |  |                            |                                    |
| 7/24/2009 | DTE Energy  | Belle River Electric<br>Generating<br>Station (MI) Unit<br>1<br>Belle River Electric<br>Generating<br>Station (MI) Unit<br>2   |  |                            |                                    |

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|----------|---------|--|--|----------------------------|------------------------------------|
|          |         | Monroe Electrical<br>Generating<br>Station (MI) Unit<br>1<br>Monroe Electrical<br>Generating<br>Station (MI) Unit<br>2<br>Monroe Electrical<br>Generating<br>Station (MI) Unit<br>3<br>Monroe Electrical<br>Generating<br>Station (MI) Unit<br>4 |  |                            |                                    |
|          |         | River Rouge<br>Electric<br>Generating<br>Station (MI) Unit<br>2<br>River Rouge<br>Electric<br>Generating<br>Station (MI) Unit<br>3   |  |                            |                                    |

| NOV Date | Company | Units Named<br>(State)   | Consent Decrees<br>Entered before<br>Jan. 2010 | System-Wide<br>Resolution? | Units Covered by the<br>Settlement |
|----------|---------|--|--|----------------------------|------------------------------------|
|          |         | St. Clair Generating<br>Station (MI)<br>Unit 2St. Clair Generating<br>Station (MI)<br>Unit 3St. Clair Generating<br>Station (MI)<br>Unit 4St. Clair Generating<br>Station (MI)<br>Unit 6St. Clair Generating<br>Station (MI)<br>Unit 6St. Clair Generating<br>Station (MI)<br>Unit 7 |  |                            |                                    |
|          |         | Trenton Channel<br>Generating<br>Station (MI) Unit<br>9A<br>Trenton Channel<br>Generating<br>Station (MI) Unit<br>17<br>Trenton Channel<br>Generating<br>Station (MI) Unit<br>18   |  |                            |                                    |

| NOV Date  | Company                    | Units Named<br>(State)  | Consent Decrees<br>Entered before<br>Jan. 2010 | System-Wide<br>Resolution? | Units Covered by the<br>Settlement |
|-----------|----------------------------|---|--|----------------------------|------------------------------------|
|           |                            | Trenton Channel<br>Generating<br>Station (MI) Unit<br>19  |  |                            |                                    |
| 8/12/2009 | FirstEnergy<br>Corporation | Ashtabula<br>Generating<br>Station (OH) Unit<br>5<br>Bay Shore<br>Generating<br>Station (OH) Unit<br>2<br>Bay Shore<br>Generating<br>Station (OH) Unit<br>3<br>Bay Shore<br>Generating<br>Station (OH) Unit<br>4<br>Eastlake Generating<br>Station (OH) Unit<br>1<br>Eastlake Generating<br>Station (OH) Unit |  |                            |                                    |

| NOV Date  | Company   | Units Named<br>(State)   | Consent Decrees<br>Entered before<br>Jan. 2010 | System-Wide<br>Resolution? | Units Covered by the<br>Settlement |
|-----------|---|--|--|----------------------------|------------------------------------|
|           |   | Eastlake Generating<br>Station (OH) Unit<br>3<br>Eastlake Generating<br>Station (OH) Unit<br>4<br>Eastlake Generating<br>Station (OH) Unit<br>5<br>Lake Shore<br>Generating<br>Station (OH) Unit<br>18 |  |                            |                                    |
| 8/18/2009 | Painesville Municipal<br>Electric Plant,<br>Painesville, OH | Boiler 3<br>Boiler 4<br>Boiler 5   |  |                            |                                    |
| 8/26/2009 | Hoosier Energy Rural<br>Electric Cooperative                | Merom Generating<br>Station (IN) Unit<br>1<br>Merom Generating<br>Station (IN) Unit<br>2   |  |                            |                                    |
| 8/26/2009 | White Pine Electric<br>Power, LLC                           | White Pine Power<br>Plant (MI) Boiler<br>1   |  |                            |                                    |

| NOV Date  | Company                               | Units Named<br>(State)   | Consent Decrees<br>Entered before<br>Jan. 2010 | System-Wide<br>Resolution? | Units Covered by the<br>Settlement |
|-----------|---------------------------------------|--|--|----------------------------|------------------------------------|
|           |                                       | White Pine Power<br>Plant (MI) Boiler<br>2   |  |                            |                                    |
| 9/29/2009 | Indianapolis Power &<br>Light Company | Eagle Valley<br>(formerly H.T.<br>Pritchard) (IN)<br>Unit 3<br>Eagle Valley (IN)<br>Unit 4<br>Eagle Valley (IN)<br>Unit 6<br>Harding Street<br>(formerly Elmer<br>W. Stout) (IN)<br>Unit 5<br>Harding Street (IN)<br>Unit 5<br>Harding Street (IN)<br>Unit 6<br>Harding Street (IN)<br>Unit 7<br>Petersburg<br>Generating<br>Stations (IN) Unit<br>1<br>Petersburg<br>Generating |  |                            |                                    |

| NOV Date   | Company                                 | Units Named<br>(State)  | Consent Decrees<br>Entered before<br>Jan. 2010 | System-Wide<br>Resolution? | Units Covered by the<br>Settlement |
|------------|---|---|--|----------------------------|------------------------------------|
|            |   | Stations (IN) Unit<br>2<br>Petersburg<br>Generating<br>Stations (IN) Unit<br>3<br>Petersburg<br>Generating<br>Stations (IN) Unit<br>4 |  |                            |                                    |
| 11/18/2009 | Dayton Power and<br>Light Company       | O.H. Hutchings<br>Generating<br>Station (OH)<br>Boiler 3<br>O.H. Hutchings<br>Generating<br>Station (OH)<br>Boiler 6                  |  |                            |                                    |
| 11/18/2009 | Wisconsin Public<br>Service Corporation | J.P. Pulliam<br>Generating<br>Station (WI) Unit 8<br>Weston Generating<br>Station (WI) Unit<br>1                                      |  |                            |                                    |

| NOV Date   | Company   | Units Named<br>(State)   | Consent Decrees<br>Entered before<br>Jan. 2010 | System-Wide<br>Resolution? | Units Covered by the<br>Settlement |
|------------|---|--|--|----------------------------|------------------------------------|
|            |   | Weston Generating<br>Station (WI) Unit<br>2<br>Weston Generating<br>Station (WI) Unit<br>3   |  |                            |                                    |
| 12/14/2009 | Wisconsin Power and<br>Light Co.,<br>Alliant Energy Corp.,<br>Madison Gas and<br>Electric Co.,<br>Wisconsin Electric<br>Power Co.,<br>Wisconsin Public<br>Service Corp. | Columbia Energy<br>Center (WI) Unit<br>1<br>Columbia Energy<br>Center (WI) Unit<br>2<br>Edgewater<br>Generating<br>Station (WI) Unit<br>4<br>Edgewater<br>Generating<br>Station (WI) Unit<br>5<br>Nelson Dewey<br>Generating<br>Station (WI) Unit<br>1<br>Nelson Dewey<br>Generating |  |                            |                                    |

| NOV Date | Company | Units Named<br>(State) | Consent Decrees<br>Entered before<br>Jan. 2010 | System-Wide<br>Resolution? | Units Covered by the<br>Settlement |
|----------|---------|------------------------|--|----------------------------|------------------------------------|
|          |         | Station (WI) Unit<br>2 |  |                            |                                    |

## **BEFORE THE PUBLIC SERVICE COMMISSION** OF THE STATE OF MISSOURI

In the Matter of Union Electric Company ) d/b/a Ameren Missouri's Tariffs to Adjust ) Its Revenues for Electric Service )

Case No. ER-2022-0337

**AFFIDAVIT OF KARL R. MOOR** } }ss WASHINGTON, D.C. }

Karl R. Moor, being first duly sworn states:

My name is Karl R. Moor, and on my oath I declare that I am of sound mind and lawful age; that I have prepared the foregoing Surrebuttal Testimony; and further, under the penalty of perjury, that the same is true and correct to the best of my knowledge and belief.

Karl R. Moor

Sworn to me this  $\underline{\mathscr{A}}$  day of March, 2023

Rhonda N McOonald Notary Public

