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Issue(s): High Prairie Witness: Ajay K. Arora
Type of Exhibit: Surrebuttal Testimony
Sponsoring Party: Union Electric Company
File No.: ER-2022-0337

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MISSOURI PUBLIC SERVICE COMMISSION

FILE NO. ER-2022-0337

SURREBUTTAL TESTIMONY

OF

AJAY K. ARORA

ON

BEHALF OF

UNION ELECTRIC COMPANY

d/b/a Ameren Missouri

St. Louis, Missouri March, 2023

SURREBUTTAL TESTIMONY

OF

AJAY K. ARORA

FILE NO. ER-2022-0337

1	Q.	Please state your name and business address.
2	A.	Ajay K. Arora, Union Electric Company d/b/a Ameren Missouri ("Amerer
3	Missouri" or "	Company"), One Ameren Plaza, 1901 Chouteau Avenue, St. Louis, Missouri 63103
4	Q.	Are you the same Ajay K. Arora that filed rebuttal testimony in this
5	proceeding?	
6	A.	Yes, I am.
7	Q.	What is the purpose of your surrebuttal testimony in this proceeding?
8	A.	I am responding to Midwest Energy Consumer Group ("MECG") witness Greg
9	Meyer's Rebu	ttal Testimony regarding the Company's High Prairie Energy Center, which was
10	acquired by	the Company for Renewable Energy Standard ("RES") compliance after the
11	Commission §	granted the Company a certificate of convenience and necessity ("CCN") for the
12	facility in 201	8 in File No. EA-2018-0202 (the "CCN Case").
13	Q.	What does Mr. Meyer propose?
14	A.	While the mechanics of his proposal in this case differ in certain respects from the
15	mechanics of	similar proposals he made in File No. ER-2021-0240, the substance of Mr. Meyer's
16	position is the	same as the substance of his proposal related to High Prairie in the Company's las
17	rate review. T	hat is, he is asking the Commission to use hindsight, by introducing facts unknown
18	to the Compar	ny or any other stakeholder at the time the decision to acquire the High Prairie wind
19	energy center	was made, to deny the Company recovery of legitimate, prudently incurred RES

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1 compliance costs in the absence of any evidence to support a conclusion that the Company has

2 acted imprudently. As I discussed in my rebuttal testimony in response to similar adjustments

advocated for in this case by Staff witness Claire Eubanks, Meyer's position is at war with the

well-established prohibition on judging a utility's decision using hindsight. It is also, in its effect,

based on the discredited "economic" used and useful standard addressed in detail in Company

witness John Reed's Rebuttal Testimony. Company witness Reed also addresses MECG witness

7 Meyer's position in his surrebuttal testimony.

In summary, MECG witness Meyer's proposed adjustments are violative of basic regulatory principles respecting imprudence, or lack of it, and relating to facilities that are used and useful and providing service to customers, which is the case with High Prairie. Each and every point the Company made in its rebuttal testimony that was in rebuttal of Staff's and OPC's positions regarding High Prairie, apply with equal force to MECG's position.

I won't repeat all of the points here, but in the absence of imprudence, it is improper for the Company to bear the consequences of the 6.9 meter/second scenario addressed in my rebuttal testimony having not turned out to be the worst-case.

Q. Even if in hindsight the current economics of the High Prairie facility are less favorable than you thought they would be when you signed the Build Transfer Agreement ("BTA"), has Mr. Meyer presented any evidence whatsoever that the Company acted imprudently when it signed the BTA?

A. No, and neither has any other party.

¹ Company witness John Reed also addressed the regulatory and economic policy concerns with witness Eubank's position in his rebuttal testimony.

1	Q. More specifically, does witness Meyer claim that the Company knew or should
2	have known that use of the minimum cut-in speed of 6.9 meters per second was not the worst-
3	case?
4	A. He makes no such claim. Moreover, when he proposed adjustments relating to High
5	Prairie in File No. ER-2021-0240, when he was testifying for his client then, the Missouri
6	Industrial Energy Consumers ("MIEC"), he confirmed that he was not making any such claim:
7 8 9	Q. I understand. But you're not claiming that Mr. Arora or Ameren back when they signed the BTA should have known then what they do know now, and that is that they were wrong about the 6.9 you're not contending that?
10 11	A. No. I'm only arguing that the basis for justifying the plan has not materialized, significantly not materialized. ²
12 13	Q. Is it your contention that Ameren should have known that use of that 6.9-meter per second cut-in speed would in fact not avoid taking Indiana bats?
14 15	A. Well, that's what Mr. Arora said in his testimony in this case, that the experts at Ameren were wrong, that they couldn't get it. ³
16	Similar to Staff witness Eubanks, the entirety of witness Meyer's position can be summed
17	up as follows: bats were taken; the Company has thus needed to not operate at night during bat season;
18	this has lowered production; the capacity factor of the facility has therefore not been as good as we had
19	hoped; force the Company to bear or "eat" the shortfall. There is, however, no ratemaking or

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regulatory policy that would justify turning utilities into insurers of future outcomes relating to

needed utility infrastructure they add with the Commission's permission, that is, forcing them to

² File No. ER-2021-0240, Deposition of Greg Meyer, Nov. 18, 2021, p. 27, ll. 14-20.

³ *Id.*, p. 27, 11. 3–8.

bear the downside risk that exists with any facility while of course, in a regulated environment, the
 utility has no upside at all.⁴

For example, if power prices shoot up or for that matter stay at high levels for a sustained time period, including in excess of the power prices used to set rates, neither witness Meyer nor anyone else is proposing that the Company keep the difference in higher market revenues. Instead, 100% of that difference in higher market revenues will benefit customers through the RESRAM.⁵ As such, customers receive the entire upside while Ameren Missouri would insure the downside.

Indeed, in 2022 power prices were higher than normal throughout the entire year, including the hours when production was not curtailed, which witness Meyer ignores, and those higher prices created additional benefits that inured to customers. While it is true, as noted by witness Meyer, that \$50.42/MWh is the average locational marginal price ("LMP") for those hours in 2022 that the High Prairie energy center was curtailed, it is also true that the average LMP for the hours that High Prairie was generating and creating benefits that were realized by customers

of all hours in calendar year 2022 when High Prairie was generating was \$50.81/MWh. When these prices are compared to the normalized LMPs in this proceeding – the same LMPs used by

during the months of April – October (the mitigation season) was \$72.19/MWh. The average price

Staff in its High Prairie calculations - it is obvious that the 2022 prices were all significantly higher

than normal, thereby generating high revenues for customers, as shown in the table below.

⁴ In explaining what was essentially the same position he took in File No. ER-2021-0240 (although in this case he has somewhat modified the mechanism by which he seeks to extract an insurance payment from the Company), Meyer admitted that he was *not* contending the Company was to blame for the lower production from the facility. *Id.*, p. 39, ll. 22-25 ("Q. And if that's your position [that due to lower production than the Company's evidence in the CCN case indicated was expected the Company should have to make up the economic consequences of the lower production to customers], then it's your contention that the company is to blame for the lower production from the facility, isn't that right? A. No, it's not.").

⁵ Renewable Energy Standard Rate Adjustment Mechanism.

Table 1

		2022 Actual		Normalized		Difference ⁶	
Hours that High Prairie							
was Generating	Full Calendar Year	\$	50.81	\$	39.29	\$	11.52
	Mitigation Season Only	\$	72.19	\$	51.12	\$	21.07
Curtailed Hours	Mitigation Season Only	\$	50.42	\$	33.06	\$	17.37

These higher prices during the hours of actual generation created incremental market revenues that benefit customers through the operation of the RESRAM and mitigate some of the downside from the need to curtail production during other hours. While I am not certainly suggesting that one can "fix" witness Meyer's distorted calculation by giving the Company this kind of upside as a tradeoff to also make it bear the downside – because the Company should *neither* bear the downside risk *nor* get the upside benefit – this kind of outcome is illustrative of the problem with the kind of arbitrary and one-sided "make customers whole" approaches reflected in witness Meyer's position when the Company prudently built a needed generation facility the entirety of which is, in fact, serving customers every day of the year.

Q. Witness Meyer flat-out claims that customers were "promised" a given level of generation, equating to no less than that produced by a 38.5% net capacity factor over the year? Were any such promises made?

A. Of course not, nor would it even have been possible the Company, or any utility, to promise what a given facility would produce in real time in the future. Meyer points to no evidence in the CCN Case record or to any statement by the Company outside of the record, where the Company ever "promised" or guaranteed any given level of production.

⁶ Upside in power prices customers received via the RESRAM that would be on top of witness Meyer's claimed "promise." Under witness Meyer's approach, if that difference were negative, customers would receive the full "promised" amount plus the Company would be forced to bear the downside.

Q. What was the evidence in the CCN Case regarding projected generation

from the facility?

A. As discussed in more detail in my rebuttal testimony, in the CCN Case, the Company presented different scenarios, based on different assumptions about future conditions at the facility, and provided the back-up for those assumptions in testimony and workpapers provided to all parties. Those scenarios illustrated different possible net present value of revenue requirement results over the facility's assumed 30-year life. However, like all future scenario modeling results, what the actual revenue requirements would be depended on whether the assumptions in each modeled scenario held. As explained in my rebuttal testimony, the Company did believe that the expected worst-case in terms of net capacity factor was a 38.5% net capacity factor, which is the net capacity factor one would have expected if the Company did need to use a minimum cut-in speed of 6.9 meters/second.⁷

Had that turned out to be true, there would have been approximately 1.349 MWhs of energy and a like number of production tax credits ("PTCs") and renewable energy credits ("RECs") produced on average each year. Those were the facts, that was the evidence. Each party had the full ability to evaluate that evidence for themselves, to conduct discovery, and to require a hearing in the case if they chose to do so. For that matter, Meyer's current client, MECG⁸ could have sought to intervene in the case, in which case it would have had such rights.

Every party had access to Schedule AA-R1 to my rebuttal testimony, indicating that the United States Fish and Wildlife Service had also concluded that use of a 6.9 meter per second minimum cut-in speed would be fully protective of endangered bats, giving us every reason to believe that on average the above-noted production level would be achieved. Every party had

⁷ At night, during bat season when the temperature is above a certain level.

⁸ MECG was formed in 2016, two years before the Company filed the CCN Case.

- 1 access to all of the evidence discussed in my rebuttal testimony and there is no indication in the
- 2 record, in the discovery propounded on the Company, or otherwise that suggested the Company
- 3 had any way to know what we now know, that is, that the 6.9 meters per second cut-in speed is not
- 4 fully protective. That turned out not to be true, and the Company never promised otherwise.
- 5 Q. While it is obviously your position that what the actual economic outcomes for
- 6 a facility turn out to be is irrelevant to whether its full revenue requirement is to be included
- 7 in rates,9 given that witness Meyer has gone down this road, are there benefits from the
- 8 facility that are more favorable than one would have assumed at the time the Commission
- 9 approved its CCN?

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A. Yes. The cost to complete High Prairie at the time it was constructed provided a huge ongoing benefit to customers. The general consensus at the time the Commission approved the CCN was that since wind generation was a mature industry the construction cost of new wind generation would remain stable in the future. The Company will need additional wind facilities as we move forward. Based on the Company's recent renewable request for proposal results, the consensus about future wind facility costs remaining stable was also wrong – as indicated in my rebuttal testimony, High Prairie was built at a cost that was substantially less than we would expect to pay for additional wind today or in the future because the cost of new wind generation has gone up. Based on the current estimates for wind generation projects in Missouri, a wind project the size of High Prairie would cost at least **______** or approximately **_____** more than the final completion cost of the High Prairie facility. This means that even with the current circumstances of less production at High Prairie, customers are benefitting significantly from its lower capital costs (return and depreciation). This benefit is completely ignored by witness

⁹ An imputation of phantom revenues effectively would *fail* to include the full revenue requirement in rates.

Meyer's (and Staff witness Eubank's similar) adjustment. Moreover, as discussed in the Company's most recent Preferred Resource Plan and in testimony in File No. EA-2022-0245, the Company expects to have a winter capacity shortfall in the near- to intermediate-term – an expectation that it did not have in 2018. Wind is an especially good energy resource in the winter – Meyer's own Table 1 shows this – and thus the winter capacity shortfall is less than it would have been had High Prairie not been built. Absent the existence of High Prairie in the Company's generation portfolio, additional new future resources would be needed, above and beyond those which are needed based on the current capacity position. That represents another meaningful benefit of High Prairie that is beyond what was expected when High Prairie was approved and acquired, but which is completely ignored by those proposing adjustments in this case. 10

Q. Are there other upsides that customers (but not the Company) could realize from the facility?

A. Yes. Again, the actual economic impacts of the facility will be what they will be, but witness Meyer wants to focus on a single downside risk that he proposes the Company bear while ignoring potential upside benefits that clearly will accrue to customers if and when they occur. In addition to the potential for higher than normal power prices discussed earlier, such benefits could include a longer useful life for the existing turbines (which could operate for 40 years not 30 years), in which case customers would get additional revenues from the facility beyond those assumed when it was first approved. Other benefits could arise from taking advantage of the infrastructure already in place because of the existence of High Prairie (transmission, towers, substation, etc.) to extend the facility's life even more through possible repowering, which again could deliver additional value not assumed when the facility was

¹⁰ Analysis of reliability metrics in the winter, i.e., loss of load expectations ("LOLE") also shows that having this wind on our system improves our reliability metrics.

1 approved. Any of those eventualities may create economic benefits for customers above and

beyond any amounts contemplated at the time of the project approval and acquisition.

Q. Please summarize your position on MECG's proposed disallowance.

A. The parties to the CCN Case specifically agreed that it was in fact prudent for the Company to acquire the facility where it is located, knowing that there was a significant presence of Indiana bats during bat season. Indeed, the Stipulation in the High Prairie CCN Case stated exactly where the facility would be located: "to be constructed in Schuyler and Adair Counties in Missouri." Unfortunately, what everyone believed would avoid taking endangered bats — using a 6.9 meter per second minimum cut-in speed — did not provide full avoidance. We are diligently working and will continue to diligently work to maximize production at High Prairie in the future. There is, however, absolutely no basis to disallow any costs because there is no basis to conclude the decisions we have made were imprudent.

And there is no basis to claim that the facility is not used and useful. All 175 turbines and related infrastructure are in-service and operating 365 days each year. The generation from High Prairie continues to provide significant value to customers through its operations and will continue to do so well into the future likely beyond its planned expected life. Finally, despite its current lower production level that had been assumed when we believed that use of a 6.9 meter per second minimum cut-in speed would allow full avoidance, as it has turned out the facility is more valuable than we thought because to obtain the wind generation it is providing now (including in winter when wind is particularly helpful) would cost significantly more than High Prairie cost when it was built.

¹¹ File No. EA-2018-0202, *Third Stipulation and Agreement*, pp. 2-4.

Surrebuttal Testimony of Ajay K. Arora

- 1 Q. Does this conclude your surrebuttal testimony?
- 2 A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Union Elect d/b/a Ameren Missouri's Ta Its Revenues for Electric Se	riffs to Adjust) Case No. ER-2022-0337							
AFFIDAVIT OF AJAY K. ARORA								
STATE OF MISSOURI)							
CITY OF ST. LOUIS) ss)							
Ajay K. Arora, being first duly sworn states:								
My name is Ajay K. Arora, and on my oath 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.								
	/s/ Ajay K. Arora Ajay K. Arora							

Sworn to me this 13th day of March, 2023.