Exhibit No.: Issue(s): Conditions; Counties' Positions Witness: Ajay K. Arora Type of Exhibit: Surrebuttal Testimony Sponsoring Party: Union Electric Company File No.: EA-2019-0021 Date Testimony Prepared: January 22, 2019

#### MISSOURI PUBLIC SERVICE COMMISSION

#### FILE NO. EA-2019-0021

#### SURREBUTTAL TESTIMONY

#### OF

#### AJAY K. ARORA

#### ON

#### **BEHALF OF**

#### UNION ELECTRIC COMPANY

#### d/b/a AMEREN MISSOURI

#### \*\*\*DENOTES HIGHLY CONFIDENTIAL INFORMATION\*\*\*

St. Louis, Missouri January 2019

### TABLE OF CONTENTS

I.	PURPOSE OF TESTIMONY	1
II.	STAFF TESTIMONY	2
III.	MDC TESTIMONY	5
IV.	THE COUNTIES' TESTIMONY 1	1

### SURREBUTTAL TESTIMONY

#### OF

#### AJAY K. ARORA

#### FILE NO. EA-2019-0021

1	Q.	Please state your name and business address.
2	А.	Ajay K. Arora, Union Electric Company d/b/a Ameren Missouri ("Ameren
3	Missouri" or	'Company"), One Ameren Plaza, 1901 Chouteau Avenue, St. Louis, Missouri
4	63103.	
5	Q.	Are you the same Ajay K. Arora that filed direct testimony in this
6	proceeding?	
7	А.	Yes, I am.
8		I. PURPOSE OF TESTIMONY
9	Q.	What is the purpose of your surrebuttal testimony in this proceeding?
10	А.	My surrebuttal testimony in this proceeding will provide an overview of the
11	surrebuttal te	stimonies filed by other Ameren Missouri witnesses and will addresses issues
12	raised by the	Missouri Public Service Commission Staff ("Staff"), the Missouri Department
13	of Conservat	ion ("MDC"), and Atchison County, DeKalb County, and the Tarkio R-I
14	School Distri	ct (collectively, "the Counties").
15	Q.	What other witnesses are filing surrebuttal testimony on Ameren
16	Missouri's b	ehalf?
17	А.	The following witnesses are filing surrebuttal testimony in addition to my
18	testimony:	

1	1. Ameren Missouri witness Tom Byrne, Sr. Director of Regulatory			
2	Affairs, addresses several policy issues raised by witnesses from MDC, by multiple			
3	witnesses for the Counties, and one of the conditions recommended by Staff; and			
4	2. Ameren Missouri witness Joseph LaMacchia, Lead Tax Specialist,			
5	addresses the property tax calculations presented by the Counties and appropriate			
6	property tax calculations under Missouri law.			
7	II. STAFF TESTIMONY			
8	Q. Does Staff support Ameren Missouri's application for a certificate of			
9	convenience and necessity ("CCN") and request for authority to merge?			
10	A. Yes, Staff's testimony recommends the Missouri Public Service			
11	Commission ("Commission") grant our request for authority to merge and grant the CCN			
12	request with certain conditions.			
13	Q. What are those conditions?			
14	A. The conditions can be found on page 3 of the Rebuttal Testimony of Jamie			
15	S. Myers and in the Staff Report on pages 23 and 24. There are seven conditions listed, the			
16	first five of which Ameren Missouri has already agreed to undertake. A shorthand summary			
17	of them are as follows: <sup>1</sup>			
18 19 20 21 22 23 24 25	<ol> <li>Providing quarterly progress reports,</li> <li>Obtaining the necessary Federal Energy Regulatory Commission approvals,</li> <li>Using an agreed upon depreciation rate/net salvage value,</li> <li>Ensuring the fully grossed-up value of earned Production Tax Credits ("PTCs") are given back to customers through the Company's Renewable Energy Standard Rate Adjustment Mechanism ("RESRAM"), and</li> </ol>			

 $<sup>^{1}</sup>$  The specific Staff-recommended language for each condition is set forth on pages 23-24 of the Staff Report. As discussed below, the Company agrees with the language for Conditions A to E, but disagrees with the appropriateness of Conditions F and G.

- 5. 1 Providing notice to MDC of all U.S. Fish and Wildlife Service 2 ("USFWS") meetings and calls and providing a copy of all 3 documents provided to USFWS. 4 There are two remaining recommended conditions. The first involves placing a cap upon 5 Total Designated Network Upgrade ("TDNU") costs (cost to interconnect to and upgrade 6 the Midcontinent Independent System Operator, Inc. ("MISO") system) of \*\*\* 7 \*\*\*. If the actual costs are estimated by MISO to exceed that amount, Staff wants 8 Ameren Missouri to conduct additional analysis which would be filed for Commission 9 consideration. The second remaining condition is for the Company to agree it will conduct 10 what Staff refers to as a "curtailment sensitivity analysis" with future CCN applications for 11 wind and solar projects interconnected at the transmission level. Q.
- 12

#### What is Ameren Missouri's position on these two additional requests?

13 A. Neither additional condition is appropriate. Starting with the request for a 14 cap to be placed on TDNU costs, the recommended condition is inappropriate for three 15 reasons. First, the MISO Generator Interconnection Process only permits generator 16 interconnection applicants 15 business days following MISO's release of its study results 17 to make a determination to withdraw from the MISO queue or proceed to the next study 18 phase. Further, in the case of this project, if the estimated upgrade costs exceed certain cost 19 thresholds set in the Build-Transfer Agreement ("BTA"), then Ameren Missouri is required 20 to make its election to proceed or withdraw within just eight business days.

21 Second, the MISO study process occurs over three phases in order for applicants to 22 receive estimated transmission study results and elect to proceed or withdraw from the 23 MISO queue. As the number of applicants changes through the three study phases, so do 24 the transmission system constraints and the costs to mitigate the constraints. It is not

1 uncommon for applicants with high interconnection costs to withdraw at the conclusion of 2 a study phase, which can often result in fewer constraints and lower costs to the remaining 3 applicants during the next study phase. This iterative process often results in a reduction in 4 an applicant's estimated upgrade costs, sometimes significantly so, from the first, to the 5 second, or third study phase. Ameren Missouri has anticipated this outcome by including 6 declining thresholds for upgrade costs at the first and second study phase in the BTA. In 7 the case where the first phase were to result in estimated costs of more than \*\*\* 8 \*\*\*, Ameren Missouri may elect to proceed to the second phase in order to receive 9 more accurate study results to make a more educated decision on whether or not to proceed. 10 Alternatively, if under the same hypothetical, Ameren Missouri were to elect to withdraw, 11 EDF may elect to proceed to the subsequent study phase to also seek more accurate results. 12 By requiring Commission approval, this process would not be allowed to take place in a 13 timely manner to meet the BTA and MISO's deadlines.

Third, Ameren Missouri bears the burden to prove the marginal upgrade cost above \*\*\*\_\_\_\_\_\_\*\*\* would be a prudent investment. Consequently, it should be allowed to do so in the time required to meet MISO's schedule requirements and to comply with the BTA so as to not delay project construction, and avoid schedule risk while project execution activities are delayed pending Commission consideration and approval of the additional transmission costs.

In summary, the recommended condition is neither practical nor needed. There is no practical way the Company could conduct an analysis, have the Commission consider it, and get a ruling within the 8/15 business day time constraints imposed by the process. Additionally, the Company must have a CCN (not one that *could* be in effect but then be

1 cancelled later due to a condition) by June 1, 2019, according to the BTA's terms. And in 2 the end, the Company must act prudently. If proceeding with the project, should the 3 incremental cost exceed the above-noted sum not be a prudent decision, then the 4 Commission can and presumably will exercise its authority to protect customers.

5

What is Ameren Missouri's position on the request for it to conduct Q. 6 curtailment sensitivity analyses in all future certificate cases for wind or solar 7 facilities interconnected to transmission?

8 A. The second condition requests that Ameren Missouri be required to 9 provide a "curtailment sensitivity analysis," which is not required by statute or by 10 Commission regulation. The regulations governing CCNs were recently modified and 11 even the new rules do not require this analysis. There may be times when undertaking this 12 analysis is appropriate, but at other times it will not make sense. Determining what 13 analysis is needed for each case it brings before the Commission and the parameters that 14 should be used in such an analysis is the responsibility of Ameren Missouri, as part of its 15 efforts to demonstrate to the Commission that the requested CCN is appropriate.

16

#### III. **MDC TESTIMONY**

17 Q. What is MDC's position on Ameren Missouri's application for a CCN 18 and request for authority to merge?

19 A. MDC's testimony recommends several conditions it desires the 20 Commission to impose, should a CCN be granted in this case. As justification, while 21 MDC's witnesses say they do not oppose wind energy, they point to their investment of 22 public funds in eagle research and conservation in the state.

### 1 Q. Can you please provide your overall perspective on the impact of 2 conservation issues on the project?

3 A. The conservation issues associated with the project are not unlike a myriad 4 of environmental compliance issues that are often faced with any large-scale construction 5 project. This includes other power plants (whether coal- or gas-fired or whether utility- or 6 developer-owned), transmission lines, waste handling facilities, etc. The developers of 7 such projects, including wind generation facilities, have to evaluate and study any potential 8 impact they may have on the environment, including wildlife. From Ameren Missouri's 9 perspective, the important question is how do such projects prudently identify and mitigate 10 those impacts while balancing the need for, as well as the benefits of, the project for our 11 customers. While wind generation facilities can impact wildlife, it should be kept in mind 12 that wind generation facilities bring with them significant environmental benefits 13 compared to more traditional generation sources. EDF-RE US Development, LLC ("EDF-14 RE"), the project developer, has taken and will continue to take seriously the need to 15 properly address conservation issues. And I can assure the Commission that Ameren 16 Missouri will also properly address these issues as it works with EDF-RE from now until 17 project completion and after closing of the transaction. EDF-RE has been substantially 18 engaged with the USFWS since the spring of 2016 and is following the 2012 USFWS 19 Land-Based Wind Energy Guidelines and, as applicable, the 2013 USFWS Eagle 20 Conservation Plan Guidance, as well as the USFWS 2016 Range-Wide Indiana Bat/Northern Long Ear Bat Summer Survey Guidelines.<sup>2</sup> I should note that these guidelines 21 22 not only provide recommendations for site selection and project development, but also

<sup>&</sup>lt;sup>2</sup> Studies do not indicate the presence of any endangered or protected species.

- 1 provide recommendations for facility operation as well. Ameren Missouri will also follow
- 2 these guidelines for the operation of the project after Ameren Missouri owns the project.

3	Q.	What conditions does MDC request the Commission impose?
4	А.	MDC witness Jennifer Campbell requests three conditions:
5 6 7 8 9 10		<ol> <li>Require Ameren Missouri to conduct a traffic count survey at Brickyard Hill Conservation Area and Corning Conservation Area,</li> <li>Require Ameren Missouri to conduct a viewshed study at the same two conservation areas, and</li> <li>Prohibit Ameren Missouri from construction or operating a wind turbine within three miles of any conservation area.</li> </ol>
11		MDC witness Dr. Haslerig requests eight additional conditions:
12 13 14 15 16 17 18 19 20 21 22 23 24 25 26		<ol> <li>Require Ameren Missouri to provide advance notice to MDC of all scheduled meetings and conference calls with USFWS,</li> <li>Prohibit Ameren Missouri from clearing any known active or inactive eagle nest trees,</li> <li>Require Ameren Missouri to conduct post-construction monitoring in accordance with USFWS Guidance,</li> <li>Require a one-mile set-back for turbines from known active and future eagle nests,</li> <li>Report to MDC all eagle carcasses within 48 hours of observation,</li> <li>Annually report to MDC observed mortalities for all raptors and birds of specifies of conservation concern,</li> <li>Provide MDC a copy of all documents and reports provided to USFWS, and</li> <li>Provide the Commissions with an annual report which includes information in conditions 3, 5, 6, and 7 above.</li> </ol>
27	Q.	What is the basis upon which MDC makes these requests?
28	А.	As is pointed out by Ms. Campbell, MDC has a constitutional mandate to
29	conserve fish,	, forest and wildlife in the state of Missouri. It does this in various ways,
30	including sup	porting recreational opportunities, the establishment of conservation areas
31	and research i	nto forestry and wildlife species. MDC is asking the Commission to adopt its
32	proposed conc	litions as part of what MDC calls the Commission's "public interest" analysis.
33	It is my under	estanding that MDC does not have any regulations of its own which impose

any of these requested conditions. Mr. Byrne addresses this matter further in his surrebuttal
 testimony.

# Q. Does Ameren Missouri agree that the suggested conditions are in the public interest?

5 A. We do not. Regarding all three conditions requested by Ms. Campbell, I note that her testimony does not say that Ameren Missouri's proposed wind facility 6 7 negatively impacts MDC's conservation areas, or that it harms Missouri wildlife, or that it 8 interferes with hunting or fishing. Instead, her testimony is that MDC doesn't know if it 9 will negatively impact those conservation areas or the activities that occur there. Then, 10 despite having not provided any real basis for concern, MDC asks Ameren Missouri to 11 undertake studies that no other developer of a wind facility in the state would be required 12 to undertake. Again, it is my understanding that MDC has no regulations that require any 13 of these conditions, but in effect asks the Commission to impose such a "regulation" on 14 Ameren Missouri alone. Using a "public interest" standard, MDC has not set forth a 15 concern that can properly be weighed by the Commission. Would the proposed facility 16 interfere with the public's use and enjoyment of the Conservation Areas? MDC does not 17 know.<sup>3</sup> Will Missourians be able to see any of the wind turbines from one of the Conservation Areas? MDC does not know.<sup>4</sup> And despite not being able to answer those 18 19 (and other) questions with factual information or otherwise showing a need, MDC asks this 20 Commission to impose multiple conditions on the requested CCN. That is not a basis on 21 which the Commission should order any condition. The Commission should deny these 22 requests.

<sup>&</sup>lt;sup>3</sup> Campbell Rebuttal, p. 6, l. 16-18.

<sup>&</sup>lt;sup>4</sup> Campbell Rebuttal, p. 6, l. 19-20.

1 One other fact bears noting. Based upon publicly available Geographic Information 2 System files for state conservation areas and surveyed coordinates for proposed turbine 3 placement, in this particular instance all MDC conservation areas are at least three miles 4 from any proposed turbine location. Consequently, as Mr. Byrne notes, this particular 5 condition is moot in this case. I point this fact out not to say it should ever be a condition 6 imposed by the Commission, but regardless, it is irrelevant to this case.

Q. What about the conditions contained in the testimony of MDC witness
Br. Janet Haslerig?

9 A. Again, Dr. Haslerig proposes eight conditions to be imposed. Generally, it 10 is my belief that Dr. Haslerig has also failed to provide the Commission with a factual basis 11 to enable it to order any of these conditions (aside from the two we have agreed to in our 12 Application). Dr. Haslerig's testimony does not state that this wind facility will endanger 13 eagles. Instead, she simply says she is concerned about the "potentially cumulative effects" 14 of our project along with existing and possible future wind facilities. Her testimony does 15 not indicate what those potential cumulative effects might be, how likely they are to occur, 16 or why Ameren Missouri's proposal is even close to being the tipping point that causes 17 these potential harms. And why should the mere fact that as an investor-owned utility 18 Ameren Missouri must obtain this Commission's approval via CCN impose a different 19 standard – by imposing additional conditions – that other wind developers have not, and 20 will not have to meet – simply because they are not regulated by this Commission? This is 21 not to say that the Company is not concerned about bald eagles. To the contrary, the 22 Company included specific provisions in the BTA to protect the bald eagle. Specifically, 23 the BTA requires EDF to seek an Eagle Take Permit ("ETP") if USFWS indicates one is

recommended for the project. EDF is in mature discussions with the USFWS on an Eagle
 Conservation Plan, which is a key prerequisite to the ETP process.

Two of the proposed conditions, number one (invite MDC to all USFWS meetings/calls) and number seven (provide MDC with copies of all documents/reports shared with USFWS) have already been agreed to by the Company in its initial Application in this case.

Condition number two (not clearing known active/inactive eagle nest trees) would be included in an ETP and does not need to be predetermined by the Commission in this case. One additional data point: surveys of the project area indicate that there are no eagle nests located there. Again, this is not to say that the condition should be adopted, but rather to point out that the condition is unneeded and duplicative of another agency's authority.

12 Condition numbers three (post-construction monitoring), four (one mile set-back 13 from known or even future nest trees), five (report eagle caresses within 48 hours), and six 14 (report observed mortalities for all raptors and birds) are similar in that they will already 15 all be considered, and perhaps required, as part of the ETP process under the USFWS's 16 jurisdiction. The Commission does not have to determine whether or not those conditions 17 are reasonable because experts in the field who are empowered by federal law to make that 18 determination will fulfill that obligation, and MDC will have a seat at that table if it wants 19 one. And remember, the Company has already agreed to provide MDC with copies of all 20 documents and reports provided to USFWS, so MDC will receive all required reporting. 21 With respect to MDC's desire that a condition be imposed that would prevent EDF from 22 building a turbine if in the future an eagle nest arises within one mile, and would even force 23 the Company to shut down an already built turbine if that happened, as earlier discussed,

MDC has no statutory authority, nor does it have a validly-adopted regulation that would impose any such restriction. None of the roughly 1,000 megawatts of wind generation already located in Missouri (another approximately 300 MW is about to go online in Nodaway County) is subject to such an onerous and unreasonable restriction.

5 The last proposed condition, number eight, is to provide the Commission with an 6 annual report which includes the information from condition numbers three, five, six and 7 seven. I am unsure of the point of this condition, as I am told by my attorneys that the 8 Commission would not have authority to modify any CCN conditions after the facility is 9 constructed. These areas are beyond the Commission's general authority and will be 10 monitored by the USFWS, making a state report unnecessary.

11

#### IV. THE COUNTIES' TESTIMONY

Q. The Counties are not supportive of Ameren Missouri's proposal, entirely because of their own financial interests arising from a difference in increase in property taxes a county would receive from an investor-owned utility that owns a new wind facility versus an unregulated wind developer that owns the facility. This testimony goes on to suggest that a Purchased Power Agreement ("PPA") would meet Ameren Missouri's needs. Do you agree?

A. I do not. It is my opinion that the Counties' alternative is not a practical option. The Counties' testimony will also be addressed by other Ameren Missouri witnesses, including Joe LaMacchia (tax calculations) and Tom Byrne (policy implications). I will address the practical implications of the Counties' assertion that Ameren Missouri could just purchase the power. Ameren Missouri bases its decision of how to add renewable generation to its mix by evaluating all options, one of which was by

1	using PPAs. Ultimately, we determined the BTA structure was more advantageous for our		
2	customers than a PPA for a number of reasons, both economic and otherwise. From an		
3	economic perspective, our analysis, based upon an alternative PPA bid price from EDF as		
4	part of the request for proposal process (adjusted to put it on an apples-to-apples basis given		
5	the impact of federal tax reform and other changes that have occurred since that time)		
6	estimates that the levelized cost of energy from our ownership of the facility is \$27.40 per		
7	MWh versus \$28.46 per MWh under a PPA. That cost difference would be borne by our		
8	customers. That said, even if the cost of ownership were higher, there are other advantages		
9	of ownership (through the BTA structure) that led us to enter into the agreement before the		
10	Commission in this case.		
11	Q. What were those advantages of a BTA structure as compared to		
12	acquiring renewable energy certificates needed for Renewable Energy Standard		
12 13	("RES") compliance by buying wind energy under a PPA?		
13	("RES") compliance by buying wind energy under a PPA?		
13 14	<ul><li>("RES") compliance by buying wind energy under a PPA?</li><li>A. The advantages include the following:</li></ul>		
13 14 15	<ul> <li>("RES") compliance by buying wind energy under a PPA?</li> <li>A. The advantages include the following:</li> <li>1. <u>Capturing long-term asset value</u>: Ameren Missouri ownership of</li> </ul>		
13 14 15 16	<ul> <li>("RES") compliance by buying wind energy under a PPA?</li> <li>A. The advantages include the following: <ol> <li><u>Capturing long-term asset value</u>: Ameren Missouri ownership of wind generation through a BTA allows Ameren Missouri to develop a long-term</li> </ol> </li> </ul>		
13 14 15 16 17	<ul> <li>("RES") compliance by buying wind energy under a PPA?</li> <li>A. The advantages include the following: <ol> <li><u>Capturing long-term asset value</u>: Ameren Missouri ownership of wind generation through a BTA allows Ameren Missouri to develop a long-term asset with an expected life of 30 years, and quite possibly more, for the benefit of</li> </ol> </li> </ul>		
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> </ol>	<ul> <li>("RES") compliance by buying wind energy under a PPA?</li> <li>A. The advantages include the following: <ol> <li><u>Capturing long-term asset value</u>: Ameren Missouri ownership of wind generation through a BTA allows Ameren Missouri to develop a long-term asset with an expected life of 30 years, and quite possibly more, for the benefit of Ameren Missouri customers. In the typical 20-year PPA, Ameren Missouri</li> </ol></li></ul>		
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> </ol>	<ul> <li>("RES") compliance by buying wind energy under a PPA?</li> <li>A. The advantages include the following: <ol> <li><u>Capturing long-term asset value</u>: Ameren Missouri ownership of wind generation through a BTA allows Ameren Missouri to develop a long-term asset with an expected life of 30 years, and quite possibly more, for the benefit of Ameren Missouri customers. In the typical 20-year PPA, Ameren Missouri customers would pay a fixed energy price for 20 years but at the end of the PPA's</li> </ol> </li> </ul>		
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> </ol>	<ul> <li>("RES") compliance by buying wind energy under a PPA?</li> <li>A. The advantages include the following: <ol> <li><u>Capturing long-term asset value</u>: Ameren Missouri ownership of wind generation through a BTA allows Ameren Missouri to develop a long-term asset with an expected life of 30 years, and quite possibly more, for the benefit of Ameren Missouri customers. In the typical 20-year PPA, Ameren Missouri customers would pay a fixed energy price for 20 years but at the end of the PPA's term, would have no asset to show for those payments. In order to obtain the full</li> </ol> </li> </ul>		

compensate the wind developer at a higher cost of capital for access to generation
 it has already paid for over a period of 20 years. I address the value of Ameren
 Missouri ownership of the project over the long-term further below.

4 2. Maximizing the value of the PTCs for the benefit of Ameren 5 Missouri's customers: As noted earlier, the PTCs for the project will total 6 approximately \$160 million, all of which will lower RES compliance costs for 7 Ameren Missouri's customers. However, if Ameren Missouri were to buy wind 8 energy under a PPA, it is highly likely that a significant part of the PTC value will 9 be lost to Missourians because of the typical tax-equity financing structure used by 10 wind developers who own and operate wind farms and then sell the power under a 11 PPA. Tax-equity partners typically demand more return on their capital, for 12 providing up-front cash for financing for the project in exchange for the ability to 13 use PTCs and other tax attributes from the project, than the regulated rate of return 14 on its capital invested that is allowed to Ameren Missouri. This higher return 15 demanded by tax-equity partners results in lost PTC value for Ameren Missouri 16 customers which is then reflected in the energy prices (by increasing them) that can 17 be offered under a PPA.

183.<u>Minimizing finance costs</u>: Another important aspect of the benefit19that Ameren Missouri customers obtain from utility ownership through a BTA as20compared to a PPA is that if a PPA were utilized, the counterparty (the developer)21would effectively rely on Ameren Missouri's healthy balance sheet to typically22finance more of the project's costs with debt; i.e., the project would be more highly23leveraged than if Ameren Missouri owned it, which would result in higher interest

rates on that debt than Ameren Missouri incurs on its own debt. In addition, because
of the higher leverage making the project a riskier investment, equity investors
would also demand a higher return on equity, than Ameren Missouri's allowed
return on equity, to finance the project. These higher financing costs manifest
themselves in the energy pricing that would be available under a PPA to the
detriment of Ameren Missouri customers.

4. 7 Retaining the ability to optimize operations and maintenance 8 ("O&M") costs: In a BTA structure with Ameren Missouri owning and operating 9 the project, Ameren Missouri can optimize (i.e., lower or slow the growth in) O&M 10 costs and capture the benefit of that optimization for its customers. If Ameren 11 Missouri were simply purchasing power under a PPA, any O&M savings realized 12 by the developer would benefit the developer instead of Ameren Missouri 13 customers. Any O&M cost savings under Ameren Missouri ownership would 14 provide additional economic value for our customers beyond the cost advantage of 15 ownership versus a PPA noted above.

16 5. Developing expertise in wind generation development: Through a 17 BTA structure, Ameren Missouri can develop valuable expertise in developing, 18 constructing, operating, and maintaining wind farms. This is because, under the 19 BTA, while the developer is literally constructing the project, Ameren Missouri 20 will, through its quality assessment program, have a much greater role in the project 21 and gain valuable expertise through the construction process than it would if 22 Ameren Missouri had simply contracted for project output under a PPA. Over time, 23 as Ameren Missouri's coal plants retire and are replaced with other resources,

including low emitting technologies like wind and solar, these other resources will
become the foundation for supplying power to our customers and we believe it is
important that we have the experience and expertise to own and operate those
facilities. We believe that this experience and expertise will provide a valuable
long-term benefit for Ameren Missouri customers.

6 6. Ensuring Oversight and Access: There are also other 7 considerations, some of them regulatory, that support ownership of wind generating 8 facilities rather than utilizing PPAs to meet Ameren Missouri's renewable energy 9 needs. When power is purchased through a PPA, the Company, and by extension 10 the Commission, has less oversight of and less information about the generating 11 facilities being used to provide power to Ameren Missouri's customers. When the 12 utility owns the facility, it is required to file monthly reports regarding the facility's 13 operation and must also immediately report outages and other operational 14 issues. However, there are no similar reporting requirements for facilities owned 15 and operated by unregulated entities. In addition, the Commission and its Staff can 16 access Company generation facilities today (e.g., for routine tours, to observe when 17 material improvements are made, and other inspections), but there is no assurance 18 of similar access to facilities owned by an unregulated entity.

19

20

Q. Please elaborate on the first advantage outlined above, capturing longterm asset value.

A. As noted earlier, by the end of the term of the typical 20-year PPA, the asset will have effectively been paid for by Ameren Missouri customers through the PPA energy costs. By owning the asset instead, Ameren Missouri can capture for its customers the value

remaining after 20 years either by continuing to operate that depreciated asset out to 30
years, or optionally, by making incremental investments in it through re-powering to more
efficient and higher production wind turbines, at a significantly lower costs than a new
project, for potentially another at least 20 years.

- 5 Q. In regard to the second advantage, does this mean that tax-equity 6 financing of a resource and purchase under a PPA would never be used by Ameren 7 Missouri?
- A. Not necessarily. There may be a number of areas where tax-equity investments would be a helpful tool to utilities and provide value to Ameren Missouri customers, but in instances like PTCs for wind generation, where Ameren Missouri is itself able to use the tax credits and fully pass the value of the credits through to its customers as they are obtained through the RESRAM, customers gain more value by Ameren Missouri ownership of the asset as compared to the reduced value available under a PPA.
- Q. No party except the Counties opposes granting Ameren Missouri's request for a CCN, although certain parties do ask the Commission to impose conditions. Does that fact seem significant to you?
- A. Absolutely. This project is the one in a series of wind generation projects for Ameren Missouri which allow the Company to comply with the Renewable Energy Standard, to provide our customers with renewable energy, and to do so in a manner that is cost-effective. The Company negotiated a BTA which provides a multitude of customer protections, with the aim of ensuring as much of the benefit for customers as possible. This arrangement is the best structure for capturing the entire value of this project and bringing

1 it to the Company's customers. It is in the best interest of our customers for the Commission

- 2 to grant our request for a CCN and for authority to merge.
- 3 Q. DeKalb County filed similar testimony as Atchison. Do you have
  4 anything to add specific to DeKalb County's testimony?

A. I would just add that this project is not in DeKalb County, there are no lines in DeKalb County, and there are no turbines in DeKalb County. Ameren Missouri has not evaluated any wind facility in DeKalb County and it is not currently considering any wind generation in DeKalb County. The project before the Commission in this case is in Atchison County only.

10

#### Q. Do you have any other observations about the Counties' position?

A. Yes I do, based on feedback I heard at the Local Public Hearing in Rock
Port and in light of the analyses reflected in Mr. LaMacchia's testimony.

13 First, it must be remembered that whether Ameren Missouri or some other entity 14 owns this facility, Atchison County will receive *more* property taxes than it does today 15 because today, there are no property taxes from the facility since it does not exist. Second, 16 in my opinion there is a very significant probability that if the Commission denies the CCN 17 and prevents the Company from proceeding with the BTA there will be no project at all. 18 If the BTA proposal dies now for lack of a CCN, EDF would have to start over on the hope 19 that it could find an alternative, but given the timeline to get construction started in order 20 to capture the full PTC value, it will have precious little time to do so (the facility must be 21 in service by the end of 2020 to obtain full PTC value and the timeline is already very tight 22 to get this CCN approved, complete the MISO interconnection process, and to then 23 complete construction in time). It took the Company about a year to negotiate the BTA.

The Counties' position assumes Atchison County will have a new facility to tax if the
 Commission denies the CCN, but that is far from certain.

3 Third, for the reasons given by Mr. Byrne, it seems to me to be poor policy for the 4 Commission to decide whether a given project is necessary or convenient for the public 5 service based upon the parochial interest of a county that may receive less new, incremental 6 property taxes if Ameren Missouri owns the facility than if another entity does because the 7 General Assembly has decided how regulated utilities are to pay their property taxes. In 8 that regard, I would note that legislation has been introduced in the current General 9 Assembly (S.B. 72) which would change the current law, where most of the facility, if 10 owned by Ameren Missouri, will be assessed statewide with the taxes allocated mostly to 11 counties Ameren Missouri serves, to a system where Atchison County would locally assess 12 the facility and receive all of the new property taxes it would generate. As indicated at the 13 Local Public Hearing question and answer session, Ameren Missouri supports that 14 legislation, but if that is how taxation of wind facilities is to occur, that is a decision for the 15 General Assembly in my view. It shouldn't be a consideration for a CCN.

16

Q. Does this conclude your surrebuttal testimony?

17 A. Yes, it does.

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

)

)

)

)

)

In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for Permission and Approval and a Certificate of Convenience and Necessity Authorizing it to Construct a Wind Generation Facility.

File No. EA-2019-0021

#### **AFFIDAVIT OF AJAY K. ARORA**

STATE OF MISSOURI	)
	) ss
CITY OF ST. LOUIS	)

Ajay K. Arora, being first duly sworn on his oath, states:

1. My name is Ajay K. Arora. I work in the City of St. Louis, Missouri, and I am employed by Union Electric Company d/b/a Ameren Missouri as Vice President of Power Operations and Energy Management.

2. Attached hereto and made a part hereof for all purposes is my Surrebuttal Testimony on behalf of Union Electric Company d/b/a Ameren Missouri consisting of 18 pages and Schedule(s) N/A, all of which have been prepared in written form for introduction into evidence in the above-referenced docket.

3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct.

Subscribed and sworn to before me this 1/10th day of Qunuary,

Cathlema-

AJAYK

My commission expires:

March 7, 2021

