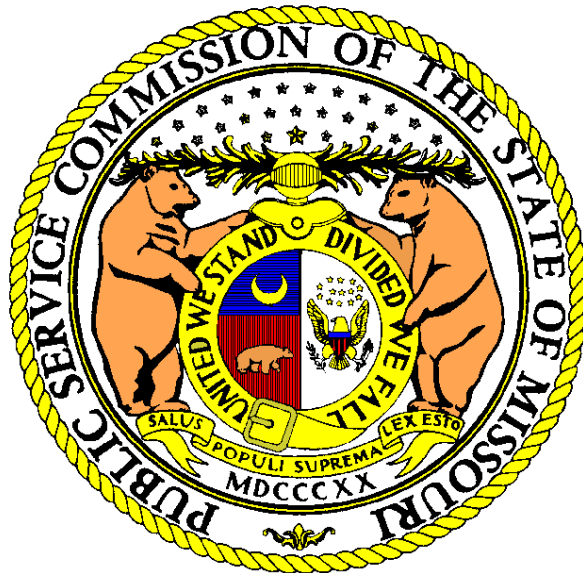


MISSOURI PUBLIC SERVICE COMMISSION

STAFF

REBUTTAL REPORT



**UNION ELECTRIC COMPANY,
d/b/a AMEREN MISSOURI**

CASE NO. EA-2019-0181

*Jefferson City, Missouri
July 15, 2019*

**** Denotes Confidential Information ****

***** Denotes Highly Confidential Information *****

**TABLE OF CONTENTS OF
STAFF REBUTTAL REPORT
UNION ELECTRIC COMPANY,
d/b/a AMEREN MISSOURI
CASE NO. EA-2019-0181**

I.	Executive Summary – Background and Staff Recommendations	1
II.	Application Requirements	4
III.	Five Tartan Criteria.....	9
a.	Whether there is a need for the facilities and service	9
b.	Whether the applicant is qualified to own, operate, control and manage the facilities and provide the service.....	10
c.	Whether the applicant has the financial ability for the undertaking	11
d.	Whether the proposal is economically feasible	12
e.	Public Interest	25
	Appendix A - Recommended Condition Regarded Resource Planning	29
	Appendix 1 - Staff Credentials	29

STAFF REBUTTAL REPORT

CASE NO. EA-2019-0181

I. Executive Summary – Background and Staff Recommendations

On May 15, 2019, Union Electric Company, d/b/a Ameren Missouri (“Ameren Missouri”) filed an Application with the Missouri Public Service Commission (“Commission”) requesting a Certificate of Convenience and Necessity (“CCN”), pursuant to 4 CSR 240-2.060, Section 393.170, RSMo., and 4 CSR 240-20.045, authorizing Ameren Missouri to construct, install, own, operate, maintain, and otherwise control and manage a wind generation facility, which includes generation-tie (“gen-tie”) facilities, to be constructed in Atchison County, Missouri (the “Outlaw Project” or “Project”) pursuant to a Build Transfer Agreement (“BTA”) with Enel Kansas, LLC (“Enel”). Ameren Missouri’s Application includes a request for authority, pursuant to Section 393.190.1, RSMo., and 4 CSR 240-10.115, to merge the special-purpose entity Outlaw Wind Project, LLC, which is a wholly owned subsidiary of Enel, that will complete the construction of the wind generation facility and immediately be acquired by and merged into Ameren Missouri with Ameren Missouri being the surviving entity.

Ameren Missouri stated in its Application that this is the last of three wind generation projects needed by the Company to comply with the Missouri Renewable Energy Standard (“RES”). The Outlaw Project is an approximately 299 megawatt (“MW”) facility and construction is anticipated to commence in October of 2019. The Outlaw Project is expected to connect to regional transmission facilities under the functional control of the Southwest Power Pool, Inc. (“SPP”) with the generating output to be sold into the SPP energy market in Missouri. Ameren Missouri’s Application and direct testimony note the BTA provides an

option for the Outlaw Project to connect to regional transmission facilities under the functional control of the Midcontinent Independent System Operator, Inc. (“MISO”) but state that it is significantly more likely the Outlaw Project will connect to SPP.

Staff reviewed Ameren Missouri’s Application based on the five factors the Commission listed in *In Re Tartan Energy*, GA-94-127, 3 Mo.P.S.C.3d 173, 177 (1994) – need; qualifications to own, operate, control and manage the facilities and provide the service; financial ability; economic feasibility; and promotion of the public interest (“Tartan Criteria”) and submits this Rebuttal Report in response to the Direct Testimony of Ameren Missouri witnesses Ajay Arora and Matt Michels.

Based on Staff’s review, Staff recommends the Commission grant Ameren Missouri a CCN for the Outlaw Project, under the specific terms of the BTA, with the following conditions:

- A. The quarterly progress reports, which Ameren has agreed to submit in Case Nos. EA-2018-0202 and EA-2019-0181, will include an update on project milestones achieved or missed, significant delays or occurrence of force majeure events, updates on cost estimates including but not limited to transmission interconnection costs, construction costs, turbine costs, and overall project cost (\$/kW), in addition to plans and specifications for the project and permit updates;
- B. Ameren Missouri must receive approval from the Federal Energy Regulatory Commission;
- C. The currently ordered depreciation rate of 6.81% and net salvage percentage of -17% shall be used;
- D. Ameren Missouri will provide the full grossed-up value of PTCs to customers through the Renewable Energy Standard Rate Adjustment Mechanism or in rates when earned;

- 1 E. Ameren Missouri will include the Missouri Department of Conservation
2 (MDC) in all scheduled meetings and conference calls with the United States
3 Fish and Wildlife Service (USFWS) as well as provide MDC with a copy of all
4 documents and/or reports related to the Project that are provided to the
5 USFWS;
- 6 F. Ameren Missouri's preferred plan and IRP models will be updated to
7 reflect the effects of the expected generation on the net present value of
8 revenue requirement (NPVRR) and the preferred plan will be adjusted
9 accordingly. A list of factors that Staff recommends the Commission order
10 Ameren Missouri to analyze for its next annual update in 2020 is attached as
11 Appendix A;
- 12 G. Ameren Missouri will analyze the IRP models in accordance with the Staff
13 recommendations attached as Appendix A and provide the results of the
14 analysis to the Commission and Commission Staff in its next IRP annual
15 update;
- 16 H. Transmission Interconnection: Ameren Missouri shall file with the
17 Commission an analysis, prior to a Generation Interconnection Agreement
18 being signed, if the Total Designated Network upgrade costs and
19 costs allocated or assigned from other upgrades or projects, exceed
20 *** _____ *** for a connection to SPP or *** _____ *** for a
21 connection to MISO. Such an analysis should compare the increased Total
22 Designated Network upgrade costs including potential costs allocated or
23 assigned from other upgrades or projects, with the benefits of continuing the
24 project; and,
- 25 I. Ameren Missouri will use the in-service criteria jointly filed by Staff and
26 Ameren Missouri on January 22, 2019 in Case No. EA-2018-0202.¹

¹ In Case No. EA-2018-0202, Ameren Missouri and Staff worked together to create a list of in-service criteria, which was also agreed to in EA-2019-0021. Due to the similarities in the projects, Staff recommends also using the in-service criteria in this case.

Staff also recommends the Commission grant Ameren Missouri's request to merge the special purpose-entity into Ameren Missouri, with Ameren Missouri being the surviving entity. Staff witness Peter Chari confirms in the Financial Ability section that the BTA between Ameren Missouri and Enel reduces Ameren Missouri's financing risk associated with the Project.

Staff Expert: Jamie S. Myers

II. Application Requirements

On April 15, 2019, Ameren Missouri filed its Certificate of Convenience and Necessity ("CCN") Application in Case No. EA-2019-0181. The CCN request was for the Outlaw Project, a 299 MW wind farm to be constructed in Atchison County, Missouri pursuant to a Build Transfer Agreement ("BTA") with Enel Kansas, LLC ("Enel"). A section of the regulations for CCN applications, 4 CSR 240-3.105, was recently rescinded ("Rescinded Rule") and replaced in a 2018 rulemaking with 4 CSR 240-20.045. This rule was challenged in the Missouri Court of Appeals, Western District, which issued an opinion² on June 28, 2019. Ultimately, the Western District vacated the Order of Rulemaking promulgating 4 CSR 240-20.045 ("Vacated Rule").³ As 4 CSR 240-20.045 was in effect at the time of Ameren Missouri filing its Application, Staff used this rule to evaluate the Application. Additionally, a comparison of requirements of the Rescinded Rule and the Vacated Rule may nevertheless be helpful and is contained below.

² *Matter of Amendment of Commission's Rule Regarding Applications for Certificates of Convenience & Necessity v. Missouri Pub. Serv. Comm'n*, No. WD 82182, 2019 WL 2651187, (Mo. App. W.D. June 28, 2019).

³ On the advice of counsel, parties to the appeal case have until Monday, July 15 to file post-disposition motions (i.e., motion for transfer and/or rehearing) and this testimony was prepared before that deadline. Staff counsel may address rule applicability in its brief, if needed.

Requirement	4 CSR 240-3.105	4 CSR 240-20.045
Description of the route of construction	✓	✓
List of utilities and railroads crossed	✓	✓
Plans and specifications for the project and estimated cost of construction	✓	✓
Plans for financing	✓	✓
Evidence of approval of governmental bodies or a statement that none are required	✓	
Facts showing the granting of the application is required by the public convenience and necessity	✓	✓
The option to furnish information at a later date, prior to granting the of the authority sought	✓	✓
The option for Commission to condition approval upon submission of required information at a later date		✓
Description of common plant		✓
Description of how construction relates to preferred plan under 4 CSR 240-22.		✓
Option for the Commission to condition approval as it deems reasonable and necessary		✓
Overview of plans regarding competitive bidding		✓
Overview of plans to restore safe and adequate service after significant unplanned/forced outages		✓
Notice to landowner affected by transmission routes or substation locations		✓

In addition to the requirements for applications found in 4 CSR 240-2.060,⁴ the specific application requirements for granting of a CCN for construction of electrical

⁴ 4 CSR 240-2.060 generally requires the legal name and contact information for the applicant; documentation of the right to do business in the State of Missouri; documentation of registration of fictitious names, if applicable; reference to statutory authority for political subdivisions, if applicable; contact information for correspondence with the Commission if other than applicant's legal counsel; list of association members, if applicable; statement of the character of business performed by each applicant; statement indicating whether there are pending actions or decisions against the applicant within the last three (3) years; a statement that no annual report or assessment fees are overdue; and an affidavit under oath of an authorized person verifying the application.

production facilities, as of the time in which Ameren Missouri's Application was filed, are contained in 4 CSR 240-20.045(6) and are generally described below:

- A description of the proposed route or site of construction;
- A list of utilities and railroads the proposed construction will cross;
- The plans and specifications for the complete construction project and an estimate of the cost of the construction project;
- The projected beginning of construction date and anticipated fully operational and used for service date;
- A description of any common plant;
- Plans for financing;
- A description of how the proposed asset relates to the preferred plan under 4 CSR 240-22;
- An overview of the utilities plan regarding competitive bidding;
- An overview of plans for restoration of safe and adequate service after significant unplanned/forced outages; and,
- Verified certification of compliance with notice requirements to landowners directly affected by proposed transmission line routes or substation locations.

Ameren Missouri included a list of utility crossings inside the project area in Schedule B of its Application. In addition to the list of utility crossings, plans for the project which are part of the of the BTA were included in ***

Ameren Missouri provided in its Application an anticipated start date for construction in October of 2019 and a fully operational date in 2020. A deadline for the fully operational date is set on *** ***, subject to certain exceptions. The estimated total cost of the project is *** *** including transmission interconnection costs to

1 SPP, or *** _____ ***⁵. The estimated cost if the Outlaw Project is connected to
2 MISO is approximately *** _____ ***.⁶

3 Ameren Missouri stated in its Application that there will be no common plant with
4 the Outlaw Project, however, the anticipated connection into the SPP market will be
5 through shared switching/substation facilities that will be co-owned by Outlaw and
6 Rock Creek Wind Project, LLC (“Rock Creek”). The Rock Creek facility is connected via
7 a gen-tie to a 345 kV line owned by Transource Missouri, Inc. (“Transource”) that is under
8 SPP’s functional control.

9 Ameren Missouri discussed its plans for financing the BTA in its Application,
10 specifically, in a manner consistent with its existing capital structure. Staff’s evaluation of
11 Ameren Missouri’s financial plan and its financial ability in this case should not be
12 considered a finding of appropriateness for ratemaking purposes. This is a matter that is
13 evolving and will be considered in the context of Ameren Missouri’s next rate case. Ameren
14 Missouri plans to apply for Commission approval to issue the long-term debt required for the
15 BTA in a future finance case. Further discussion regarding financing is provided in the
16 Financial Ability Section of this Rebuttal Report.

17 Ameren Missouri states in its Application that the Outlaw Project is one of three
18 projects that will be used for RES compliance in the preferred resource plan adopted in the
19 last triennial resource planning filing. The preferred plan from the most recent IRP filing
20 calls for 700 MW of new wind generation. The total generation of the three projects proposed

⁵ Application pages 8-9, paragraph 20.

⁶ Application page 9, footnote 18 also notes that the maximum project capacity would be 244 MW if connected to MISO.

1 by Ameren Missouri in Case Nos. EA-2018-0202, EA-2019-0021, and EA-2019-0181 could
2 be 857 MW, should all projects achieve their stated goals.

3 The Outlaw Project was selected from the December 2015 Request for
4 Proposal (“RFP”) that was also used to find the projects in Case Nos. EA-2019-0021 and
5 EA-2018-0202. Ameren Missouri states that it will maintain competitive bidding by entering
6 into a service and maintenance agreement with the turbine supplier that is compensated based
7 on production and will require the supplier to maintain a minimum level of available turbines
8 qualifying for PTCs. Ameren Missouri will maintain the balance of plant facilities through a
9 competitive bid process and maintain staff on site to monitor and manage site maintenance.⁷

10 Ameren Missouri states in its Application that it will prepare emergency action plans,
11 which will include plans for the restoration of safe and adequate service after significant,
12 unplanned/forced outages, when the project is closer to operating, and has requested a
13 variance of the provisions of 4 CSR 240-20.045(6)(J). Staff does not have an issue with the
14 plans being filed at a later date and does not oppose the request for variance made at the time
15 of filing under 4 CSR 240-20.045(6)(J). However, if Ameren Missouri is able to submit the
16 information prior to the start of construction on the Outlaw Project, no variance from the rule
17 would be necessary.⁸

18 Ameren Missouri states in its Application that the Outlaw Project includes no
19 transmission lines or transmission substations, requiring no affidavit regarding the notice to
20 landowners in 4 CSR 240-20.045(6)(K).

21 *Staff Expert: Cedric E. Cunigan*

⁷ Application page 10, paragraph 25.

⁸ As previously noted above, this testimony was prepared before the deadline on which parties to the appeal in WD82182 have to file post-disposition motions.

III. Five Tartan Criteria

a. Whether there is a need for the facilities and service

The Missouri Renewable Energy Standard (“RES”) was enacted as a voter initiative petition in November 2008. Provisions of the resulting statute and regulations require Ameren Missouri (and the other investor-owned utilities) to meet certain requirements regarding the use of renewable energy while not exceeding the one percent (1%) retail rate impact (“RRI”) limit. Compliance with the RES is met by the retirement of renewable energy certificates (“RECs”) which represent that 1 MWh of electricity was generated with a renewable energy resource. Ameren Missouri operates or has contracted for generation with Keokuk Hydro-electric Generation Station, Horizon Pioneer Prairie II Wind Farm, Maryland Heights Renewable Energy Center, and the O’Fallon Renewable Energy Center. Ameren Missouri also has access to RECs from customer generators who have received solar rebates.⁹

Ameren Missouri needs additional RECs to comply with the RES and has planned to buy RECs for 2019 and 2020 compliance.¹⁰ Matt Michels states in his Direct Testimony that beginning in 2021 Ameren Missouri will need approximately 4.5 million RECs per year to meet RES.¹¹ Ameren Missouri does need additional sources of RECs to comply with the RES beginning in 2019.¹² Staff does note that the anticipated generation of this project, when combined with the anticipated generation of the Brickyard Hills Wind and High Prairie Wind Projects, will exceed the 700 MW of generation that Ameren Missouri expects to need for compliance. Staff recommends that the preferred plan and IRP models be updated to reflect

⁹ RSMo 393.1030.3.

¹⁰ Ameren Missouri Renewable Energy Standard Compliance Plan 2018-2020, EFIS Case No. EO-2018-0287.

¹¹ Page 3, lines 13-16 of the Direct Testimony of Matt Michels, Case No. EA-2019-0181.

¹² The RES portfolio requirements stepped up to 10% in 2018; to comply the Company will exhaust or nearly exhaust its banked RECs. Staff reviewed Figure 1 on page 4 of Matt Michels’ direct testimony, and Ameren Missouri’s 2018 RES Compliance Report and 2019-2020 RES Compliance Plan.

the effects of the expected generation on the net present value of revenue requirement (NPVRR) and adjust the preferred plan accordingly. A list of factors that Staff recommends the Commission order Ameren Missouri to analyze for its next annual update in 2020 is attached as Appendix A.

Staff Expert: Cedric E. Cunigan

b. Whether the applicant is qualified to own, operate, control and manage the facilities and provide the service

The proposed wind facility will be constructed pursuant to the BTA between Ameren Missouri and Enel, which incorporates Ameren Missouri's specifications for the project. Enel is a special purpose entity under Tradewind Energy, Inc. ("Tradewind"), which is owned by Enel Green Power North America, Inc. ("EGP"). Tradewind had developed 13 GW of wind, solar, and storage projects at the time of the purchase. EGP operates on six continents with more than 43 GW of renewables managed, 11 GW coming from wind resources. The Direct Testimony of Ajay Arora also states that ** _____

_____ ** has reached an agreement to acquire 100% of the membership interests in Enel prior to the commencement of construction.¹³ ** _____

_____ ** In his Direct Testimony, Ameren Missouri witness Ajay Arora discusses the expertise that wind developers, such as Enel, Tradewind, and ** _____ ** have in wind development, noting that ** _____ ** leadership team has more than 20 years of experience in energy generation and has completed similar projects under the build transfer structures with other utilities.¹⁴

¹³ Direct Testimony of Ajay Arora page 5, lines 9-14.

¹⁴ Direct Testimony of Ajay Arora page 5, line 18 though page 6, line 2.

Further, Ameren Missouri's contract development team ** _____

**15

Staff does not have concerns with the qualifications of Enel, Tradewind, or
** _____ **, or those entities' experience with operating, maintaining, and developing
renewable resources. Also, there are provisions of the BTA which protect Ameren Missouri
*** _____ ***. Finally, Ameren
Missouri has developed the experience necessary over its long history of operating generation
facilities to operate the wind facility after acquisition.

Staff Expert: Cedric E. Cunigan

c. Whether the applicant has the financial ability for the undertaking

Ameren Missouri's Application indicates that it intends to finance the BTA with a mix
of debt and equity consistent with its current authorized capital structure. Staff reviewed
projected financial statements Ameren Corporation and Ameren Missouri provided to rating
agencies and confirmed Ameren Missouri's projected balance sheets are consistent with its
stated intentions. Specifically, during the year in which the transaction is expected to close
(2020), Ameren Missouri expects to receive ** _____ ** from
Ameren Corporation and directly issue ** _____ ** during the same
year. Ameren Missouri's projected financial statements also indicate that it plans to retain all
of its income in 2020 to help finance its approximate ** _____ ** in capital expenditures,

¹⁵ Confidential Response to Staff Data Request No. 0009 in Case No. EA-2018-0202.

1 which is ** _____ ** higher than Ameren Missouri's annual capital expenditures during
2 the previous two years. The retention of equity as well as the planned equity infusion will
3 also cause Ameren Missouri's capital structure to be rebalanced toward its authorized capital
4 structure. Staff's evaluation of Ameren Missouri's financial plan and its financial ability in
5 this case should not be considered a finding of appropriateness for ratemaking purposes. This
6 is a matter that is evolving and will be considered in the context of Ameren Missouri's next
7 rate case.

8 Due to the nature of the BTA transaction, Enel will incur the construction costs during
9 the development of the Project. This will significantly reduce Ameren Missouri's financing
10 risk associated with the Project.

11 Staff concludes that Ameren Missouri has the financial ability to acquire the Project
12 from Enel under the proposed BTA transaction.

13 *Staff Expert: Peter Chari*

14 **d. Whether the proposal is economically feasible**

15 It is Staff's position that the proposed project is economically feasible for Ameren
16 Missouri.

17 Ameren Missouri includes in its Application several arguments to support the
18 economic feasibility of the Enel Outlaw Wind project:¹⁶

- 19 1. The project is a cost-effective means of meeting a part of the Missouri
20 Renewable Energy Standard ("RES") requirements and could provide long-
21 term benefits to Ameren Missouri customers.
- 22 2. The build transfer agreement ("BTA") structure allows Ameren Missouri to
23 leverage the developer's expertise with wind generation construction and
24 acquire a late-stage wind project in Missouri.

¹⁶ Application of Union Electric Company d/b/a Ameren Missouri for Permission and Approval and a Certificate of Public Convenience and Necessity Authorizing it to Construct a Wind Generation Facility ("Application"), pages 7-8.

- 1 3. The BTA arrangement is the best structure for capturing the entire value of
2 the approximately \$300 million in Production Tax Credits (“PTCs”) the
3 Project will generate and to provide the associated cost savings to Ameren
4 Missouri customers.
- 5 4. Ameren Missouri has included as part of its Application¹⁷ in this CCN
6 proceeding five specific conditions, stemming from intervenor concerns that
7 were addressed through the Stipulation & Agreement(s) in its prior wind
8 CCN cases, File Nos. EA-2018-0202 and EA-2019-0021. Those items
9 specifically addressed and agreed to as part of Ameren Missouri’s
10 Application in this case are:
- 11 A. Ameren Missouri shall file with the Commission quarterly
12 progress reports on the plans, specifications, and permit
13 obtainment.
- 14 B. Ameren Missouri must receive approval from the Federal Energy
15 Regulatory Commission (“FERC”).
- 16 C. The currently ordered depreciation rate of 6.81% and net salvage
17 percentage of -17% shall be used.
- 18 D. Ameren Missouri will provide the full grossed-up value of PTCs
19 to customers through the Renewable Energy Standard Rate
20 Adjustment Mechanism (“RESRAM”) or in rates when earned.
- 21 E. Ameren Missouri will include the Missouri Department of
22 Conservation (“MDC”) in all scheduled meetings/conference calls
23 with the United States Fish and Wildlife Service (“USFWS”) as
24 well as provide MDC a copy of all documents and/or reports
25 related to the Project that are provided to the USFWS.

26 **BACKGROUND**

27 In December 2015, Ameren Missouri issued a request for proposal (“RFP”) to wind
28 project developers to determine if wind projects were the most economically feasible method
29 of meeting the RES requirements, as discussed previously in this Report.¹⁸ Based upon the

¹⁷ Application, pages 12-14.

¹⁸ ***

1 results of the RFP, Ameren Missouri determined that wind resources are the lowest cost
2 source of renewable energy available at this time to meet RES requirements. ** _____

3 _____
4 _____¹⁹ ** Through analysis and cost/revenue modeling Ameren
5 Missouri concluded that ownership of a wind farm is the most cost effective means to meet
6 future RES requirements under most modeled scenarios and that a BTA is the most
7 appropriate method to accomplish that ownership transaction.

8 Ameren Missouri received thirteen solicited as well as additional unsolicited offers or
9 “bids” from seven wind developers and narrowed down the list of potential project candidates
10 to six. While the initial price range for the short listed BTA wind projects was in the range of
11 *** _____ ***, declines in wind turbine pricing along with Ameren
12 Missouri’s continued negotiations with developers allowed it to contract for the current price
13 of *** _____ ***, *** _____

14 _____
15 _____
16 *continued on next page*

¹⁹ **

**

1

_____	_____	_____	_____
_____ _____ _____ _____	_____	_____	_____
_____ _____ _____ _____ _____	_____	_____	_____
_____ _____ _____	_____	_____	_____
_____ _____ _____ _____	_____ _____	_____ _____	_____ _____
_____	_____	_____	_____

2

3

4

20

5

21***

6

7

Staff is concerned that connecting this project into SPP could affect the long term net present value of revenue requirement (“NPVRR”). ***

8

20 ***

21 ***

*** Arora, Direct Testimony, 13:1-17.

*** causes
an increase in costs to ratepayers, it could lead to Staff recommending an adjustment in future rate cases as discussed further below in the Transmission Interconnection section of this Report from Staff witness Shawn E. Lange.

PRODUCTION TAX CREDITS

Overall, the primary reasons that the wind project is economically feasible for Ameren Missouri are due to the recent decline in costs of construction materials as well as availability of the production tax credit. For wind projects under construction as of December 31, 2016, and placed in service by 2020, the PTC provides tax credits of \$25 per MWh,²² with annual adjustments for inflation, generated for the first ten (10) years of operation of eligible wind projects. The tax credit is phased down for wind facilities and expires for other technologies commencing construction after December 31, 2016. The phase-down for wind facilities is described as a percentage reduction in the tax credit amount described above:

- For wind facilities commencing construction in 2017 and placed in service before December 31, 2021, the PTC amount is reduced by 20%.
- For wind facilities commencing construction in 2018 and placed in service before December 31, 2022, the PTC amount is reduced by 40%.
- For wind facilities commencing construction in 2019 and placed in service before December 31, 2023, the PTC amount is reduced by 60%.

In order for Ameren Missouri to receive full PTC benefits, an eligible project must have “commenced construction” prior to January 1, 2017. The Internal Revenue Service has issued guidance on how it evaluates whether construction has commenced using two methods:

²² The current inflation adjusted PTC amount for 2019 is \$25 per MWh per Federal Register / Vol. 84., No. 109 / Thursday, June 6, 2019 / Notices.

1 a “physical work” test and a 5% “safe harbor” test. The physical work test may establish the
2 beginning of construction by beginning “physical work of a significant nature.” The physical
3 work test is based on the nature of the work performed rather than the cost of the work.
4 The 5% safe harbor test with respect to a facility is demonstrated by showing that 5% or more
5 of the total cost of the facility was paid or incurred by the applicable date. Meeting the
6 criteria of either method is sufficient to demonstrate that construction has commenced and
7 that the project can qualify for PTCs depending on the time frame this qualification is met.²³

8 ***
9
10
11
12

13 ***
14

15 As previously discussed, wind projects must be in service by year end 2020 to receive
16 full PTC benefits. In this regard, as stated in its Application, Ameren Missouri has specifically
17 already agreed to:

18 ...provide the full grossed-up value of PTCs to customers
19 through the Renewable Energy Standard Rate Adjustment
20 Mechanism or in rates when earned (subject to normal billing
21 lags), without any reduction and without a return on any
22 deferred tax assets, regardless of Ameren Missouri’s tax
23 position (the “PTC Guarantee”). Notwithstanding the foregoing,
24 this PTC Guarantee will not apply to the extent a change in law
25 or a force majeure event results in a tax position for Ameren
26 Missouri that prevents Ameren Missouri from utilizing the
27 PTCs in the year earned. If the PTC Guarantee did not apply in
28 a given year because of the immediately preceding sentence, the
Company will provide to customers the grossed-up value of the

²³ <https://www.irs.gov/pub/irs-drop/n-17-04.pdf>.

PTCs that are earned in that year when and to the extent that those PTCs are actually utilized to reduce the Company's tax liability. For purposes of this agreement, a "force majeure event" is defined as an act of God such as an earthquake, tornado, or severe flood, or a war or act of terrorism.

CONSUMER PROTECTIONS

The BTA allows Ameren Missouri to reject the agreement if the project does not meet several criteria such as a *** _____ ***, loss of the PTCs, or SPP/MISO transmission study fees being above an acceptable level. Ameren Missouri has yet to receive the results of the regional transmission operator ("RTO") interconnection agreement study; nor has it received approval of the project by the FERC at this time. The third phase of the interconnection agreement study is set to be complete by late 2019 and Ameren Missouri plans to receive FERC approval no later than October 31, 2019.

Similar to the PTCs, Ameren Missouri has already agreed as part of its Application that "Ameren Missouri must receive approval from the Federal Energy Regulatory Commission pursuant to Section 203 of the Federal Power Act."

Staff has requested verification of the transmission interconnection agreement as well as FERC approval once completed/achieved.

AMEREN MISSOURI'S FINANCIAL CAPABILITY

In the past, Ameren Missouri has completed projects of a similar size and scope, such as the environmental scrubbers that were placed in service at the Sioux generating facility. The Sioux scrubber project cost approximately \$574.1 million and this investment was included in permanent rates by the Commission as part Case No. ER-2011-0028. Similarly, in the past Ameren Missouri has demonstrated the ability to place into service several

1 complex capital improvement projects that exceed the total cost of the proposed wind project
2 that is the subject of this case. Between January 1, 2002, and December 31, 2006, Ameren
3 Missouri completed approximately \$2.7 billion of capital improvements that were placed into
4 permanent rates by the Commission in Case No. ER-2007-0002. Additionally, in the past
5 Ameren Missouri has successfully placed over \$1 billion of capital investment into service
6 within a single calendar year and subsequently received recovery of those costs in rate cases.²⁴
7 Most recently, Ameren Missouri completed approximately \$1.6 billion of capital investment
8 between the December 31, 2014, true-up cutoff in Case No. ER-2014-0258 and the
9 December 31, 2016, true-up cutoff in Case No. ER-2016-0179. Ameren Missouri has the
10 ability to own, operate, control, and maintain the proposed wind facility throughout the
11 facility's expected service life.²⁵ Additionally, Staff will have the opportunity to fully review
12 and evaluate the prudence of all project costs in a future Ameren Missouri rate proceeding
13 prior to inclusion in base rates.

14 Senate Bill 564 was signed into law on June 1, 2018. Ameren Missouri has indicated
15 in its response to Staff Data Request No. 0034 that it intends to use for accounting and
16 ratemaking purposes both the plant-in-service accounting ("PISA") mechanism allowed under
17 SB 564 and the RESRAM allowed for Missouri RES compliance costs. Under PISA, Ameren
18 Missouri is allowed to defer the return and depreciation expense associated with 85% of the
19 new wind plant investment amount. Under Ameren Missouri's recommended approach, the
20 remaining 15% of the new wind investment would then be included in the RESRAM, a
21 single-issue rate mechanism. Staff's understanding is that it is possible that some portion of

²⁴ In calendar years 2010 and 2014 Ameren Missouri placed approximately \$1.2 billion and \$1.1 billion of capital investment into service.

²⁵ Ameren Missouri was recently granted a CCN by the Commission for an approximately 400 MW wind farm in Case No. EA-2018-0202 and an approximately 157 MW wind farm in Case No. EA-2019-0021.

1 the remaining 15% of wind investment amounts not eligible for PISA may not be necessary
2 for RES compliance purposes. If this occurs, Staff will make a recommendation in the next
3 general rate case as to appropriate rate treatment on wind investment costs not required for
4 RES compliance purposes or qualifying for PISA treatment.

5 Ameren Missouri has provided documentation of its extensive negotiations as well as
6 cost modeling and other analysis to Staff that indicates that for economic feasibility purposes
7 it has sufficiently evaluated the necessary capital costs, ongoing operating costs and various
8 available project financing options associated with the proposed project. Ameren Missouri
9 has specifically chosen and negotiated the BTA to have the wind project built to its
10 specifications, to receive the desired level of generation, and for the project to be completed
11 on the desired/required timeline. Ameren Missouri has specifically included consumer
12 protections to minimize the financial risk of any cost overruns associated with the wind
13 project. Staff has reviewed all responses to the RFP, Ameren Missouri's analysis of those
14 responses, as well as all revenue and cost modeling associated with the project, and has
15 determined that the wind project is economically feasible.

16 *Staff Experts: Amanda C. McMellen and Caroline Newkirk*

17 **TRANSMISSION INTERCONNECTION**

18 **SPP**

19 The Outlaw Project is an approximately 299-megawatt ("MW") facility.²⁶
20 If connected to SPP, interconnection would take place on the Transource Sibley-Nebraska
21 City 345 kV transmission line. SPP published an initial draft Interconnection Facilities Study
22 as of June 2019. That study indicated the Outlaw Wind Project, GEN-2016-115, would be

²⁶ EA-2019-0181 CCN Application page 4.

1 responsible for SPP interconnection costs of \$2,058,353.²⁷ All of the interconnection costs
2 were due to the study assumption that the Outlaw project would have its own gen-tie line that
3 would connect directly to the Holt County Substation. Ameren Missouri has indicated the
4 Outlaw project will likely interconnect into SPP via Enel's Rock Creek gen-tie line that is in
5 operation. Thus these SPP interconnection costs should be less than the interconnection costs
6 outlined in the June 2019 SPP Interconnection Facilities Study. In June 2019, MISO
7 published the Affected System Study for the group of projects in SPP DISIS-2016-002,
8 of which GEN-2016-115 is included. That study indicated the Outlaw Wind Project,
9 GEN-2016-115, would be responsible for MISO interconnection costs of \$16,301,230.²⁸

10 **MISO**

11 If the Project is connected to the transmission system under MISO's functional
12 control, the Project will have an assumed installed capacity of 244 MW.²⁹ Interconnection
13 would take place on or near the MidAmerican Cooper-Atchison 345 kV line. MISO published
14 the MISO DPP 2016 August West Area Phase 2 Study on December 19, 2018. That study³⁰
15 indicated the Outlaw Wind Project, project J476, would be responsible for MISO
16 interconnection costs of \$14,271,143.³¹

17 Ameren Missouri stated, "it is significantly more likely that the Outlaw Project will
18 connect to SPP."³² According to Ameren Missouri, "connecting to the SPP transmission line
19 provides greater schedule certainty to complete the project by 2020 because it is likely that the

²⁷ http://opsportal.spp.org/documents/studies/files/2016_Generation_Studies/GEN-2016-115-IFS-2016-002-24_IFS-Summary_R0-DRAFT.pdf.

²⁸ http://opsportal.spp.org/documents/studies/files/2016_Generation_Studies/REP522_MISO%20AFS%20SPP-DISIS-2016-002_rev2%20-%20Public.pdf.

²⁹ Ajay Arora Direct page 13 footnote 12.

³⁰ https://cdn.misoenergy.org/GI_DPP_2016_AUG_West%20Phase2_SIS_Public_Final305049.pdf.

³¹ Because of the close proximity of SPP and MISO transmission facilities, SPP may require additional upgrades not accounted for in this cost estimate.

³² Ameren Missouri Application for CCN EA-2019-0181 page 7.

1 connection to the Transource line will be via a gen-tie line that originally was part of the gen-
2 tie line for another project that has already been developed by Enel and has been operational
3 for over 18 months, the Rock Creek project.”³³

4 **Concerns**

5 “If connected to SPP, Ameren Missouri does not intend to pseudo-tie the generator
6 into MISO, nor does it intend to schedule the energy from the generator into MISO by any
7 other means.”³⁴ Thus the Outlaw project, in many ways, would act as an Independent Power
8 Producer in SPP. The facility would be bid into SPP for meeting SPP load. The owner of the
9 proposed generating facility would receive payments for power from SPP as well as
10 renewable energy credits and production tax credits. Without using a pseudo-tie or using any
11 other market mechanism to schedule either the energy or capacity into MISO, the energy or
12 the accredited capacity could not be utilized by Ameren Missouri in the MISO marketplace.

13 The Fall 2017³⁵ SPP Independent Market Monitor quarterly report showed concern for
14 the increase in number of and value of negative market prices. The amount of and level of
15 negative market prices in 2018 was noticeably down, due in part to network/reliability
16 upgrades in certain areas and higher loads due in part to abnormal weather in certain areas.
17 As of 2019,³⁶ SPP had 50,407 MW of additional wind capacity in the Generation
18 Interconnection queue under study. It is currently unclear how much of the 50,407 MW will
19 ultimately get constructed or how much it may impact the market.³⁷ In 2018, the SPP total

³³ Ajay Arora Direct page 23, lines 8-12.

³⁴ Company Response to Staff Data Request No. 0039.

³⁵ https://www.spp.org/documents/56353/spp_mmu_quarterly_fall_2017_v2.pdf.

³⁶ <https://www.spp.org/documents/31587/intro%20to%20spp.pdf>.

³⁷ ***

1 wholesale market cost averaged around \$28/MWh, an increase of 15 percent from 2017.³⁸
2 In comparison, for 2018, MISO's all in price averaged \$32.57, an increase of 4 percent from
3 2017.³⁹ Given the date of Ameren's study, Staff is concerned that an updated study may
4 reveal different results if the most recent market conditions and interconnection costs in each
5 market are explicitly reflected in the modeling.

6 Finally, as with many other wind projects, the date in which all studies are completed
7 and a generation interconnection agreement is finalized and signed by the RTO and the entity
8 owning the generation is a large concern in obtaining the full Production Tax Credits (PTC).
9 While Ameren Missouri stated "... Enel has secured a spot in the SPP queue that will allow
10 transmission agreements to be put in place in time to meet the 2020 in-service deadline."⁴⁰
11 It is still possible that something less than 299 MWs in SPP or something less than 244 MWs
12 in MISO will ultimately be constructed. Without completed MISO and SPP interconnection
13 studies, it is impossible to definitively determine how much interconnection cost will
14 ultimately be incurred by this project.

15 The primary selection criteria of a preferred plan under 4 CSR 20-22 is to minimize
16 the net present value of revenue requirement. If the project is unable to be used as generation
17 capacity to meet MISO resource adequacy requirements in the future, Staff is concerned that
18 connecting this project into SPP could affect the long term NPVRR. *** _____
19 _____ *** causes
20 an increase in costs to rate payers, it could lead to Staff recommending an adjustment in future
21 rate cases. Such an increase in costs could be caused by reduced revenue, increased need for

³⁸ <https://www.spp.org/documents/59861/2018%20annual%20state%20of%20the%20market%20report.pdf>.

³⁹ https://www.potomaceconomics.com/wp-content/uploads/2019/06/2018-MISO-SOM_Report_Final2.pdf.

⁴⁰ Ajay Arora Direct page 10, lines 3-4.

1 investment in supply-side resources, demand-side resources, or an inability to economically
2 retire base load coal units early. For these reasons, among others, Staff recommends that the
3 Commission require Ameren Missouri to conduct the modeling analysis discussed in
4 Appendix A and provide the results to the Commission and Commission Staff in the next
5 integrated resource planning annual update.

6 Without completed MISO and SPP interconnection studies, it is impossible to
7 definitively determine how much interconnection cost will ultimately be incurred by this
8 project. For the SPP interconnection, SPP has published an initial draft of the Interconnection
9 Facilities Studies and MISO has published an Affected System Impact Study. For the MISO
10 interconnection, MISO has published the DPP 2016 August West Area Phase 2 study,
11 however Staff is unaware of a published SPP study of the impacts of the MISO interconnected
12 Outlaw project. Staff recommends that the Commission require Ameren Missouri file the final
13 interconnection studies from SPP and MISO for the desired project point of interconnection.⁴¹

14 Staff recommends that if the Total Designated Network upgrade costs and costs allocated or
15 assigned from other upgrades or projects exceed *** _____ ^{42***} for a SPP interconnection
16 or exceed *** _____ ^{43***} for a MISO interconnection, that Ameren Missouri file in
17 this docket an analysis supporting the decision to proceed no later than 10 days after signing a
18 Generator Interconnection Agreement.

19 *Staff Expert: Shawn E. Lange*

⁴¹ Given the proximity to the seam, if the interconnection is with MISO it is likely that there will be costs with both MISO and SPP; and if the interconnection is with SPP it is likely that there will be costs with both SPP and MISO.

⁴²Ajay Arora Highly Confidential Schedule AKA-D1 page 3.

⁴³Ajay Arora Highly Confidential Schedule AKA-D1 page 3.

Curtailment/Dispatch Down

It is important to address that the addition of 299 MW (SPP) or 244 MW (MISO) in an area that has existing wind may contribute to curtailment or dispatching down of the additional generation facility as well as the other generation facilities that have similar generation characteristics or that may be generating at the same time. Factors such as regional transmission capacity, regional generation mix, load magnitude and shape, among others, play significant roles in determining the amount of generation curtailed or dispatched down. Two factors that may affect the amount of generation curtailed or dispatched down would be the amount of generation in MISO and SPP, as well as the effects of generation in the MISO and SPP seams that would directly affect generation coordination between the two RTOs.⁴⁴ The amount of curtailment would impact the market revenues received as well as the amount of production tax credits (PTCs) and Renewable Energy Credits.⁴⁵

Staff Expert: Shawn E. Lange

e. Public Interest

Ameren Missouri has provided documentation of its evaluation of RFP responses, including unsolicited bids, and extensive negotiations which resulted in the BTA; further, Ameren Missouri has specifically chosen and negotiated the BTA to have the wind project built to its specifications, for the desired level of generation, and completion of the project on its desired timeline. Ameren Missouri has specifically included consumer protections to minimize the financial risk of any cost overruns associated with the wind project. However,

⁴⁴ If generation is concentrated in an area that does not have significant load in the hours that the variable intermittent generation is at max or near max generation, absent transmission capacity to fully export that generation, congestion may result in that area that would lead to the transmission operator taking actions to preserve the operational safety of the transmission system. One such option is curtailing the amount of variable intermittent generation accepted from an otherwise available resource.

⁴⁵ Under Ameren Missouri witness Mr. Michels' economic evaluation of curtailment as it pertains to the RES RRI calculation, the project will not exceed the 1% RES cap in the studied scenarios.

as noted in Ajay Arora's Direct Testimony, all projects of this magnitude carry risks.

The main risks for the Outlaw project outlined by Ameren Missouri are:

- Transmission system interconnection;
- Land control;
- PTC value qualification; and
- Construction and PTC Value Retention⁴⁶

Transmission System Interconnection

Transmission system interconnection risks are discussed in the Transmission Interconnection Section.

Land Control

Ameren Missouri considered land control in its RFP selection process. Enel has already acquired 100% of the land rights needed for wind turbine locations, but has not acquired all of the land rights required for the gen-tie line. Assuming that the project connects to SPP, Enel expects to obtain the remaining land rights by September 30, 2019.⁴⁷

PTC value qualification

The risks and minimization of risks associated with PTC value qualification are discussed in the Economic Feasibility Section.

Construction and PTC value retention

As discussed in the Economic Feasibility section, one of the primary reasons the wind project is economically feasible is the availability of the production tax credit. To retain 100% value of the PTCs wind projects must be placed in-service, for IRS purposes, by the end of

⁴⁶ Direct Testimony of Ajay Arora page 21, lines 11-19.

⁴⁷ Direct Testimony of Ajay Arora page 10, lines 1-3.

2020. Ajay Arora notes in his Direct Testimony that the Project schedule is tight.⁴⁸ Ameren Missouri has mitigated the risk of schedule delay by having a minimum turbine completion written into the BTA. ***

Because the public interest assessment involves essentially a reconsideration of the other Tartan Criteria of need for the Project, its economic feasibility, Ameren Missouri's qualifications and financial ability to construct the Project, Staff's assessment concludes that the Project under the specific terms of the BTA, with the conditions Ameren Missouri has already agreed to and Staff's recommended conditions, promotes the public interest.

Therefore, Staff recommends the Commission grant Ameren Missouri a CCN for the Outlaw Project, under the specific terms of the BTA, with the following conditions:

- A. The quarterly progress reports, which Ameren has agreed to submit in Case Nos. EA-2018-0202 and EA-2019-0181, will include an update on project milestones achieved or missed, significant delays or occurrence of force majeure events, updates on cost estimates including but not limited to transmission interconnection costs, construction costs, turbine costs, and overall project cost (\$/kW), in addition to plans and specifications for the project and permit updates;
- B. FERC Approval: Ameren Missouri must receive approval from the Federal Energy Regulatory Commission pursuant to Section 203 of the Federal Power Act;
- C. Depreciation: Until such time as a different depreciation rate is approved by the Commission for wind facility investments recorded to FERC Account 344,

⁴⁸ Direct Testimony of Ajay Arora page 16, lines 6-10.

1 the currently-approved depreciation rate of 6.81% shall be used. Until such
2 time as a different net salvage percentage is approved by the Commission, a
3 net salvage percentage of -17% shall be used and tracked on the Company's
4 books. Prior to the in-service date for the Project, Ameren Missouri will
5 provide a depreciation study potentially proposing a new depreciation rate for
6 the wind facility investments recorded to FERC Account 344;

7 D. Production Tax Credits: Ameren Missouri will provide the full grossed-up
8 value of PTCs to customers through the Renewable Energy Standard Rate
9 Adjustment Mechanism or in rates when earned (subject to normal billing
10 lags), without any reduction and without a return on any deferred tax assets,
11 regardless of Ameren Missouri's tax position (the "PTC Guarantee").
12 Notwithstanding the foregoing, this PTC Guarantee will not apply to the extent
13 a change in law or a force majeure event results in a tax position for Ameren
14 Missouri that prevents Ameren Missouri from utilizing the PTCs in the year
15 earned. If the PTC Guarantee did not apply in a given year because of the
16 immediately preceding sentence, the Company will provide to customers the
17 grossed-up value of the PTCs that are earned in that year when and to the
18 extent that those PTCs are actually utilized to reduce the Company's tax
19 liability. For purposes of this agreement, a "force majeure event" is defined as
20 an act of God such as an earthquake, tornado, or severe flood, or a war or act
21 of terrorism;

22 E. Wildlife: Ameren Missouri will provide reasonable advanced notice to the
23 Missouri Department of Conservation ("MDC") of all scheduled meetings and
24 conference calls (related to the Project), if any, with the United States Fish and
25 Wildlife Service ("USFWS"). Ameren Missouri will provide MDC a copy of
26 all documents and/or reports related to the Project, if any, that it provides to the
27 USFWS at the same time as they are provided to the USFWS;

28 F. Ameren Missouri's preferred plan and IRP models will be updated to reflect
29 the effects of the expected generation on the net present value of revenue
30 requirement (NPVRR) and the preferred plan will be adjusted accordingly.

A list of factors that Staff recommends the Commission order Ameren Missouri to analyze for its next annual update in 2020 is attached as Appendix A;

G. Ameren Missouri will analyze the IRP models in accordance with the Staff recommendations attached as Appendix A and provide the results of the analysis to the Commission and Commission Staff in its next IRP annual update;

H. Transmission Interconnection: Ameren Missouri shall file with the Commission an analysis, prior to a Generation Interconnection Agreement being signed, if the Total Designated Network upgrade costs and costs allocated or assigned from other upgrades or projects, exceed *** _____ *** for a connection to SPP or *** _____ *** for a connection to MISO. Such an analysis should compare the increased Total Designated Network upgrade costs including potential costs allocated or assigned from other upgrades or projects, with the benefits of continuing the project; and

I. Ameren Missouri will use the in-service criteria jointly filed by Staff and Ameren Missouri on January 22, 2019 in Case No. EA-2018-0202.⁴⁹

Staff Expert: Cedric E. Cunigan

Appendix A - Recommended Condition Regarded Resource Planning

Appendix 1 - Staff Credentials

⁴⁹ In Case No. EA-2018-0202, Ameren Missouri and Staff worked together to create a list of in-service criteria, which was also agreed to in EA-2019-0021. Due to the similarities in the projects, Staff recommends also using the in-service criteria in this case.

Appendix A: Recommended Condition Regarded Resource Planning

Due to changing market conditions and other variables that are inherent to the construction industry, assumptions made when forming the Integrated Resource Plan (“IRP”) may no longer be valid. Staff recommends that the Commission order Ameren Missouri to conduct modeling analysis with the variables listed below as uncertain factors working with Commission Staff to develop appropriate Alternative Resource Plans and update IRP models and any other models used to determine economic feasibility as necessary, or provide an explanation of why no update is needed. Staff also recommends that the Commission order Ameren Missouri to update the preferred plan in its IRP annual update accordingly.

1. PTC Value – significant construction delays may lead to a situation where Ameren Missouri cannot acquire the needed MWs for compliance by the Dec. 31, 2020 deadline. PTC values for resources may decline to 80% or lower depending on actual construction and in-service dates.
2. PTC production – consider the difference in wind production and the resulting value derived from PTCs produced dependent on location (NW MO, Eastern KS, Western KS).
3. Interconnection/Transmission Costs – changes in the RTO queue or study results can cause increases to project costs, making some projects less feasible. Ameren should consider the possibility of variation depending on the RTO to which the Outlaw Wind Project connects.
4. Ameren Missouri should consider scenarios in which the wind assets will be utilized to meet future resource adequacy requirements of MISO and scenarios in which the wind assets only sell energy into the respective market to which the wind assets are interconnected. Ameren Missouri should quantify the effects of supply-side or demand side deferrals of each scenario.
5. Hourly Pricing – Ameren Missouri should consider the forecasted hourly prices during expected generation of wind assets for each RTO to which the potential wind projects may connect.
6. Probability of negative hourly pricing - Ameren Missouri should consider the probability of negative hourly pricing during probable high generation time periods depending on the RTO to which the potential wind projects connect.
7. Location – Missouri projects offer the 1.25 Renewable Energy Credit (“REC”) multiplier, but may provide less overall generation. Ameren Missouri should consider the necessary investment for both total MW and total project cost depending on the location of all potential wind assets.
8. REC Output – Ameren Missouri has stated the wind projects are for Renewable Energy Standard (“RES”) Compliance. Ameren Missouri should consider how the factors above affect the anticipated amount of RECs generated, and whether new resources will be needed to meet RES requirements.

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) Case No. EA-2019-0181
for Permission and Approval and a)
Certificate of Public Convenience and)
Necessity Under 4 CSR 240-3.105)

AFFIDAVIT OF PETER CHARI

STATE OF MISSOURI)
)
COUNTY OF COLE) ss.

COMES NOW PETER CHARI and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Rebuttal Report*; and that the same is true and correct according to his best knowledge and belief.

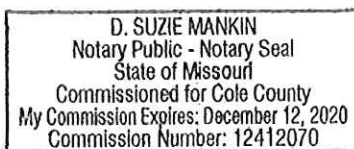
Further the Affiant sayeth not.




PETER CHARI

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 12th day of July 2019.





Notary Public

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) Case No. EA-2019-0181
for Permission and Approval and a)
Certificate of Public Convenience and)
Necessity Under 4 CSR 240-3.105)

AFFIDAVIT OF CEDRIC E. CUNIGAN

STATE OF MISSOURI)
)
COUNTY OF COLE) ss.

COMES NOW CEDRIC E. CUNIGAN and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Rebuttal Report*; and that the same is true and correct according to his best knowledge and belief.

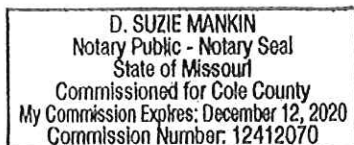
Further the Affiant sayeth not.

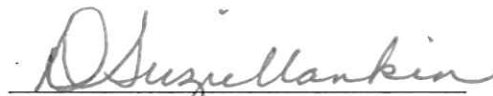


CEDRIC E. CUNIGAN

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 12th day of July 2019.





Notary Public

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 Public Convenience and)
Necessity Under 4 CSR 240-3.105)

Case No. EA-2019-0181

AFFIDAVIT OF SHAWN E. LANGE

STATE OF MISSOURI)
)
COUNTY OF COLE) ss.

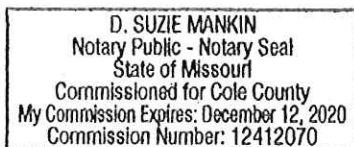
COMES NOW SHAWN E. LANGE and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Rebuttal Report*; and that the same is true and correct according to his best knowledge and belief.

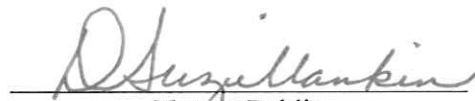
Further the Affiant sayeth not.


SHAWN E. LANGE

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 12th day of July 2019.




Notary Public

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) Case No. EA-2019-0181
for Permission and Approval and a)
Certificate of Public Convenience and)
Necessity Under 4 CSR 240-3.105)

AFFIDAVIT OF AMANDA C. McMELLEN

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

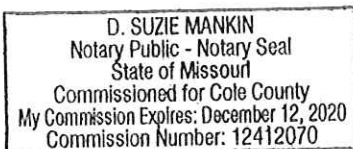
COMES NOW AMANDA C. McMELLEN and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Staff Rebuttal Report*; and that the same is true and correct according to her best knowledge and belief.


Further the Affiant sayeth not.


AMANDA C. McMELLEN

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 11th day of July 2019.




Notary Public

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) Case No. EA-2019-0181
for Permission and Approval and a)
Certificate of Public Convenience and)
Necessity Under 4 CSR 240-3.105)

AFFIDAVIT OF JAMIE S. MYERS

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW JAMIE S. MYERS and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Staff Rebuttal Report*; and that the same is true and correct according to her best knowledge and belief.

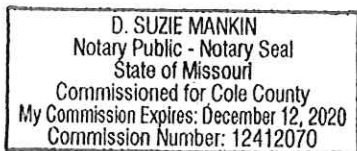
Further the Affiant sayeth not.

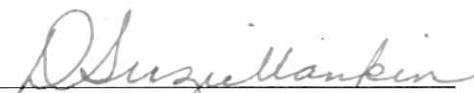


JAMIE S. MYERS

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 3rd day of July 2019.





Notary Public

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) Case No. EA-2019-0181
for Permission and Approval and a)
Certificate of Public Convenience and)
Necessity Under 4 CSR 240-3.105)

AFFIDAVIT OF CAROLINE NEWKIRK

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

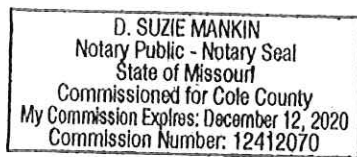
COMES NOW CAROLINE NEWKIRK and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Staff Rebuttal Report*; and that the same is true and correct according to her best knowledge and belief.

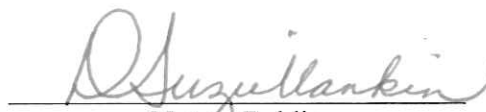
Further the Affiant sayeth not.


CAROLINE NEWKIRK

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 11th day of July 2019.




Notary Public