

**MEMORANDUM**

TO: Missouri Public Service Commission Case File  
Case No. EO-2017-0268, Renewable Energy Standard Compliance Plan 2017 -  
2019 for Union Electric Company, d/b/a Ameren Missouri

FROM: Claire M. Eubanks, PE, Engineering Analysis Unit

/s/ Daniel I. Beck 5/26/17  
Engineering Analysis Unit / Date

/s/ Robert S. Berlin 5/26/17  
Staff Counsel's Office / Date

SUBJECT: Staff Report on Ameren Missouri's Renewable Energy Standard  
Compliance Plan 2017-2019

DATE: May 26, 2017

**SUMMARY**

The Staff has reviewed Union Electric Company, d/b/a Ameren Missouri's ("Ameren Missouri" or "Company") *Renewable Energy Standard Compliance Plan 2017-2019* ("Plan"). Based on Staff's review, the Company has met the minimum requirements for the plan; however, Staff is concerned that the Company's retail rate impact calculations did not include the projected compliance costs for purchasing RECs or additional wind which may be pursued during the planning period (4 CSR 240-20.100(8)(B)1.E.). Because the 1% retail rate impact (RRI) limit is reached \*\* \_\_\_\_\_ \*\* it is unclear to Staff whether the purchase of RECs during the planning period will be justified, depending on the quantity and price of RECs to be purchased. The 2017 IRP, to be filed in October, \*\* \_\_\_\_\_ \*\*<sup>1</sup> and therefore may impact the RRI calculation or variables used in the RRI calculation. For example, if the Company increases the assumed capacity factor of future renewable resources or lowers the cost assumptions,

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<sup>1</sup> Response to Staff Data Request No. 0009.

**NP**

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

**Attachment A**

additional resources or RECs purchases may be needed to reach a maximum level of compliance before reaching 1% RRI. The Company is constrained by the retail rate impact from meeting the RES requirements during the planning period (2017-2019),<sup>2</sup> estimated to occur \*\* \_\_\_\_\_ . \*\* For these reasons, Staff recommends the Commission order Ameren Missouri to file an updated RRI calculation in this case concurrent with its 2017 IRP filing which is required to be filed not later than October 1, 2017.<sup>3</sup> Staff also encourages the Company to utilize variables consistent with the 2017 IRP in its next RRI calculation or provide justification for its assumptions.<sup>4</sup>

### **OVERVIEW**

On April 15, 2017, the Company filed its *Plan* for calendar years 2017 through 2019, in accordance with Rule 4 CSR 240-20.100(8), Electric Utility Renewable Energy Standard Requirements, Annual RES Compliance Report and RES Compliance Plan. This rule states, in part, “Each electric utility shall file an annual RES compliance plan with the commission. The plan shall be filed no later than April 15 of each year.” Subparagraphs 4 CSR 240-20.100(8)(B)1. A. through G. provide the minimum requirements for the plan. Subsection 4 CSR 240-20.100(8)(D) requires that Staff examine the plan and file a report within forty-five (45) days of the filing.

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<sup>2</sup> Response to Staff Data Request No. 0013.

<sup>3</sup> See, Order Granting Variance issued July 22, 2015, in File No. EE-2015-0316.

<sup>4</sup> 4 CSR 240-20.100(5)(B)4. Requires in part that “Any variables utilized in the modeling shall be consistent with values established in prior rate proceedings, electric utility resource planning filings, or RES compliance plans, unless specific justification is provided for deviations.”

**DISCUSSION**

Staff reviewed the Company’s Compliance Plan in accordance with the established requirements to verify the Plan contains the information required by rule. The results of this review are detailed below, with appropriate rule subparagraphs A. through G. identified and quoted.

**A. “A specific description of the electric utility’s planned action to comply with the RES;”**

As noted in response to Staff Data Request No. 0013, the Company is restrained by the RRI calculation from meeting the RES requirements during the planning period.

The Company’s planned actions for addressing the shortage in RECs are as follows:

Currently, Ameren Missouri is exploring options for adding additional wind generation, and will potentially use additional wind, SREC purchases, or a combination thereof, to fulfill any remaining non-solar requirements that may occur during this time period.<sup>5</sup>

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<sup>5</sup> Page 5 of the Plan; response to Staff Data Request No. 0013 indicates that there was a typo on this page and the reference to SRECs should be RECs.

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The Company explains in the Plan that it will continue to utilize renewable energy certificates (“RECs”) from the Keokuk hydroelectric generating station, the Maryland Heights Renewable Energy Center (“MHREC”) which utilizes landfill gas, and a purchased power agreement (“PPA”) from the Pioneer Prairie II Wind Farm (“Pioneer Prairie II”).

For solar compliance, the Company will utilize solar renewable energy credits (“S-RECs”) from net-metered customers, the solar generation facility installed at the Company headquarters, and its utility-scale solar facility O’Fallon Renewable Energy Center (“OREC”).

The MHREC, the net-metered systems, and Company-owned solar generation will qualify for the Missouri in-state one and twenty-five hundredths (1.25) credit.<sup>6</sup>

Please note the two solar pilot programs which were subjects of recent CCN cases (EA-2016-0207 and EA-2016-0208) were not included in the plan.

- B. “A list of executed contracts to purchase RECs (whether or not bundled with energy), including type of renewable energy resource, expected amount of energy to be delivered, and contract duration and terms;”**

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<sup>6</sup> 393.1030.1., RSMo; Rule 4 CSR 240-20.100(3)(G).

The Company provided the following information regarding its executed contracts:

	Type	Expected Energy Delivered	Contract duration and terms <sup>7</sup>
<b>Pioneer Prairie</b>	Wind	** ____ **	15 years
<b>Customer Standard Offer Contracts</b>	Solar	** ____ **	10 years

The Company discusses its executed contracts on page 10 and Table 1 on page 18 of the *Plan* includes a list of executed contracts, the type of renewable energy, the expected energy to be delivered and contract duration and terms. The Company has a 15-year PPA for energy and RECs from Pioneer Prairie II, beginning in 2009. The Company has Standard Offer Contracts (“SOCs”) with a portion of its net-metered customers. Please note there is a typographical error on page 10 of the *Plan*; The Company executed 628 SOCs prior to passage of HB 142.<sup>8</sup> Additionally, S-RECs are acquired from customers as a condition of receiving a rebate due to the passage of HB 142. \*\* \_\_\_\_\_

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<sup>7</sup> The Company has previously provided the executed contracts for Pioneer Prairie in Staff Data requests.  
<sup>8</sup> Response to Staff Data Request No. 0009 in EO-2015-0267.

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**C. “The projected total retail electric sales for each year;”**

The Company provided values for its projected retail electric sales. The values appear to be reasonable estimates.

**D. “Any differences, as a result of RES compliance, from the utility’s preferred resource plan as described in the most recent electric utility resource plan filed with the commission in accordance with 4 CSR 240-22, Electric Utility Resource Planning;”**

The Company submitted its most recent triennial compliance filing on October 1, 2014 and annual update in April 2016. The *Plan* is similar to the October 1, 2014 preferred resource plan in regard to renewable resource additions as a result of RES compliance. \*\* \_\_\_\_\_

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\_\_\_\_\_ \*\* The 2017 IRP may impact the RRI calculation; therefore, Staff recommends the Commission order Ameren Missouri to file an updated RRI calculation in this case concurrent with its 2017 IRP filing.

**E. “A detailed analysis providing information necessary to verify that the RES compliance plan is the least cost, prudent methodology to achieve compliance with the RES;”**

**NP**

The Company provided the actual and projected costs of capital projects and O&M expenses related to RES compliance in Table 3, located on page 21 of the *Plan*. However, the Company did not include the projected costs related to REC purchases or additional wind resources which may occur during the plan period. \*\* \_\_\_\_\_

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\_\_\_\_\_ \*\* The Company is constrained by the retail rate impact from meeting the RES requirements during the planning period (2017-2019).<sup>9</sup> Because the 1% rate impact limit is reached \*\* \_\_\_\_\_

\_\_\_\_\_ \*\* it is unclear to Staff whether the purchase of RECs during the planning period will be justified.

Staff reserves the right to comment on whether the *Plan* is the least cost, prudent method to comply with the RES when rate recovery is requested.

- F. “A calculation of the RES retail rate impact limit calculated in accordance with section (5) of this rule. The calculation should be accompanied by workpapers including all the relevant inputs used to calculate the retail rate impact limits for the planning interval which is included in the RES compliance plan. The electric utility may designate all or part of those calculations as highly confidential, proprietary, or public as appropriate under the commission’s rules;”**

<sup>9</sup> Response to Staff Data Request No. 0013.

The Company provided a description of the Retail Rate Impact calculation on pages 10-11 of the Plan and provided the associated work papers with its filing. The results model the unconstrained renewable additions and constrained renewable additions to remain under the RES retail rate impact limit. Staff has recently issued a clarifying data request regarding the source of variables used in the RRI calculation.<sup>10</sup>

The 2017 IRP, to be filed in October, \*\* \_\_\_\_\_  
\_\_\_\_\_ \*\*<sup>11</sup> and therefore may impact the RRI calculation or variables used in the RRI calculation. For example, if the Company increases the assumed capacity factor of future renewable resources or lowers the cost assumptions, additional resources or RECs purchases may be needed to reach a maximum level of compliance before reaching 1% RRI. The Company is constrained by the retail rate impact from meeting the RES requirements during the planning period (2017-2019),<sup>12</sup> estimated to occur \*\* \_\_\_\_\_ . \*\* For these reasons, Staff recommends the Commission order Ameren Missouri to file an updated RRI calculation in this case concurrent with its 2017 IRP filing. Staff also encourages the Company to utilize variables consistent with the 2017 IRP in its next RRI calculation or provide justification for its assumptions.<sup>13</sup>

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<sup>10</sup> Response to Staff Data Request No. 0010.1 due June 12, 2017

<sup>11</sup> Response to Staff Data Request No. 0009.

<sup>12</sup> Response to Staff Data Request No. 0013

<sup>13</sup> 4 CSR 240-20.100(5)(B)4. Requires in part that “Any variables utilized in the modeling shall be consistent with values established in prior rate proceedings, electric utility resource planning filings, or RES compliance plans, unless specific justification is provided for deviations.”



**G. “Verification that the utility has met the requirements for not causing undue adverse air, water, or land use impacts pursuant to subsection 393.1030.4. RSMo, and the regulations of the division.”**

The Company states that the generating facilities utilized to meet the RES requirements have been certified by the Missouri Department of Natural Resources.<sup>14</sup>

The existing renewable resources Ameren Missouri intends to utilize over the planning period have been certified by the Division of Energy.

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<sup>14</sup> Rule 10 CSR 140-8.010(4) – now the Missouri Department of Economic Development – Division of Energy.

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

In the Matter of the Renewable Energy                    )  
Standard Compliance Report 2016 and                    )  
Renewable Energy Standard Compliance Plan            )  
2017-2019    )  
Case No. EO-2017-0268

**AFFIDAVIT OF CLAIRE M. EUBANKS**

STATE OF MISSOURI        )  
  )  
COUNTY OF COLE        )        ss.

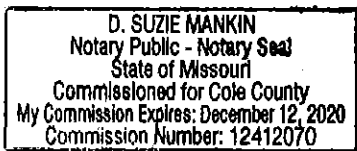
COMES NOW CLAIRE M. EUBANKS and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Staff Report on Ameren Missouri's Renewable Energy Standard Compliance Plan 2017-2019* in Memorandum form; and that the same is true and correct according to her best knowledge and belief.

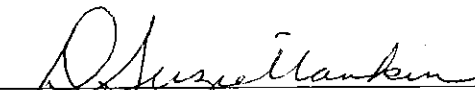
Further the Affiant sayeth not.

  
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CLAIRE M. EUBANKS

**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 26<sup>th</sup> day of May, 2017.



  
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Notary Public