

MEMORANDUM

TO: Missouri Public Service Commission Case File
Case No. EO-2019-0317, Kansas City Power & Light Company's
2019 Renewable Energy Standard Compliance Plan

FROM: Amanda Coffey, Engineering Analysis

<u>/s/ Daniel I. Beck, PE 5/30/2019</u> Engineering Analysis / Date	<u>/s/ Jeffrey A. Keevil 5/30/2019</u> Staff Counsel's Office / Date
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SUBJECT: Staff Report on Kansas City Power & Light Company's 2019 Annual Renewable
Energy Standard Compliance Plan

DATE: May 30, 2019

SUMMARY

Staff has reviewed Kansas City Power & Light Company's ("KCPL") 2019 Annual Renewable Energy Standard Compliance Plan ("Plan"). Based on the information supplied KCPL appears to have met the minimum requirements of 4 CSR 240-20.100(8)(B).

In regards to the retail rate impact ("RRI") calculation, KCPL calculated the cumulative carry-forward amount; however, KCPL did not originally include the resulting value in its final RES RRI calculation as required by Commission rule.¹ KCPL provided the corrected RRI work paper in response to a Staff Data Request.² The cumulative carry-forward amount, which can be positive or negative, ** _____, ** therefore, Staff does not recommend a re-filing of KCPL's RRI calculation in this instance.

OVERVIEW

On April 15, 2019, KCPL filed its *Plan* for calendar years 2019 through 2021. The *Plan* was filed 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

¹ 4 CSR 240-20.100(5)(B)3.

² EO-2019-0315 Staff Data Request 1; EO-2019-0317 Staff Data Request 4

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 of its review within forty-five (45) days of the filing.

DISCUSSION

Staff has reviewed KCPL's *Plan* in accordance with the established requirements to verify that the *Plan* contains the information required by the rule. The results of the review are detailed below, with appropriate rule subparagraphs A. through G. identified and quoted.

A. "A specific description of the electric utility's planned actions to comply with the RES;"

KCPL generates renewable energy at its wholly-owned Spearville 1 and 2 wind facilities and will continue to do so during the 2019-2021 RES Compliance Plan period. Additionally, KCPL has Power Purchase Agreements (PPAs) from eight wind facilities. KCPL's non-solar renewable resources³ are listed in the table below. KCPL expects to have banked REC's unexpired at the end of 2019 plus the addition of REC's generated by the wind facilities' actual generation.

Renewable Resource	Commercial Operation Date	Term (Years)	Capacity (MW)	Expected Annual Generation (Mwh)	Missouri Cumulative Expected Annual Generation (MWh)⁴
Spearville 1-2	2006 & 2010	n/a	100.5	321,421	** **
Cimarron II	6/1/2012	20	131.1	518,700	** **

³ All non-solar renewable resources with expected annual generation

⁴ Values represents the expected generation in year 2021 from KCPL's RRI calculation provided in EO-2019-0315 Staff Data Request 1 with the Missouri jurisdictional factor applied to each wind farm.

Renewable Resource	Commercial Operation Date	Term (Years)	Capacity (MW)	Expected Annual Generation (Mwh)	Missouri Cumulative Expected Annual Generation (MWh)⁴
Spearville 3	10/1/2012	20	100.8	358,300	** _____ **
Slate Creek	12/30/2015	20	150	605,050	** _____ **
Waverly	1/4/2016	20	200	732,600	** _____ **
Osborn	12/15/2016	20	120 ⁵	450,250	** _____ **
Rock Creek	11/8/2017	20	180 ⁶	690,700	** _____ **
Pratt	12/13/2018	20	110 ⁷	433,300	** _____ **
Prairie Queen ⁸	May 2019	20	90 ⁹	237,900	** _____ **

KCPL projects the non-solar RES requirement in 2021 (end of planning period) to be 1,216,924 MWhs. As shown in the table above, KCPL's Missouri jurisdictional expected annual generation is well in excess of the projected 2021 RES requirements. The values listed in the table above are the Missouri-jurisdictional total expected generation in 2021; the total expected annual generation is 4,348,221 MWh.

⁵ KCPL's Osborn PPA is for 120 MW of the 200 MW.

⁶ KCPL's Rock Creek PPA is 180 of the 200 MW.

⁷ KCPL's Pratt PPA is 110 of the 244 MW.

⁸ Expected to be operational May 2019.

⁹ KCPL's Prairie Queen PPA is 90 of the 200 MW.

Therefore, Osborn, Rock Creek, Pratt, and Prairie Queen are in excess of the Missouri RES Requirements.¹⁰

For solar compliance, KCPL expects to utilize solar renewable energy credits (“S-RECs”) obtained from customer-generators for the 2019 to 2021 plan period. KCPL also generates S-RECs from the solar generation facilities installed as a part of the SmartGrid¹¹ project (refer to Table 2 of the *Plan* for a listing of specific projects).

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;”

KCPL provided a list of executed contracts for the wind PPAs. KCPL has provided the following executed agreements in response to Staff Data Requests: ** _____

_____¹², _____¹³, _____¹⁴,
_____¹⁵, _____¹⁶, _____¹⁷, and _____
_____¹⁸ **

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

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

¹⁰ Staff’s assessment assumes the oldest wind PPAs are used for RES compliance which is not necessarily based on least-cost resources.

¹¹ These solar installations were part of the plan to install approximately 180 kW of utility owned and operated solar in and around the SmartGrid demonstration project area to integrate renewables and new technologies to modernize and automate the electric grid. The final installation of SmartGrid solar was completed in the second quarter of 2014.

¹² Staff Data Request No. 0001 in EO-2014-0287.

¹³ Staff Data Request No. 0002.2 in EO-2014-0287.

¹⁴ Staff Data Request No. 0001 in EO-2013-0504.

¹⁵ Staff Data Request No. 0002 in EO-2015-0265.

¹⁶ Staff Data Request No. 0004 in EO-2016-0282.

¹⁷ Staff Data Request No. 0002 in EO-2018-0290.

¹⁸ Staff Data Request No. 0002 in EO-2018-0290.

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;”

KCPL submitted its most recent Integrated Resource Plan in April 2018 (Case No. EO-2018-0268). During the three year RES planning period, KCPL’s preferred plan includes one wind addition (2019). The preferred plan wind addition is in excess of the RES requirements over the three year planning period.

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;”

The *Plan* notes that Spearville 1 was installed prior to the RES rules, as part of KCPL’s Comprehensive Energy Plan. The costs associated with Spearville 1 and Spearville 2 are already included in revenue requirements.¹⁹

KCPL selected wind resources Spearville 3 and Cimarron II PPAs in response to the August 2011 Request For Proposals (RFP) to satisfy the non-solar RES requirements and provided the reports regarding the selection process.²⁰

KCPL also executed the following wind PPAs: Cimarron, Spearville 3, Slate Creek, Waverly, Osborn, Rock Creek, Pratt, and Prairie Queen. Cimarron, Spearville 3, Slate Creek, Waverly, Osborn, Rock Creek are currently included in purchased power expense.²¹ KCPL notes in the *Plan* that it does not consider these wind contracts as directly attributable to RES compliance. As described in Section A of this

¹⁹ In-service requirements for Spearville 1 met in Case No. ER-2006-0314; In-service requirements for Spearville 2 met in Case No. ER-2010-0355.

²⁰ KCPL provided documentation in response to Staff Data Request No. 0003 in EO-2013-0504.

²¹ See Staff Second Prudence Review Report pages 26-35

report, the following wind farms are in excess of the Missouri RES requirements: Osborn, Rock Creek, Pratt, and Prairie Queen.²²

For compliance with the solar portion of the RES, KCPL plans to use S-RECs from customer-generators and future KCPL owned solar installations.

Staff wants to be clear that it has not made a ratemaking determination whether the Plan is the least cost, prudent method for complying with the RES and reserves the right to address this when rate recovery is requested, and suggests the Commission be clear in any Order it may issue in this case that it is not making any ratemaking determination.

- F. “A calculation of the RES retail impact limit calculated in accordance with section (5) of this rule. This calculation should be accompanied by workpapers including all the relevant inputs used to calculate the retail 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; and”**

The *Plan* includes an explanation of the calculation of the RES RRI. Work papers supporting the calculation were provided with its filing. KCPL’s calculation results in a rate impact of less than 1 percent on average over the planning period.

In regards to the RRI calculation, KCPL calculated the cumulative carry-forward amount; however, KCPL did not originally include the resulting value in its final RES RRI calculation as required by Commission rule.²³ KCPL provided the corrected RRI work paper in response to a Staff Data Request.²⁴ The cumulative carry-forward amount, which can be positive or negative, ** _____ . **

²² Staff’s assessment assumes the oldest wind PPAs are used for RES compliance which is not necessarily based on least-cost resources.

²³ 4 CSR 240-20.100(5)(B)3.

²⁴ EO-2019-0315 Staff Data Request 1; EO-2019-0317 Staff Data Request 4

therefore, Staff does not recommend a re-filing of KCPL's RRI calculation in this instance.

Section 3.3 of the plan indicates that the renewable energy resource additions will utilize the most recent electric utility resource planning analysis. KCPL's Integrated Resource Plan filing submitted in April 2018 includes 80 MW of wind in 2019, and 13 MW of solar in 2028. ** _____

_____ ** As noted on page 8 of the *Plan*, KCPL does not consider the wind PPAs as directly attributable to RES compliance due to their favorable economics.

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.”

KCPL states that, to its knowledge, all facilities utilized by KCPL to meet the requirements of the RES have received all necessary environmental and operational permits and are in compliance with any necessary federal, state, and/or local requirements related to air, water and land use.²⁵

²⁵ Rule 10 CSR 140-8.010(4).

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Kansas City Power & Light)
Company's Submission of its 2019 Renewable) Case No. EO-2019-0317
Energy Standard Compliance Plan)

AFFIDAVIT OF AMANDA COFFER

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

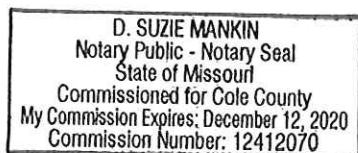
COMES NOW AMANDA COFFER and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Staff Report - 2019 Annual RES Compliance Plan*, in memorandum form; and that the same is true and correct according to her best knowledge and belief.

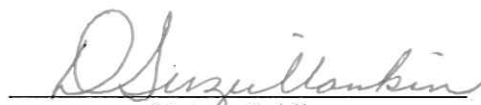
Further the Affiant sayeth not.


AMANDA COFFER

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 30th day of May 2019.




Notary Public