DATA REQUEST

JI_SDR2_1 RE: KPC response to JI-SDR-01. Please confirm that the response provided is that the Company replied upon a subjective and undocumented process in designing the proposed NMS-II tariff.

If this is not the case, please provide copies of all documents, resources, and directives that informed or prescribed the design of the proposed NMS-II tariff.

RESPONSE

The Company cannot confirm and denies the assertion. Please refer to the Company's response to JI SDR-01 and Company Witness Vaughan's direct testimony at page 9 line 15 through page 10 at line 10 which describes the methodology used to design rates in this case. That established process produced the rate design approved by this Commission in its January 13, 2021 Order. The same methodology was employed in connection with the approved rate design in Kentucky Power's affiliates in 11 state jurisdictions in dozens of rate proceedings over many years based on the laws and regulations in those states. The methodology is evidenced and can be followed through the filing schedules and workpapers that have been provided in this proceeding. In addition to the decades of cost of service, cost allocation, rate design and tariff experience that American Electric Power Service Corporation's regulatory pricing team has, the team members involved in the design of the Company's rates in this proceeding regularly participate in industry group and regulator-led training sessions, as well as industry working group meetings with other rate professionals to build upon their professional education and experience.

See also the NARUC electric utility cost allocation manual, which is available for purchase at https://maxxwww.naruc.org/forms/store/ProductFormPublic/electric-utility-cost-allocation-manual

DATA REQUEST

JI_SDR2_2 RE: KPC response to JI-SDR-02. Please confirm that the response provided is that the Company did not reference or rely upon any principles of rate making in designing the proposed NMS-II tariff.

If this is not the case, please provide copies of all documents, resources, and directives that informed or prescribed the principles that guided or informed the design of the proposed NMS-II tariff. Please explain how these principles, if any, are reflected in specific elements of the proposed NMS-II tariff, if at all. To the extent that the proposed NMS-II tariff deviated from such guiding principles, if any, please explain why this approach was chosen.

RESPONSE

The Company cannot confirm and denies the assertion. Please refer to the Company's response to JI-SDR2-1 and JI-SDR-02.

DATA REQUEST

- JI_SDR2_3 RE: KPC response to JI-SDR-03. Please confirm that the response provided is that the Company did not follow any particular process in designing the proposed NMS-II tariff.
 - a. If this is not the case, please provide copies of all documents, resources, and directives that informed or prescribed the process used in the design of the proposed NMS-II tariff.
 - b. Please explain how this process, if any, is reflected in the proposed NMS-II tariff, if at all. To the extent that the proposed NMS-II tariff deviated from that process, if any, please explain why a different approach was chosen.

RESPONSE

The Company cannot confirm and denies the assertion.

- a. Please refer to the Company's response to JI-SDR2-1 and JI-SDR-03.
- b. The development of proposed tariff NMS II followed the same steps/process as the development of the Company's other Commission approved applicable rates in this proceeding. The rates for net billing energy and demand under NMS II are the standard tariff rates. The avoided cost pricing for excess generation follows standard avoided cost principles as outlined in Company witness Vaughan's direct and rebuttal testimonies. The avoided cost pricing principles also are reflected in the Commission approved Cogen/SPP tariff.

DATA REQUEST

- JI_SDR2_4 RE: KPC response to JI-SDR-04. The Company response does not appear to address the following components of the request, styled JI-SDR-04, for which the Joint Intervenors request a specific response:
 - a. Please indicate and explain in detail for each, whether the Company evaluated and quantified these impacts over the life of an installed customer generation facility in developing its proposal for a new net metering tariff.
 - b. Please provide copies of any and all such evaluation and quantification.
 - c. If the company did not evaluate and quantify these impacts, please explain in detail why it did not do so.

RESPONSE

- a. Subparts a-m, s, and t were specifically addressed from an avoided cost standpoint in Company Witness Vaughan's direct (page 23-30) and rebuttal (pages 20-43) testimonies and associated exhibits and schedules. Item o "program administration" is covered in the Company's proposed tariff NMS II.
- b. Please refer to the Company's response to part a.
- c. The Company did not specifically consider JI-SDR-04 items n, p, q and r. Additional financial incentives for NMS customers or utility performance incentives are not contemplated by KRS 278.465 to KRS 278.468. The other requested items (credit collection and risk) are already covered by the Company's existing terms and conditions of service.

DATA REQUEST

JI_SDR2_5 RE: KPC response to JI-SDR-05. Please confirm that the response provided is that the Company position is that the impacts of electric tariffs on customers are not relevant in rate design and may not be considered by the Commission in reaching a decision on whether to approve a tariff proposed by the Company. If this is not the Company's position, please reconcile the Company's response with the Company's position.

RESPONSE

The Company objects to this data request. The information sought it is not relevant and not reasonably calculated to lead to the discovery of admissible evidence. KRS 278.466(5) provides that net metering rates are to be established "using the ratemaking process provided by ..." Chapter 278 of the Kentucky Revised Statutes. KRS 278.030(1) mandates that rates be "fair, just, reasonable." Further, under Kentucky law it is the result reached and not the methodology employed that controls in determining the reasonableness of rates. *National-Southwire Aluminum Co. v. Big Rivers Electric Corp.*, 785 S.W.2d 503, 512 (Ky. App. 1990). The NMS II rates proposed by Kentucky Power are fair, just, and reasonable. Further, the NSPM-DER have not been adopted by the Commission and the Company's agreement or disagreement with the broad principles stated in them is not relevant and not reasonably calculated to lead to the discovery of admissible evidence.

Without waiving these objections, The Company cannot confirm and denies the assertion. JI-SDR-05 refers to various customer economic items that are outside of the Company's cost of service. The Company's rates for electric service based on its cost of service should not be influenced by a customer's independent investment decision. Customer's economic decisions, including items outside of the Company's cost of service and rates such as tax incentives for making an investment, can be based on the Company's approved rates and tariffs at the time of that decision.

DATA REQUEST

JI_SDR2_6 RE: KPC response to JI-SDR-06. Please confirm that the response provided is that the Company position is that the impacts of electric tariffs on society and the public in general are not relevant in rate design and may not be considered by the Commission in reaching a decision on whether to approve a tariff proposed by the Company.

If this is not the Company's position, please reconcile the Company's response with the Company's position.

RESPONSE

The Company objects to this data request. The information sought it is not relevant and not reasonably calculated to lead to the discovery of admissible evidence. KRS 278.466(5) provides that net metering rates are to be established "using the ratemaking process provided by ..." Chapter 278 of the Kentucky Revised Statutes. KRS 278.030(1) mandates that rates be "fair, just, reasonable." Further, under Kentucky law it is the result reached and not the methodology employed that controls in determining the reasonableness of rates. *National-Southwire Aluminum Co. v. Big Rivers Electric Corp.*, 785 S.W.2d 503, 512 (Ky. App. 1990). The NMS II rates proposed by Kentucky Power are fair, just, and reasonable. Further, the NSPM-DER have not been adopted by the Commission and the Company's agreement or disagreement with the broad principles stated in them is not relevant and not reasonably calculated to lead to the discovery of admissible evidence.

DATA REQUEST

JI_SDR2_7 RE: KPC response to JI-SDR-07. Please provide a supplemental response based on the testimony filed by Company witnesses Vaughan and Stegall, summarizing the response and identifying, with citation to page and line number, the responses to the request and including all subparts.

RESPONSE

- a. The total subsidy in rates for net metering customers during the test year have been quantified using the Company's class cost of service calculations. These calculations have been used to support the measurement of subsidies in rates, revenue allocations and resulting rates in at least the Company's last four base rate cases. Please also refer to Company Witness Stegall's direct and supplemental testimonies regarding the class cost of service process.
- b. All test year net metering customers were included in the net metering classes included in the supplemental class cost of service. The duration of the measurement is the test year.
- c. Please refer to the Company's response to part A, and JI-SDR2-1.
- d. Please refer to Company witness Vaughan's supplemental testimony at page S4 line 18 through page S5 line 5 for the requested information. Please refer to section II Exhibit I of the Company's application for the amount of customers by class at the end of the test year. These amounts are for the test year. The Company has made no future projections.

DATA REQUEST

JI_SDR2_8

RE: KPC response to JI-SDR-08.

a. Please confirm that the Company's response is that net metering customers are viewed by the Company as wholesale generators in regard to their export or injection of excess generation.

If this is not the case, please explain.

b. Please confirm that the Company position is that net metering customers are making a sale for resale when their excess production is exported or injected.

If this is not the case, please explain.

- c. Please explain in detail the Company's intended meaning for the statement that "net metering customers . . . act like a wholesale generator." Please provide metering and other data, plus copies of all analysis performed, and all resources relied upon in reaching the conclusion that net metering customers act like wholesale generators and provide details about how net metering customers do so.
- d. Please provide a supplemental response based on the testimonies filed by Company witness Vaughan, summarizing the response and identifying, with citation to page and line number, the discussion in testimony of how net metering customers are wholesale generators, and when.
- e. Please provide a supplemental response based on the testimonies filed by Company witness Vaughan, summarizing the response and identifying, with citation to page and line number, the discussion in testimony of how net metering customers acting like a wholesale generator impacts the Company's cost of service.

RESPONSE

a. and b. The Company cannot confirm and denies the assertion. The Company's response to JI-SDR-08 speaks for itself and explains the matter.

c. Please refer to the Company's response to JI-SDR-08. Customer generators act like, or have a similar effect on the Company's wholesale settlement with PJM, as would a wholesale generator because their excess generation above their load requirements acts to reduce the Company's wholesale load that it settles with PJM on an hourly basis. No metering data is required for this conclusion. Please refer to PJM's FERC approved tariff and its various energy market settlement manuals that are publicly available at www.PJM.com. An injection of generation at the distribution level lowers the Company's wholesale load reported to PJM for energy market settlement. Please also refer to Company Witness Vaughan's Rebuttal testimony at page R25.

d. and e. Please refer to the Company's response to JI-SDR-08 and subparts A, B and C of this response.

DATA REQUEST

JI_SDR2_9 RE: KPC response to JI-SDR-09. Please confirm that the Company's response is that it has absolutely no idea what happens to net metering exports when they occur and how this impacts the distribution or transmission system. If this is not the case, please explain the Company's position in detail, and provide metering data, analysis, or other references substantiating the Company's position(s).

RESPONSE

The Company objects to this request because it is argumentative. Subject to and without waiving the foregoing objection, the Company states:

The Company denies. The Company's response to JI-SDR-09 speaks for itself.

DATA REQUEST

JI_SDR2_10 RE: KPC response to JI-SDR-11.

- a. Please provide copies of all relevant data and charts depicting the load shapes of all net metering customers before and after installing net metered generation.
- b. Please explain the Company's position on the degree of similarity between pre- and post-net metering load shapes within the population of net metering customers in its system.

RESPONSE

- a. The Company does not have load data and charts for its net metering customers before and after their customer generation systems went into service. The Company analyzed the test year net metering customers, who were taking net metering service during the test year. Please also refer to Company Witness Vaughan's rebuttal testimony at page 38 for a discussion and charts showing that the Company's Virginia affiliate's (APCO) standard residential and residential net metering load shapes plotted over top one another. The APCO Virginia interval metering data from residential net metering customers shows that their load shapes are the same as standard residential customers except when their systems are generating.
- b. Customers' underlying load shapes do not change when they install a solar generation system, their net load shape (actual load less generation) changes when their systems generate during the daylight hours. The Company utilized the net load shape for purposes of conducting its supplemental class cost of service study in this proceeding. Please also refer to part A of this response.

DATA REQUEST

JI_SDR2_11 RE: KPC response to JI-SDR-12. Please respond to the portion of the request that asked the Company to "explain and document" its response. If the Company offers no explanation or documentation and relied upon no explanation or documentation in developing its NMS-II tariff proposal, please so indicate. If not, please address the data request.

RESPONSE

The Company's response to JI-SDR-12 speaks for itself. The Company answered the request in full.

DATA REQUEST

JI_SDR2_12 RE: KPC response to JI-SDR-13. Please provide a supplemental response based on the testimonies filed by Company witnesses Vaughan and Stegall, summarizing the response and identifying, with citation to page and line number, where in the testimony, and workpapers that the data and analysis for each element of the request JI-SDFR-13, "a." through "n." are provided.

RESPONSE

For all parts of this request, the Company does not know what is meant by "(hours above average demand both before and after the specific peak hour). The coincidence of actual peak hours have been evaluated throughout the NMS II rate design process in this proceeding.

Please refer to the Company's response to KYSEIA 1-3 for Kentucky Power's cost causing system peak hours. The comparison of class coincidence to the Company's Kentucky retail system peak hours is done in the class cost of service ("CCOS") studies, both the originally filed and the supplemental CCOS.

- a. and b. The standard (non-net metering) load profiles were provided in the Company's response to KYSEIA 1-1 and the net metering load profiles were provided in KYSEIA 4-6.
- c. System peak hours have been provided in Section V, Schedule 9
- d. Class peak hours used in the CCOS allocation process have been provided in the Company's original and supplemental CCOS studies and associated workpapers.
- e. See part C.
- f. See part C.
- g. and h. Solar production data profiles used in the avoided cost pricing and net load shape calculations have been provided in KPCO_R_KPSC_3_1_Attachment17 and Company Witness Stegall's supplemental CCOS workpapers.
- i. See part C.

- j. See parts G, H and D.
- k. See parts G, H and C.
- 1. See parts G, H and C.
- m. Please refer to KPCO_R_KPSC_3_1_Attachment17 and Section V, Schedule 9
- n. Please refer to $KPCO_R_KPSC_3_1_Attachment17$ and part D.

DATA REQUEST

JI_SDR2_13 RE: KPC response to JI-SDR-14.

- (a) Please explain in detail why the Company asserts that it is not proposing that all customers receive the same compensation rate for excess generation.
- (b) Please explain in detail and provide cost of service data, metered data, and analysis to support the assertion that all net metering customers are "similarly situated," and that they are similarly situated with all other residential customers. If neither of these are the Company's assertions, please explain in detail the reason and meaning for the Company's response to JI-SDR-14.

RESPONSE

- a. The Company has proposed two different avoided cost rates, one for residential NMS II customers and one for commercial NMS II customers.
- b. In reference to the Company's response to JI-SDR-14. Further, residential net metering customers are similarly situation (to each other) and commercial net metering customers are similarly situation (to each other).

DATA REQUEST

JI_SDR2_14 RE: KPC response to JI-SDR-15. Please provide a supplemental response based on the testimonies filed by Company witnesses Vaughan and Stegall, summarizing the response and identifying, with citation to page and line number, where in the testimony and workpapers that the data and analysis and conclusions about the costs to serve net metering customers is presented, and how the costs to serve net metering customers are the same or different from the costs to serve nongenerating customers.

RESPONSE

The entire basis of Company Witness Vaughan and Stegall's supplemental testimonies is the difference in the cost to serve net metering customers compared to their standard tariff counterparts. The applicable data is the supplemental CCOS and workpapers filed by Company Witness Stegall.

DATA REQUEST

JI_SDR2_15 RE: KPC response to JI-SDR-16. Please reconfirm the Company's commitment to provide a response to the request as submitted.

RESPONSE

The Company filed its response to JI-SDR-16 on March 1, 2021.

DATA REQUEST

JI_SDR2_16 RE: KPC response to JI-SDR-17. Please provide a response to request, which sought an explanation for the Company's position.

RESPONSE

The Company's response to JI-SDR-17 speaks for itself. The Company answered the request in full.





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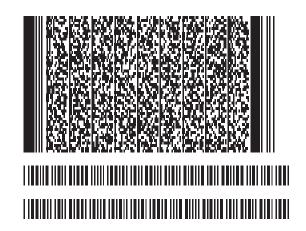
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March 15, 2021 07:19:25 -8:00 [2437B044D0F1] [167.239.2.87] aevaughan@aep.com (Principal) (Personally Known)

E-Signature Notary: Brenda Williamson (BW)

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I, Brenda Williamson, did witness the participants named above electronically sign this document.



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VERIFICATION

The undersigned, Alex E. Vaughan, being duly sworn, deposes and says he is a Director-Regulatory Pricing & Renewables for American Electric Power Service Corporation that he has personal knowledge of the matters set forth in the forgoing responses and the information contained therein is true and correct to the best of his information, knowledge and belief after reasonable inquiry.

alex € Vaughan Alex E. Vaughan STATE OF OHIO) Case No. 2020-00174 **COUNTY OF FRANKLIN**

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Alex E. Vaughan this ____ day of March 2021.

03/15/2021



Notary Public



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