COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC 2018 INTEGRATED RESOURCE)CASE NO.PLAN OF DUKE ENERGY KENTUCKY, INC.)2018-00195

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION TO DUKE ENERGY KENTUCKY, INC.

Duke Energy Kentucky, Inc. (Duke Kentucky), pursuant to 807 KAR 5:001, is to file with the Commission an original and an electronic version of its responses to the following information, with a copy to all parties of record. The information requested herein is due on or before February 25, 2019. Responses to requests for information shall be appropriately bound, tabbed, and indexed. Electronic documents shall be in portable document format (PDF), shall be searchable and shall be appropriately bookmarked. Each response shall include the name of the individual responsible for responding to questions related to the information provided.

Each response shall be answered under oath or, for representatives of a public or private corporation or a partnership or association or a governmental agency, be accompanied by a signed certification of the preparer or the person supervising the preparation of the response on behalf of the entity that the response is true and accurate to the best of that person's knowledge, information, and belief formed after a reasonable inquiry.

Duke Kentucky shall make timely amendment to any prior response if it obtains information which indicates that the response was incorrect when made or, though correct when made, is now incorrect in any material respect. For any request to which Duke Kentucky fails or refuses to furnish all or part of the requested information, it shall provide a written explanation of the specific grounds for its failure to completely and precisely respond.

Careful attention shall be given to copied material to ensure that it is legible. When the requested information has been previously provided in this proceeding in the requested format, reference may be made to the specific location of that information in responding to this request. When applicable, the requested information shall be separately provided for total company operations and jurisdictional operations. When filing a paper containing personal information, Duke Kentucky shall, in accordance with 807 KAR 5:001, Section 4(10), encrypt or redact the paper so that personal information cannot be read.

1. Refer to the 2017 Integrated Resource Plan (IRP), page 11, regarding the emerging interest for renewable energy. Explain the process Duke Kentucky utilizes to inform new and existing customers of additional renewable energy and how that information was utilized to determine the amount of renewable energy that is identified in the IRP.

2. Refer to the IRP, page 11, regarding Duke Kentucky's PJM Interconnect LLC's requirements.

a. Explain how the impact of PJM Capacity Performance (CP) requirements has affected Duke Kentucky's decision making with regard to operating in

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PJM under the fixed resource requirement (FRR) construct or under the reliability pricing model (RPM) construct.

b. Identify and explain any changes to the process Duke Kentucky underwent in deciding on whether to operate in PJM's CP under the FRR or RPM construct.

c. Provide any studies that Duke Kentucky has undertaken (or will undertake) since the CP requirements have been put in place to determine which construct would be most beneficial to its customers.

3. Refer to the IRP, page 11, regarding the impacts of sharp increases in load. Identify all known projects that will increase Duke Kentucky's load including the amount of load and the time such load will occur. Consider this an on-going request throughout this proceeding.

4. Refer to the IRP, page 15, Figure 2.2. Provide the amount of losses from 2013 through 2017 as a percentage and explain the fluctuation in the amount of losses each year during that period.

5. Refer to the IRP, page 15, Figure 2.3. Provide Duke Kentucky's all-time summer and winter peak demand and energy requirements.

 Refer to the IRP, page 17, regarding the duel-fuel project at the Wooddale Station. Provide an update of the progress of the project and its adherence to the proposed timelines of the project.

7. Refer to the IRP, page 20. Explain how Duke Kentucky determined the planning reserve margin used in its IRP models.

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8. Refer to the IRP, page 22, regarding fuel prices. Explain how Duke Kentucky develops its low-sulfur diesel fuel price forecasts.

9. Refer to the IRP, page 23, regarding forecasted capital costs.

a. Identify and explain the impacts the recently enacted tariffs on steel and aluminum have had on the metal products producer price indices.

b. Explain how the tariffs on steel and aluminum have impacted the assumptions and conclusions contained in its IRP.

10. Refer to the IRP, page 24, regarding capital cost. Identify and provide copies of the third-party capital cost-projections.

11. Refer to the IRP, page 32, regarding the price of carbon emissions.

a. Explain how Duke Kentucky determined the \$5/ton price for carbon emissions in 2025 and the \$3/ton/year increase over the planning period.

b. Explain if Duke Kentucky made any changes in the methodology used to determine the price for carbon emissions since its 2014 IRP. If so, provide an explanation as to why these changes were made.

12. Refer to the IRP, page 42. Provide the cost of coal and gas utilized in the Duke Kentucky's modeling and the low and high gas and coal price and explain how they were determined.

13. Refer to the IRP, page 51, Table 5.4. Explain the large decrease in coalfired generation from 2017 to 2018.

14. Refer to the IRP, page 55. Identify and explain how the heating and cooling thresholds were determined.

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15. Refer to the IRP, page 57. Confirm if the period used for Duke Kentucky's forecasted population is indeed 2014 to 2034.

16. Refer to the IRP, page 62, Table 8.2. Provide an update to the table reflecting all the data for winter 2017 and 2018 to date. Consider this an on-going request throughout this proceeding.

17. Refer to the IRP, page 95. Explain if any of Duke Kentucky customers indicated an interest in a Combined Heat and Power project since the filing of the IRP.

18. Refer to the IRP, Appendix C, page 75.

a. Explain what impact the EPA's recent action on December 27, 2018, when it issued a proposed revised Supplemental Cost Finding for the Mercury and Air Toxics Standard Rule and the Clean Air Act had on Duke Kentucky's environmental compliance activities.

b. Provide a listing of the dates when the Miami 6 emission allowances expire.

c. Explain any changes to emission allowances since Duke Kentucky's last IRP.

19. Refer to the IRP, Appendix E, page 93.

a. Discuss whether Duke Kentucky utilized a period other than a thirtyyear weather normalization period.

b. Identify any of Duke Kentucky's affiliates that utilized a period other than a thirty-year weather normalization period.

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c. Explain any alternative weather normalization period utilized by Duke Kentucky affiliates above and discuss how it compares to a thirty-year weather normalization period.

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Gwen R. Pinson Executive Director Public Service Commission P.O. Box 615 Frankfort, KY 40602

JAN 2 8 2019

DATED ____

cc: Parties of Record

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