

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF DUKE	)	
ENERGY KENTUCKY, INC. FOR A	)	CASE NO.
CERTIFICATE OF PUBLIC CONVENIENCE	)	2017-00186
AND NECESSITY FOR CONSTRUCTION OF A	)	
NUMBER 2 DISTILLATE FUEL OIL SYSTEM AT	)	
THE COMPANY'S WOODSDALE NATURAL	)	
GAS-FIRED GENERATING STATION	)	

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 the original in paper medium and an electronic version of the following information. The information requested herein is due no later than July 28, 2017. Responses to requests for information in paper medium shall be appropriately bound, tabbed and indexed. Each response shall include the name of the witness responsible for responding to the 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 application, paragraph 12, regarding the higher PJM Interconnection LLC (“PJM”) Capacity Performance (“CP”) payments for the most reliable resources and higher non-performance assessments for assets that do not meet performance expectations.

a. Assuming the Commission approves Duke Kentucky’s proposal to construct the new back-up ultra-low sulfur diesel distillate fuel oil system (“ULSD Fuel System”) at the Woodsdale Generating Station and that it is timely completed, provide a comparison of the current Delivery Year CP payments with those through the

2020/2021 Delivery Year broken down by the CP payments for the East Bend and Woodsdale Generating Stations.

b. Assuming the Commission approves Duke Kentucky's proposal, identify and explain the basis for any anticipated changes to other revenues (other than jurisdictional sales of electricity) from the Woodsdale Generating Station, including those for black-start capacity, ancillary services, and net off-system sales revenue, from the current Delivery Year through the 2020/2021 Delivery Year broken down by the other such revenues for the East Bend and Woodsdale Generating Stations.

c. Explain how the higher CP payments for the most reliable resources are determined and the estimated impact they will have on the revenues generated from the Woodsdale Generating Station for the 2019/2020 and 2020/2021 Delivery Years, assuming they are reliable resources.

2. Refer to the application, paragraphs 13 and 15, regarding the CP market changes. Also, refer to Case No. 2014-00078,<sup>1</sup> in which the Commission approved Duke Kentucky's accounting treatment for the sale of natural gas purchased for generation but not consumed and sold at a loss. What effects, if any, will the CP market changes have on mitigating or eliminating the scenario which gave rise to Case No. 2014-00078?

3. Refer to the application, paragraph 16, regarding Duke Kentucky's load obligation.

a. Provide a comparison of Duke Kentucky's summer and winter generation capacity to its actual and forecasted summer and winter peak load

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<sup>1</sup> Case No. 2014-00078, *An Investigation of Duke Energy Kentucky, Inc.'s Accounting Sale of Natural Gas not used in its Combustion Turbines* (Ky. PSC Nov. 25, 2014).

obligations, including its PJM reserve margin, for the 2015/2016 Delivery Year through the 2020/2021 Delivery Year.

b. Explain how, if at all, the proposed ULSD Fuel System will affect the summer or winter generation capacity at the Woodsdale Generating Station.

4. Refer to the application, paragraph 19, regarding the retirement and demolition of the existing propane secondary fuel system.

a. When was Duke Kentucky's last depreciation study conducted?

b. Did the depreciation rates developed for the assets in the existing propane secondary fuel system consider the impact of the cost-of-removal and salvage value (net salvage value)?

c. If the answer to part b. above is affirmative, explain how, if at all, the depreciation rates affected the \$55.4 million cost of the proposed project.

d. What impact will the proposed project have on the useful life of the units at the Woodsdale Generating Station?

5. Refer to the application, Exhibit 5, page 13 of 106. With respect to a "Capacity Performance (CP) penalty period," explain why CP periods typically occur during the winter rather than during the summer. For the prior three Delivery Years, provide the days which would have been considered as a CP period.

6. Refer to the Direct Testimony of Joseph A. Miller, Jr., pages 12–13, where he states that the installation of fuel oil combustion hardware on the units at the Woodsdale Generating Station will not trigger the need for any significant construction-related permits. Identify any other needed construction-related permits and provide the

status of such permits. Consider this an ongoing request to be updated throughout the duration of this proceeding.

7. Refer to the Direct Testimony of John A. Verderame (“Verderame Testimony”), page 12, lines 18–23. Provide a copy of Duke Kentucky’s preliminary FRR plans for the 2019-2020 and 2020-2021 Delivery Years.

8. Refer to the Verderame Testimony, page 13, lines 13–18. Explain what types of “supporting data and information” could be requested of Duke Kentucky by PJM or the Independent Market Monitor (“IMM”) to evaluate whether the Woodsdale Generating Station can meet the operational and performance requirements of Capacity Performance Resources.

9. Refer to the Verderame Testimony, pages 13–14, regarding the broad discretion provided to PJM and the IMM to challenge generators as being Capacity Performance compliant.

a. Explain in detail the process by which either PJM or the IMM would exercise its authority to challenge a generation resource’s compliance with the CP requirements.

b. Is Duke Kentucky aware of any generation resource that has been challenged by PJM or the IMM as not compliant with the CP requirements?

10. Refer to the Verderame Testimony, page 14, lines 18–20. Explain in detail the “asset hardening” strategies that are being implemented at the East Bend Generating Station and how this strategy will reduce the frequency and duration of forced outages. Explain also whether a hardening strategy was considered for the Woodsdale Generating Station as part of its CP-compliance evaluation.

11. Refer to the Verderame Testimony, page 15, lines 4–6. Other than fuel certainty, explain what other factors would be considered by PJM to be a minimum requirement to meet Capacity Performance expectations.

12. Refer to the Verderame Testimony, page 16, lines 16–22. Explain whether gas supply to the Woodsdale Generating Station has been interrupted in the last ten years either during a Duke Kentucky-system peak period or a PJM-system peak period.

13. Refer to the Verderame Testimony, page 17, lines 2–6. Provide the annual capacity factors for the Woodsdale Generating Station and for each unit for each of the past five years.

14. Refer to the Verderame Testimony, page 25, regarding the alternative CP compliance strategies that were considered for the Woodsdale Generating Station.

a. Were there net present value estimates for each of the alternative strategies?

b. If the answer to part a. is affirmative, provide the information relative to each strategy.

c. If the answer to part a. is negative, explain why Duke Kentucky did not perform net present value calculations.

d. If net present value calculations were not performed, explain how Duke Kentucky determined the proposed ULSD Fuel System was the less expensive alternative in the long term.

e. To the extent possible, for each strategy, provide the capital cost, the annual fuel cost, and the annual variable cost.

15. Refer to the Verderame Testimony, page 30, footnote 11. Provide an update to the status of this appeal and consider this an ongoing request to be updated throughout the duration of this proceeding.

16. Refer to the Verderame Testimony, Confidential Exhibit JV-1. Provide any and all supporting work papers and documents associated with the development of the Kepner-Tregoe Decision Matrix used by Duke Kentucky to evaluate the various compliance strategies for the Woodsdale Generating Station.



John S. Lyons  
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Public Service Commission  
P.O. Box 615  
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DATED     **JUL 14 2017**    

cc: Parties of Record

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