

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

2012 INTEGRATED RESOURCE PLAN OF EAST	)	CASE NO.
KENTUCKY POWER COOPERATIVE, INC	)	2012-00149

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION  
TO EAST KENTUCKY POWER COOPERATIVE, INC.

East Kentucky Power Cooperative, Inc. ("EKPC"), pursuant to 807 KAR 5:001, is to file with the Commission the original and 10 copies of the following information, with a copy to all parties of record. The information requested herein is due no later than June 25, 2012. Responses to requests for information 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.

EKPC 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 EKPC 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.

1. Refer to page 4, Section 1.3, of EKPC's 2012 Integrated Resource Plan ("IRP") and the Technical Appendix ("TA"), Volume 2, pages 13 and 14, of the IRP. The last sentence on page 4 of the IRP states, "EKPC believes an aggressive but reasonable DSM goal would be to pursue approximately 50 MW over a five year period." Pages 13 and 14 of the TA, Volume 2, contain the projected load impacts of existing and new demand-side management ("DSM") programs, respectively.

a. Explain what EKPC means by "[a]ggressive but reasonable..." in the statement on page 4 of the IRP.

b. Explain why the statement on page 4 of the IRP refers to 50 MW when the incremental load impacts listed on pages 13 and 14 of the TA, Volume 2 of the IRP, over the period 2012-2017, are reductions in excess of 50 KW for existing programs and reductions in excess of 100 MW for new programs.

2. Refer to page 5 of the IRP, which continues the discussion of Section 1.3, DSM. The next-to-last sentence indicates that the final program details for new DSM programs will not be complete until late 2012. Upon completion of those details, what action(s) will EKPC expect to take regarding implementation of the programs that have been found to be financially feasible?

3. Refer to page 6, Section 1.4, of the IRP. The first paragraph discusses EKPC's intent to keep its plans flexible and continue to monitor load and economic power supply alternatives, including joining a Regional Transmission Organization ("RTO"). On May 3, 2012, EKPC filed an application with the Commission requesting approval to transfer certain transmission assets to the PJM Interconnection, L.L.C. ("PJM").<sup>1</sup> Provide a general, high-level discussion of what impacts, assuming its request is approved by the Commission, EKPC joining PJM would have on its 2012 IRP.

4. Refer to page 9, Section 1.7, of the IRP.

a. The recommendations of the EKPC DSM and Renewable Energy Collaborative ("Collaborative") were provided to EKPC management on January 31, 2012. Explain what management's response to the recommendations has been to date.

b. If they have been developed, provide the timelines for pursuing and/or implementing each of the recommendations of the Collaborative.

c. If they have been developed, identify and describe in general the educational, marketing, and training programs planned for EKPC's member systems.

d. Explain whether it is anticipated that additional personnel will be required by EKPC and/or its member systems to implement the new DSM programs. If so, provide the estimated number of new personnel required for EKPC and the member systems as well as brief job descriptions for the new personnel.

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<sup>1</sup> Case No. 2012-00169, Application of East Kentucky Power Cooperative, Inc. to Transfer Functional Control of Certain Transmission Facilities to PJM Interconnection, LLC (filed May 3, 2012).

e. Describe what, if any, standardized processes for gathering data, investigation, and reporting on energy and demand impacts are currently being used by EKPC and its member cooperatives.

5. Refer to page 10 of the 2012 IRP, the table of existing DSM programs which includes a Residential Lighting program. Is this program included in EKPC's tariff? If yes, provide the location of this program in the tariff. If no, explain.

6. Refer to the IRP, page 28, which continues the discussion of transmission projects that begins on page 26. The first sentence of the first paragraph on the page refers to a planned interconnection that will provide a stronger source in a specific area of need on the EKPC system. Provide the location of that interconnection and the name of the system to which EKPC will be interconnected.

7. Refer to the tables on pages 40, 42, 44, and 46 of the IRP, all of which include a column with a heading "Weather Normalized, etc." Provide the number of years in the period EKPC uses for normal weather and the last year of that period.

8. Refer to revised page 46 of the IRP, which was filed on May 9, 2012. EKPC's Office Use is shown as 2,916 MWh for 2011 which is roughly one-third of the usage shown for all other years. Explain the reduced usage in 2011.

9. Refer to page 50 of the IRP. Explain why, for existing DSM programs, there is a projected decrease in the Impact on Energy Requirements in 2021-2026.

10. Refer to Table 8.(3)(e)(1)-2 on page 79 of the IRP, specifically, the programs identified by the footnotes to the table. Explain why EKPC did not include the programs referenced in these footnotes in its marketing plans for 2009-2011.

11. Refer to the bottom of page 92 of the IRP, the table for the Programmable Thermostat Program. Explain why the impact on the winter peak is zero.

12. Refer to Table 8.(3)(e)(4) on pages 100 and 101 of the IRP, which shows DSM program costs for both existing and new DSM programs.

a. Confirm that these costs are the present value, in 2012 dollars, of the projected costs for the period covered by the 2012 IRP.

b. If the answer to part a. of this request is affirmative, provide the projected program costs, by year, for the period 2012-2026.

13. Refer to Table 8.(3)(e)(5) on pages 102 and 103 of the IRP.

a. Explain how the present value of the projected DSM program cost savings was discounted to a 2012 present value.

b. Provide the discount rate(s) used to calculate the present value amounts and explain how the rate(s) was (were) selected and developed.

14. Refer to pages 161-163 of the IRP which summarizes the development of EKPC's optimal resource plan for the 2012-2026 planning period.

a. Confirm that the projected capacity additions in Table 8.(4)(a) are based on the continued operation of the Dale units and Cooper Unit 1 and that those additions represent the plan identified as Plan 1 in Table 8.(5)(a).

b. The last sentence on page 162 states that the five lowest cost plans are shown in the following table, which the sentence identifies as Table 8.3. The table, however, has the heading "Table 8.5 (a)." Clarify that this is the table identified in the sentence as Table 8.3.

c. Based on the results EKPC realized using the *Resource Optimizer* simulation model, provide the present value revenue requirements of the resource plans identified as the "[f]ive lowest cost plans" on page 162.

15. Refer to the IRP, page 165, Section 8.5, Reliability Criteria and Projected Capacity Needs.

a. EKPC is a member of SERC Reliability Corporation (“SERC”). As a SERC member, “EKPC plans capacity to meet its peak load expectations plus a 12 percent reserve margin.” Explain in detail how EKPC’s planning reserve margin is related to its membership in SERC.

b. Explain why 12 percent is the specific reserve margin EKPC uses for planning purposes as opposed to some other percentage.

16. Refer to the IRP, pages 167-168, Table 8.(3)(c) and Table 8.(4)(b)1-4. Explain why the total of Power Purchases and Market Purchase for each year shown in Table 8.(3)(c) differs from the total for the same year of the Firm Purchases-Other Utilities and Firm Purchases-Non-Utilities in Table 8.(4)(b)1-4.

17. Refer to page 170, Section 9.0 of the IRP. Confirm whether 1997 is the correct year of the consent decree discussed in the last sentence on the page.

18. Refer to page 176 of the IRP. The last sentence in the Regional Haze Rule section refers to controls being installed at Cooper Unit 2 and plans to install parallel controls at Cooper Unit 1.

a. Provide the status of the construction at Cooper Unit 2.

b. Provide a timeline for the planned construction at Cooper Unit 1.

19. Refer to Section 8, page 17, of EKPC’s 2009 IRP.<sup>2</sup> One of the existing DSM programs, Electric Water Heater, offered rebates to residential customers for

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<sup>2</sup> Case No. 2009-00106, 2009 Integrated Resource Plan of East Kentucky Power Cooperative, Inc. (Ky. PSC Jan. 11, 2011).

installing high efficiency electric water heaters. This program is not listed as an existing program in EKPC's 2012 IRP. What is the status of the Electric Water Heater program?

20. An existing DSM program in EKPC's 2009 IRP, Geothermal Cooling and Heating, offered rebates to retail members who installed efficient geothermal systems. Provide the status of this program and explain the difference between it and the "Geothermal Retrofit" listed as a "new" DSM program on page 11 of EKPC's 2012 IRP.

21. An existing DSM program in EKPC's 2009 IRP, Compact Fluorescent Lighting, provided fluorescent bulbs at member cooperative annual member meetings. This program is not listed as an existing DSM program in the 2012 IRP. What is the status of this program?

22. Refer to TA-Volume 1, Section 3.5(2), page 31. Provide the applicable sections of the Twenty-Year Financial Forecast used to prepare the load forecast, and a discussion of all "assumptions about future environmental issues such as carbon legislation and future supply resources" that were incorporated into the load forecast, peak demand forecasts, and any sensitivity analyses that were conducted.

23. Refer to TA-Volume 1, Section 3.5(3), page 31.

a. Explain whether all appliance data used in the statistically adjusted end-use ("SAE") modeling comes from the U.S. Department of Energy ("DOE") or if some data comes from EKPC's end-use surveys.

b. If some of the data used in the SAE modeling comes from EKPC's end-use surveys, explain how the surveys are conducted and how the appliance data from the surveys is combined with the DOE appliance data for use in EKPC's forecast.

24. Refer to TA-Volume 1, Section 4.0, page 37.

a. Describe in detail the methodology used to combine IHS Global Insight county level projections into projected regional economic activity.

b. Explain whether any projected price increases that are the direct result of EKPC activity are factored into the electric price variables used in the customer class load projections.

25. Refer to TA-Volume 1, Section 5.0, page 51. Explain why various economic variables such as total employment or household income would not be used consistently in each of the member system residential customer forecasts.

26. Refer to TA-Volume 1, Section 6.2. EKPC's most recent appliance saturation survey was conducted in 2009, its load forecast was performed in 2010, and the current IRP was filed on April 20, 2012. Explain why more recent survey data and a more recent load forecast was not used for this IRP.

27. Refer to TA-Volume 1, Section 8.0, page 77. Explain in detail how the hourly load forecast is calibrated to seasonal peak demands and to the annual energy forecasts to build the calibrated hourly load forecast for the EKPC system.

28. Refer to TA-Volume 2, page 4, which lists the major enhancements to EKPC's DSM planning since the last IRP, and page 15 of the TA, Volume 2. Items 5 and 6, on page 4, and the discussion and table on page 15 refer to DSM in conjunction with environmental compliance costs. Describe any changes in the environmental compliance cost computations in the 2012 IRP that differ from those in the 2009 IRP.

29. Refer to TA-Volume 2, Exhibit DSM-3, page 2 of 10, the target market for the "Beat the Peak" program. Explain why the program is "particularly designed to produce critical peak demand savings from end uses other than air conditioning or water heating." (Emphasis added).



30. Refer to TA-Volume 2, Exhibit DSM-3, page 3 of 10, the target market for the Low Income Weatherization program. Explain whether any consideration was given to targeting low income customers with above average electric usage levels.

31. Refer to TA-Volume 2, Exhibit DSM-3, page 4 of 10, the description of the Programmable Thermostat with Electric Furnace Retrofit program.

a. The last sentence states that “[s]ome studies have shown that programmable thermostats can significantly increase morning peak loads when used with heat pumps.” Explain whether the phrase “some studies” means that other studies have not shown the same result.

b. Identify the studies referenced in the description of the program and provide the year each study was performed or published.

32. Refer to TA-Volume 2, Exhibit DSM-3, pages 4 and 5 of 10, where the Advanced Weatherization Tier 2 and Tier 3 programs are described. Confirm whether the only difference between the two programs from a physical perspective will be the amount of insulation and air sealing that is provided.

33. Refer to TA-Volume 2, Exhibit DSM-3, page 5 of 10, and Exhibit DSM-4, page 8 of 21. The program description for the Direct Load Control of Residential Pool Pumps in Exhibit DSM-3 states that an incentive of \$10 per year for each pool pump under control will be offered, which is consistent with EKPC’s current tariff section DSM-3(a). The rebate amount shown in Exhibit DSM-4 is \$20 per year. Explain the discrepancy.

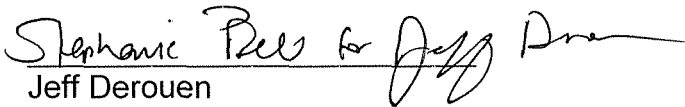
34. Refer to TA-Volume 2, Exhibit DSM-3, page 8 of 10, the fourth paragraph of the description of Direct Load Control for Commercial Air Conditioning program.

35.

a. The first sentence of the paragraph states that the incentive will be \$40 per year for each commercial air conditioner while the second sentence states that the incentive will be \$20 per month for four hot weather months. The second sentence appears to reflect an annual incentive of \$80. Confirm the planned amount of the incentive for this program.

b. EKPC's current tariff, Section DSM-3(b), states that the incentive is based on air conditioning unit tonnage. For units under five tons, the incentive is \$5 per month and for units over five tons, the incentive is \$6 per month. The incentive is to be credited over the months of June through September. Explain the discrepancy in the incentive amounts shown in the IRP and in EKPC's tariff.

36. Refer to TA-Volume 2, Exhibit DSM-6, page 4 of 30, the last paragraph of the description of the Direct Load Control of Residential Air Conditioners and Water Heaters Program. The last sentence states that EKPC's "participation goal represents 16% of the current eligible market of residences with central air conditioning." Explain how 16 percent was chosen and how it compares to participation rates of other electric utilities' residential air conditioning direct load control programs.

  
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cc: Parties of Record

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