COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE 2006 INTEGRATED RESOURCE PLAN OF) CASE NO. EAST KENTUCKY POWER COOPERATIVE, INC) 2006-00471

COMMISSION STAFF'S INITIAL DATA REQUEST TO EAST KENTUCKY POWER COOPERATIVE, INC.

East Kentucky Power Cooperative, Inc. ("EKPC") is requested, pursuant to 807 KAR 5:001, to file with the Commission the original and 8 copies of the following information, with a copy to all parties of record. The information requested herein is due on January 17, 2007. Each copy of the data requested should be placed in a bound volume with each item tabbed. When a number of sheets are required for an item, each sheet should be appropriately indexed, for example, Item 1(a), Sheet 2 of 6. Include with each response the name of the person who will be responsible for responding to questions relating to the information provided. Careful attention should be given to copied material to ensure that it is legible. Where information requested herein has been provided, in the format requested herein, reference may be made to the specific location of said information in responding to this information request.

- 1. Published reports indicate that Warren Rural Electric Cooperative Corporation ("Warren RECC") will remain on the Tennessee Valley Authority's system rather than become a part of the EKPC system. Explain how this change will affect EKPC's:
 - a. load forecast;

- b. generation construction plans and schedules, including the
 Spurlock and Smith generation sites; and
 - c. transmission construction plans and schedules.
- 2. Section 5(5) on page 5-15 of EKPC's October 21, 2006 Integrated Resource Plan ("2006 IRP") states that EKPC anticipates issuing a Request for Proposals ("RFP") for baseload capacity in early 2007.
- a. Since Warren RECC will not become part of the EKPC system, explain whether EKPC still anticipates issuing this RFP.
- b. Page 8-12 of the 2006 IRP indicates that EKPC considered but did not explicitly model supercritical coal units in this IRP and that it will perform a more detailed evaluation of such units in the future. Explain whether EKPC expects to give serious consideration to supercritical coal units in conjunction with its anticipated 2007 RFP.
- 3. Refer to page 6-3 of EKPC's 2006 IRP. Item 10 under the heading "Major Enhancements Since Last IRP" states that a resource optimization model was used to develop the current resource plan. Explain how using such a model differs from how EKPC has developed previous resource plans and why this is a major enhancement.
- 4. Refer to the tables on page 8-18 of the 2006 IRP. Explain how the number of years under "Savings Lifetime" is determined for a given Demand-Side Management ("DSM") program.
- 5. Refer to the paragraph at the bottom of page DSM-3 of the Technical Appendix to the 2006 IRP ("Technical Appendix"). Provide a schedule that shows, by program, the amounts that make up the "over \$150 million in net benefits" and the

"investment of just under \$50 million" associated with the new DSM programs listed in Table DSM-2.

- 6. Refer to the discussion on page DSM-6 of the Technical Appendix regarding the qualitative screening process and qualitative screening results for the 93 DSM measures considered by EKPC.
- a. Explain how the criteria were developed for screening the measures and whether the criteria differ from what EKPC has used to evaluate DSM measures in previous IRPs.
- b. Explain how a score of 15, out of a possible combined score of 20, was chosen as the cut-off point for determining whether measures were passed on to the quantitative evaluation process.
- 7. Refer to Table DSM-5 on page DSM-10 of the Technical Appendix. Three of the existing programs, Electric Water Heater Retrofit, Air Source Heat Pump New Construction, and Air Source Heat Pump Retrofit, reflect increases in load requirements and total resource test benefit ratios of less than 1.0. Given these demand impacts and test results, identify and describe the factors that support the continuation of these programs.
- 8. Refer to Table DSM-9 on page DSM-15 of the Technical Appendix. This table reflects how EKPC factored environmental costs into its DSM evaluation. "More explicit factoring of environmental costs" is listed as Item 2 under "Major Enhancements Since Last IRP" on page 6-3 of the 2006 IRP. Describe in detail of how this treatment of environmental costs is more explicit than what EKPC has reflected in previous DSM evaluations.

- 9. Refer to the Technical Appendix, Exhibit DSM-4, Existing DSM Programs Assumptions Sheets.
- a. What criteria, other than the "California" cost-benefit tests used in its quantitative evaluation process, does EKPC rely upon to determine the success of individual DSM programs?
- b. What procedures does EKPC use to document the results of individual DSM programs?
- c. What procedures has EKPC established to ensure that rebates are paid to program participants or member cooperatives only when program guidelines are met?
- 10. Refer to the Technical Appendix, Exhibit DSM-9, page 6 of 7, concerning the "Commercial New Construction Program."
- a. Explain how EKPC plans to locate participants for this program before construction of a new facility has started.
- b. Refer to the last sentence under "Target Market." Explain why, for a commercial program, the primary market is identified as members who are constructing new stick-built homes.
- 11. Refer to EKPC's 2006 Load Forecast Report. Describe in detail all changes to EKPC's forecasting methodology and procedures that have occurred since the 2003 IRP filing.
- 12. Refer to EKPC's 2006 Load Forecast Report, pages 25-27. Since Warren RECC is no longer joining EKPC, the final calculations in Tables 3-2, 3-3, and 3-4 may not be accurate. Provide revisions to these tables.

- 13. Refer to EKPC's 2006 Load Forecast Report, page 33. Provide a description of how the various counties were aggregated into each of the seven economic regions.
- 14. Refer to EKPC's 2006 Load Forecast Report, page 33. Provide a description of the manner in which the Regional Economic Model is applied to individual member cooperatives.
- 15. Refer to EKPC's 2006 Load Forecast Report, Figures 4-1 through 4-5, pages 34 37. Explain whether "All Regions" refers to the seven economic regions listed in Table 4-2.
- 16. Refer to EKPC's 2006 Load Forecast Report, page 36 lines 3-5. Describe the two effects that will cause the labor force to grow more slowly than in the past.
- 17. Refer to EKPC's 2006 Load Forecast Report, Table 4-2, page 38. Provide a map that shows the economic regions by county overlaid with the territories of each of the member systems.
- 18. Refer to EKPC's 2006 Load Forecast Report, Table 4-3 through Table 4-9. Explain why data for 2004 and 2005 had to be simulated and explain how the simulation was accomplished.
 - 19. Refer to EKPC's 2006 Load Forecast Report, page 49, Section 5.1.2.
- a. Provide a more detailed explanation of how "shares" are calculated and forecast.
- b. Within each region, the boundaries of the counties and the utility service territories do not match up neatly. In the case where a member's territory may

overlap into more than one region, explain whether the model attempts to keep all of the appropriate customers and, if so, how the adjustments are made.

- 20. Refer to EKPC's 2006 Load Forecast Report, pages 76-77.
- a. Transmission line losses in summer are usually higher than in winter. Provide an explanation, if possible, of why the winter line losses are greater than the summer line losses for the years 1992 1993, 1996, 1999, and 2001 2003 in Table 8-1.
- b. Table 8-1 refers to peak day winter and summer demand. However, the winter and summer peak day figures in Table 8-1, after adjusting for transmission line losses, appear in Table 8-2 as coincident peak demands. Explain how a seasonal system peak day demand is equivalent to the coincident peak demand.
 - 21. Refer to EKPC's 2006 Load Forecast Report, page 78, Section 8.3.2.
- a. Explain whether EKPC included estimates of electricity price increases (its own increases from the recent and pending generation and transmission line construction or from rate increases that its member cooperatives might undertake) in forecasting electricity demand, in both Chapters 7 and 8. If so, explain what was assumed and how the price increases were taken into account in the forecasts.
- b. Explain and show how the loss of Warren RECC affects the electricity demand forecasts in both Chapters 7 and 8.
- c. In taking into account any effects that price increases have on electricity demand, explain whether price increases should be modeled for all rate classes, rather than for just the residential class. If modeled just for the residential

class, explain why the industrial and small commercial classes would not be sensitive to

price changes in a long range forecast.

22. Refer to EKPC's 2006 Load Forecast Report, page 78, Section 8.3.5.

Explain whether "90%/10% output" means 90 percent of the base case peak demand

scenario and 10 percent greater than the base case peak demand scenario?

23. Refer to EKPC's 2006 Load Forecast Report, page 78. Explain how the

five assumptions were used to calculate the high and low cases.

24. Refer to EKPC's 2006 Load Forecast Report, page 79, Table 8-3. Explain

whether Table 8-3 refers to peak day MW and MWh requirements.

25. Refer to Appendix B-4, Residential Appliance Saturation. Explain whether

computers, printers and other related equipment should be included in future surveys.

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DATED: _December 20, 2006_

CC:

All parties