COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter:

A JOINT APPLICATION FOR THE APPROVAL OF)		
OF DEMAND-SIDE MANAGEMENT PROGRAMS, A)		
DSM COST RECOVERY MECHANISM, AND A)	CASE NO.	93-150
CONTINUING COLLABORATIVE PROCESS ON DSM	ý		
FOR LOUISVILLE GAS AND ELECTRIC COMPANY)		

<u>O R D E R</u>

IT IS ORDERED that Louisville Gas and Electric Company ("LG&E") and its demand-side management collaborative ("Collaborative") shall file an original and 10 copies of the following information with this Commission, with a copy to all parties of record. 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. The response to this request is due no later than March 29, 1996.

1. In the response to Item 9 of the Commission's January 5, 1996 Order, the Collaborative stated that individual demand-side management ("DSM") screening results were not available for six new

programs. On March 4, 1996, the Collaborative filed a supplemental response which contained DSM screening results for each of the new programs.

- a. When did the Collaborative decide that these DSM screening tests should be performed?
- b. When were these DSM screening tests prepared by the Collaborative?
- 2. In the response to Item 9 of the Commission's January 5, 1996 Order, the Collaborative indicated that it was difficult to quantify the benefits for the six new programs which had not been individually screened. How is the Collaborative now able to quantify program benefits when it insisted two months ago that such a quantification was difficult and had not been performed?
- 3. In the response to Item 9 of the Commission's January 5, 1996 Order, the Collaborative indicated that the six new programs were not selected based upon their cost/benefit ratios but on their value to the customers.
 - a. Is this statement still valid?
- b. If yes, why has the Collaborative performed these DSM screening tests and submitted the results to the Commission?
- c. Does the Collaborative contend that the DSM screening results filed on March 4, 1996 support the adoption of these new programs? Explain.

- 4. In the March 4, 1996 filing, the pages contained in the appendices are not consecutively numbered. Provide an index to the March 4, 1996 filing. For each page included in the appendices, identify whether the results are based on the 20-year or the 5-year avoided cost assumption.
- 5. The March 4, 1996 filing contains the DSM screening results from these tests: the Participant Test, the Utility Test, the Ratepayer Impact Test, the Total Resource Test, and the Societal Test. The perspective of each test was described in Case No. 91-423.
- a. Are the DSM screening tests performed by the Collaborative consistent with the DSM tests described in the Commission's Staff Report issued in Case No. 91-423?
- b. If not, identify and explain the differences in the test perspectives between those described in Case No. 91-423 and those presented in the March 4, 1996 filing.
- 6. In reviewing the expected savings/benefits described for each program, it is not clear that the savings/benefits have been expressed on the same basis for each program. If not, prepare a schedule comparing the expected savings/benefits for each program

Case No. 91-423, A Review Pursuant to 807 KAR 5:058 of the 1991 Integrated Resource Plan of Louisville Gas and Electric Company. See Staff Report on the Integrated Resource Plan of the Louisville Gas and Electric Company, January 1993, at 3-12.

on the same basis, such as annual savings (KWh, KW, or MMBtu) per participant.

- 7. Were any of the DSM programs screened using inputs that differ from those shown in the March 4, 1996 supplemental response? If yes, provide copies of the alternative DSM screenings.
- 8. The DSM screening output for each program includes a load impacts summary which appears to model the customer prior to implementation of the specific program, the customer after implementation, and the difference or effect resulting from the program.
- a. Is this an accurate interpretation of the information supplied on the load impacts summary? If not, explain the correct interpretation.
- b. Explain why the savings/benefits for the following programs were identified as the "after" results rather than the "difference" on their respective load impacts summaries:
 - (1) Commercial Conservation Program.
 - (2) Commercial Not-for-Profit.
 - (3) Residential Energy Efficiency Product Program.
- 9. Appendix 1 to the March 4, 1996 filing contains the DSM screening results for the Commercial Conservation Program. This program was presented as an expansion of an existing program in the 1996 DSM Program Plan ("DSM Plan").

- a. Does the Collaborative now contend that the Commercial Conservation Program is a new program?
- b. If yes, what is its relationship to the previously existing program?
- c. Why were DSM screening tests performed on this program?
- d. Explain why this screening was not performed earlier.
- 10. In Appendix 1, the Collaborative indicated that a comprehensive evaluation report on Niagara Mohawk Power's ("NiMo") commercial audit program was used to develop many assumptions.
 - a. Provide three copies of this evaluation report.
- b. Explain why NiMo's evaluation report was used. Address these issues in this response:
- (1) How is NiMo's service territory similar to LG&E's?
 - (2) Is NiMo a combination energy utility?
- (3) How long has NiMo's commercial audit program been in effect?
 - (4) How similar is NiMo's program to LG&E's?
- 11. In Appendix 1, the Collaborative stated that it assumed a conservative implementation rate of only 60 percent compared to the NiMo program.
 - a. Why was this assumption necessary?

- b. Why is 60 percent considered conservative?
- c. How was this level of implementation determined? Include copies of any analyses, studies, or other documentation which support this determination.
- d. Did NiMo implement its programs for fewer customers than it originally planned? Explain.
- 12. The first page of Appendix 1 shows a distinction between "Level I" and "Level II" audits.
- a. What is the difference between a "Level I" and "Level II" audit?
- b. What impact, if any, do these different levels have on the costs associated with the audits?
- c. What impact, if any, do these different levels have on the measures to be implemented as a result of the audit? Identify the specific measures LG&E assumed would be implemented.
- d. Define the term "installed cost" as used in this analysis.
- 13. Based on the first page of Appendix 1, the average installed cost per audit in 1996 is approximately \$4,915 (\$1,720,228 divided by 350 audits). The average installed cost per audit in 1997 is approximately \$5,324 (\$2,396,019 divided by 450 audits). The program average cost is reported to be \$5,145. Reconcile these cost levels with the budget estimates reported on page 46 of the 1996 DSM Plan.

- 14. In Section 4.3 of the 1996 DSM Plan, page 41, the Collaborative indicated that the expansion of the existing commercial conservation program into new construction was the most cost effective opportunity to incorporate energy efficiency into a facility. However, in Case No. 93-425, the Staff Report noted that LG&E rejected a commercial construction building standards program because of high costs, difficulty in assessing impacts, and generally negative responses from utilities that had actually implemented that type of program.
- a. Reconcile LG&E's 1993 perspective on this program with the current position of the Collaborative.
- b. Identify any differences between the program reviewed by LG&E in 1993 with the new construction option proposed by the Collaborative.
- 15. Appendix 3 contains the DSM screening results from combining the two commercial programs. The benefit/cost tests summary report indicates that the amounts shown for Total Costs, Total Benefits, and Net Benefits are the sum of the same items for the individual benefit/cost tests presented in Appendices 1 and 2.

² Case No. 93-425, A Review Pursuant to 807 KAR 5:058 of the 1993 Integrated Resource Plan of the Louisville Gas and Electric Company.

Case No. 93-425, Staff Report on the Integrated Resource Plan Report of the Louisville Gas and Electric Company, March 1995, at 3-4.

- a. Why were the two commercial class programs screened together?
- b. Specifically identify any common or similar characteristics these two programs share.
- c. When screening the two commercial programs together, did the Collaborative review the individual program inputs to determine if some of the costs were duplicative? If not, explain why this step was omitted.
- 16. Appendix 5 contains the screening results for the residential new construction program.
- a. Identify the utility and the state-wide residential new construction program referenced on the first page of Appendix 5.
- b. Explain how the service territory and the construction program particulars compare with LG&E's proposal.
- c. Why did the Collaborative assume no free ridership when modeling this program?
- 17. Appendix 6 contains the screening results for the residential energy efficiency product program.
- a. Identify the utility referenced on the first page of Appendix 6.
- b. Explain how the service territory and the program particulars compare with LG&E's proposal.

- c. Provide three copies of the impact evaluation results referenced on the first page of Appendix 6.
- d. Why did the Collaborative assume no free ridership when modeling this program? Did the utility referenced on the first page of Appendix 6 assume some level of free ridership?
- 18. Appendix 7 contains the screening results for the residential energy efficiency product program.
- a. Explain how the Collaborative defined a "typical" older home and how the design heat losses and gains were determined. Include any analyses, studies, or other documentation which support the Collaborative's assumptions.
- b. Identify the HVAC distributor referenced on the first page of Appendix 7.
- 19. The DSM screening test results for the residential financing program showed different Total Benefit amounts for the Total Resource Test and the Societal Test. The difference appears to be related to a customer loan/lease received amount included in the Total Resource Test but excluded from the Societal Test. By definition, the Societal Test includes all of the costs and benefits included in the Total Resource Test, with the additional consideration of the costs and benefits associated with externalities.
- a. Why was this item excluded from the Societal Test calculations?

- b. Does the Collaborative consider the customer loan/lease received to be an externality? Explain.
- c. Why were there no externalities factored into the DSM screening tests for the other proposed new programs?
- 20. Appendix 9 contains the DSM screening results from combining the five residential programs. The benefit/cost tests summary report indicates that the amounts shown for Net Benefits are the sum of the same items for the individual benefit/cost tests presented in Appendices 4 through 8. However, the summary report indicates that the amounts shown for Total Costs and Total Benefits are not the sum of the same items for the individual tests presented in Appendices 4 through 8.
- a. Why were the five residential class programs screened together?
- b. Specifically identify any common or similar characteristics these programs share.
- c. When screening the residential programs together, did the Collaborative review the individual program inputs to determine if some of the costs were duplicative? If not, explain why this step was omitted.
- d. Explain how the sum for the Net Benefit individual results can match the consolidated residential class results, while the individual program results for Total Costs and Total Benefits do not match the consolidated residential class results.

21. In Section 6.0 of the 1996 DSM Plan, the Collaborative presented DSM screening results for the residential load management program and for all seven new programs in total. A comparison of the results (comparing B/C I with B/C II or B/C III with B/C IV) shows that the increase in Total Costs due to the other new programs being added to the load management Total Costs was \$1,117,800. This difference was constant for four of the five tests; no cost difference was reported in the Participant Test. The summation of the Total Costs reported for the same new programs in Appendices 2 and 5 through 8 were: Participant Test - \$5,590,150; Utility Test - \$2,127,510; Ratepayer Impact Test - \$13,692,150; Total Resource and Societal Tests - \$5,738,340.

a. Why are there such significant differences between the implied Total Costs impact filed in the 1996 DSM Plan and the Total Costs reported in the March 4, 1996 supplemental response?

b. Why did the Collaborative revise the costs included in the DSM screening results filed on March 4, 1996?

c. Which set of Total Costs assumptions reflects the Collaborative's expectations? Explain.

Done at Frankfort, Kentucky, this 15th day of March, 1996.

PUBLIC SERVICE COMMISSION

For the Commission

ATTEST:

Executive Director