

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE REQUEST OF EAST KENTUCKY POWER	)	
COOPERATIVE, INC. FOR A DETERMINATION OF	)	CASE NO.
REASONABLENESS OF A NEW DEMAND-SIDE	)	2006-00048
MANAGEMENT PROGRAM, DIRECT LOAD CONTROL	)	
OF WATER HEATERS AND AIR CONDITIONERS	)	

O R D E R

On January 31, 2006, East Kentucky Power Cooperative, Inc. ("East Kentucky") filed for a determination of reasonableness of a new voluntary demand-side management ("DSM") program entitled Direct Load Control ("DLC") of Water Heaters and Air Conditioners ("Program"). Although East Kentucky requests that the Commission review the Program and determine that it is reasonable under KRS 278.285, the statute which governs DSM programs, it is not at this time seeking to recover any costs related to the Program. This case was established to review the Program and the proposed tariff for the Program.

The Program is intended to reduce peak demand by curtailing air conditioner and water heater run time. East Kentucky member cooperatives, Big Sandy Rural Electric Cooperative Corporation ("Big Sandy") and Blue Grass Energy Cooperative Corp. ("Blue Grass"), have recently installed and are utilizing Automated Meter Reading ("AMR") systems. Due to the interests of these two cooperatives in this program and their AMR capability, it is proposed that they be authorized to offer this program.

DLC switches will be installed on each participant's central air conditioning or heat unit or heat pump. These switches will allow the unit to be cycled off for 15-minute periods. Through an AMR system, East Kentucky will be able to track load and usage levels and communicate with the switching devices on the units. Similar switching devices will also be installed on water heaters, and East Kentucky will communicate in the same manner with the water heating unit to cycle it off for a maximum of 4 hours. Given the function of a typical water heater, this cycling time is not expected to affect customer comfort. However, eligibility for the Program is limited to participants whose water heaters have a capacity of 40 gallons or more.

Similar programs have been successful throughout the electric utility industry. Two utilities subject to the Commission's jurisdiction, Louisville Gas and Electric Company and Kentucky Utilities Company, have had DLC programs for air conditioning units in place for several years.

East Kentucky proposes to limit the cycling to on-peak periods. This range includes the hours of 6:00 a.m.–12:00 p.m. and 4:00 p.m.–10:00 p.m. from October through April, and 10:00 a.m.–10:00 p.m. from May through September. East Kentucky plans to proceed with a pilot Program, placing switches on 400 water heaters and 400 air conditioning units at Blue Grass and 300 water heaters at Big Sandy. Customers will receive \$20 per participating air conditioning unit per summer and \$10 per participating water heater per year as credits on their bills. Customers will not be charged any fees to participate in the Program.

In its application, East Kentucky addressed issues relating to the Program's benefits/costs results, the annual costs it estimates it will incur for the Program, and the

involvement of its member cooperatives in conjunction with the Program. East Kentucky used the Standard California Cost Effectiveness Tests to analyze the benefits/costs of the Program, assuming that there are 5,000 participants. Its results therefrom, based on the Ratepayer Impact Test and the Total Resource Cost Test, showed the Program to be cost-effective.<sup>1</sup> The benefits were based on estimated reductions in winter peak demand of 1.03 kW and summer peak demand of 1.37 kW per participant.

East Kentucky intends to initiate the Program on a pilot basis, beginning June 1, 2006, and operate it through September 2007. East Kentucky estimates that its annual costs for the pilot Program will total \$296,000, including any rebates. It proposes to file a report with results of the project with the Commission by December 31, 2007.

The Commission, having considered the evidence of record and being otherwise sufficiently advised, finds that implementing the Program on a pilot basis is reasonable and consistent with the provisions of KRS 278.285 and should be approved as proposed. In the event that East Kentucky decides to temporarily extend the pilot DSM Program beyond September 30, 2007, while the results of the pilot are being analyzed, East Kentucky should file a new tariff no later than August 31, 2007.

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<sup>1</sup> The results under the various tests were: (1) ratepayer impact measure - 1.82 and (2) total resource cost test - 2.41. A result greater than 1.0 indicates that a program is cost-effective.

IT IS THEREFORE ORDERED that:

1. East Kentucky's pilot DSM Program to control 700 water heaters and 400 air conditioners is approved as proposed, effective June 1, 2006 through September 2007.

2. Within 20 days from the date of this Order, East Kentucky shall file its tariff for the new pilot DSM Program including its effective date and showing that it was approved by authority of this Order.

3. East Kentucky shall file a report on the pilot DSM Program approved herein no later than December 31, 2007.

4. Any temporary extension of the pilot DSM Program shall be set forth in a new tariff.

5. This case is closed and removed from the Commission's docket.

Done at Frankfort, Kentucky, this 18<sup>th</sup> day of April, 2006.

By the Commission

ATTEST:



Executive Director