#### COMMONWEALTH OF KENTUCKY

### BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF KENTUCKY POWER COMPANY	)
FOR COLLABORATIVE DEMAND-SIDE	)
MANAGEMENT PROGRAMS AND FOR AUTHORITY	)
TO IMPLEMENT A TARIFF TO RECOVER COSTS AND	) CASE NO.
NET LOST REVENUES AND RECEIVE INCENTIVES	) 2011-00300
ASSOCIATED WITH THE IMPLEMENTATION OF THE	)
KENTUCKY POWER COMPANY COLLABORATIVE	)
DEMAND-SIDE MANAGEMENT PROGRAMS	)

### ORDER

On August 15, 2011, Kentucky Power Company ("Kentucky Power") and its Demand-Side Management ("DSM") Collaborative ("Collaborative"), with the exception of the Office of the Attorney General of Kentucky ("AG"), filed a joint application with the Commission. The application included (1) a revised tariff containing revised DSM surcharges for Kentucky Power's residential and commercial customers to become effective on and after September 28, 2011, (2) requests to extend six long-term existing DSM programs for three years, through 2014, and (3) a request to extend another long-term existing program, the Modified Energy Fitness program, for two additional years, through 2013. Based upon its initial review of Kentucky Power's proposed tariff, the

<sup>&</sup>lt;sup>1</sup> The voting members of the Residential Class DSM Collaborative are: Kentucky Power; the AG; Community Action Kentucky; Northeast Kentucky Community Action Agency; Big Sandy Community Action Agency; Middle Kentucky Community Action Partnership, Inc.; Gateway Community Action Council; LKLP Community Action Council; Community Services - LINKS and BSADD Aging; and Kentucky Housing Corporation. The voting members of the Commercial Class DSM Collaborative are: Kentucky Power; the AG; Floyd County Schools; and Our Lady of Bellefonte Hospital.

Commission found in its September 1, 2011 Order that additional inquiry was necessary to determine the tariff's reasonableness and we suspended the proposed tariff for five months, up to and including February 28, 2012. The AG sought and was granted full intervention.

A procedural schedule was established allowing for two rounds of discovery. Kentucky Power was subject to one information request from the AG and two information requests from Commission Staff ("Staff"). An informal conference was held November 21, 2011 with another information request from Staff. Discovery is complete and the matter now stands submitted to the Commission for a decision based upon the record.

# DISCUSSION OF RECENTLY APPROVED PROGRAMS

Kentucky Power has five authorized residential and commercial DSM programs that were approved in Case Nos. 2010-00095<sup>2</sup> and 2010-00198.<sup>3</sup> These programs will remain unchanged through December 31, 2012. An Evaluation, Measurement, and Verification ("EM&V") will be performed on these five DSM programs by an external vendor during the first half of 2012. Kentucky Power will file the EM&V report with the

<sup>&</sup>lt;sup>2</sup> Case No. 2010-00095, Joint Application Pursuant to 1994 House Bill No. 501 for the Approval of Kentucky Power Company Collaborative Demand-Side Management Programs, and for Authority to Recover Costs, Net Lost Revenues and Receive Incentives Associated with the Implementation of One New Residential, One Combined Residential/Commercial, and One Commercial Demand-Side Management Program Beginning January 1, 2010 (Ky. PSC Aug. 10, 2010).

<sup>&</sup>lt;sup>3</sup> Case No. 2010-00198, Joint Application Pursuant to 1994 House Bill No. 501 for the Approval of Kentucky Power Company Collaborative Demand-Side Management Programs and for Authority to Recover Costs, Net Lost Revenues and Receive Incentives Associated with the Implementation of One New Combined Residential/Commercial and One Commercial Demand-Side Management Program Beginning August 2, 2010 (Ky. PSC Oct. 15, 2010).

Commission by August 15, 2012. Those programs, as described by Kentucky Power, are as follows:

- 1. Residential Efficient Products Program This program provides incentives and marketing through retailers to build market share and promote usage of Energy Star lighting products to reduce the amount of energy consumed by home lighting. This program was approved in Case No. 2010-00095.
- 2. Commercial High Efficiency Heat Pump/Air Conditioner Program This program offers a financial incentive to small commercial customers (less than 100 kW demand) who purchase a new qualifying central air conditioner or heat pump, up to a five-ton unit, with a Consortium for Energy Efficiency (CEE) Tier 1 rating and who comply with pertinent eligibility requirements of this program. In addition, the program offers financial incentives to dealers who sell these high efficiency units. This program targets the existing retrofit market only. The customer and dealer incentives are shown in the following table:

	Customer		
	Air Conditioner	Heat Pump	Dealer
36,000 or fewer Btu/hr	\$250	\$300	\$50
36,000 to 65,000 Btu/hr	\$400	\$450	\$50

Kentucky Power proposes to reduce the number of annual participants for 2011 from 120 to 65, due to lower than expected participation levels. Also, the 2011 budget amount shown on the status report is reduced from \$69,000 to \$47,100. The revised budget includes an increase for 2011 evaluation expense from \$2,000 to \$5,305.

In an effort to promote the program, Kentucky Power engaged in newspaper advertising in its service area for four weeks during the months of July 2011 and November 2011. Its representatives have also met with Heating Ventilation and Air Conditioning ("HVAC") dealers to promote the program and enlist their assistance in recruiting participants. The \$5,305 evaluation expense is based on the actual contract cost of the EM&V contractor. This program was approved in Case No. 2010-00095.

- 3. Residential and Commercial Heating, Ventilation, and Air Conditioning Diagnostic and Tune-Up Program This program works with participating licensed HVAC dealers and targets residential and small commercial customers with HVAC system performance problems. The objective of this program is to reduce energy usage by conducting a diagnostic performance check on unitary air conditioning and heat pump units, air restricted indoor and outdoor coils, and over/under refrigerant charges. The customer and dealer incentives are: residential \$50; commercial \$75; and dealer \$50. This program was approved in Case No. 2010-00095.
- 4. Commercial Incentive Program This program is designed to address cost-effective electricity savings measures not addressed or offered through other Kentucky Power programs. All commercial customers are eligible to participate and all projects must be pre-approved by Kentucky Power prior to purchase and installation of any equipment or materials. Eligible measures include lighting, HVAC, and motor and drive measures. Incentives for qualifying prescriptive measures will vary and will be provided to participating customers at the lesser of (1) a calculated incentive level, or (2) up to 50 percent of the incremental equipment cost of qualifying energy-efficient products (i.e., those costs above federal and/or state efficiency levels).

There were no participants in this program at the time of filing of the application; but as of December 8, 2011, there are sixty-two pending applications. Kentucky Power placed four weeks of advertisement with eight newspapers in its service area to promote this program. This program was approved in Case No. 2010-00198.

5. Residential and Small Commercial Load Management Program - The purpose of this program is to reduce peak demand through the installation of load control devices on residential and commercial central air conditioners, heat pumps and/or electric water heaters. This is accomplished by reducing the duty cycle of air conditioning equipment and turning off water heaters during peak periods. The customer incentives are in the following table:

	Residential	Commercial
Air Conditioner or Heat Pump per unit (1)	\$5	\$5
Electric Water Heater per unit (2)	\$1	\$1

- (1) Months of June, July, August, and September
- (2) Months of June, July, August, September, October, November, December, January, and February

Kentucky Power requests approval of a reduction in the number of annual participants for 2011 from 1,040 to 550 due to lower than expected participation levels. Also, the 2011 budget amount shown on the status report is reduced from \$613,415 to \$289.626.

Kentucky Power has promoted this program through two emails to its employees. The Company is currently working with five employee installations, which include ten switches, to test the equipment in anticipation of a January 2012 deployment. This program was approved in Case No. 2010-00198.

# DISCUSSION OF PROGRAMS PROPOSED TO BE EXTENDED

Kentucky Power requests Commission approval for a three-year extension, through 2014, of the following residential and commercial programs: Targeted Energy Efficiency, Community Outreach Compact Fluorescent Lights ("CFL"), Energy Education for Students, Mobile Home Heat Pump, Mobile Home New Construction, and High Efficiency Heat Pump. Kentucky Power also requests Commission approval for a two-year extension, through 2013, for the Modified Energy Fitness ("MEF") program. Kentucky Power evaluated these programs and determined them to be cost effective. The one program of concern is the MEF program; the primary concern being that homes of customers in newer, better-sealed homes are being weatherized, spending funds that otherwise could be used on less efficient and/or older homes, which would result in greater energy and demand savings. The two-year extension, rather than a three-year extension, means that the MEF program will be evaluated sooner for cost effectiveness. The following are descriptions of programs to be extended:

1. Targeted Energy Efficiency Program - This is a residential weatherization program, promoted solely through the Community Action Agencies, designed to improve energy efficiency ("EE") for low-income customers through energy audits coupled with installation of various energy conservation measures for both all-electric and non-all electric customers. Measures include energy audit; inspection of heating equipment; weather-stripping; caulking of windows and exterior doors; blower door analysis with air and duct sealing; water heater blanket, pipe insulation, and thermostat setback; attic, floor, and wall insulation; CFL bulbs; and structural repairs that have EE value.

- 2. Community Outreach CFL Program This program is designed to promote the conservation and efficient use of electricity by encouraging the use of energy efficient Energy Star CFL bulbs in place of incandescent light bulbs in residential homes.
- 3. Energy Education for Students Program This program is designed as both an energy education program and a program to promote energy efficient lighting in residential homes. Kentucky Power works with the Kentucky National Energy Education Development project to provide energy education materials to participating middle schools. Each seventh grade student at the participating schools receives a package of four CFLs.
- 4. Mobile Home Heat Pump Program This program is designed to promote a more efficient HVAC system for mobile homes. The program is promoted through HVAC contactors. Incentives are paid to both the HVAC dealers and the customers who purchase high-efficiency heat pumps to replace their existing electric furnaces. The customer incentive is \$400 and the dealer incentive is \$50. Approximately 80 percent<sup>4</sup> of the HVAC dealers in Kentucky Power's service territory participate in this program.
- 5. Mobile Home New Construction Program This program is designed to lower usage in new mobile homes by paying incentives to mobile home dealerships and the customers who purchase new mobile homes with high efficiency heat pumps and Zone 3 insulation packages. The customer incentive is \$500 and the dealer incentive is \$50.

<sup>&</sup>lt;sup>4</sup> See Application at Tab 3, Evaluation Report Mobile Home Heat Pump, page 6.

- 6. High Efficiency Heat Pump Program This program is designed to reduce residential electric energy consumption by upgrading less efficient electric heating and cooling systems with high-efficiency heat pumps. The customer incentive is \$400 and the dealer incentive is \$50.
- 7. Modified Energy Fitness Program This program is designed to promote conservation and efficient use of electricity by improving the energy fitness of electrically heated residences with a minimum average monthly usage of at least 1,000 kWh. The measures include energy audits, blower door testing, caulking and weather-stripping, three faucet aerators, two low-flow showerheads, one CFL, hot-water pipe insulation, duct sealing, a water heater wrap, a door sweep, hot-water heater temperature turn-down, and programmable thermostat. An audit report is also provided recommending additional actions the homeowner could take. There is no income level requirement with this program.

## COMMISSION'S CONCERN AS TO PROMOTION AND PARTICIPATION

As noted earlier in this Order, Kentucky Power has requested authority to reduce both the projected participation levels and program budget amounts for the Commercial High Efficiency Heat Pump/Air Conditioner Program and the Residential and Small Commercial Load Management Program. Even though the Commission will grant this request, it must express its concern regarding any reduction in participation and the budget for any DSM program.

In June 2010, as result of a settlement, Kentucky Power was authorized to increase base rates for its residential and most of its commercial customers by more

than 16 percent.<sup>5</sup> In addition, in a pending case, Kentucky Power has requested authority to construct a Dry Flue Gas Desulfurization system and related facilities at its Big Sandy Plant's Unit 2 which could result in a proposed rate increase of 31.40 percent for its ratepayers.<sup>6</sup>

The Commission realizes that customer participation in DSM is voluntary and that Kentucky Power cannot compel greater participation; however, the Commission believes that most well-informed customers would choose to participate in DSM programs to avoid higher energy bills. Therefore, the Commission strongly encourages Kentucky Power to promote its DSM programs, educate applicable customers who would qualify for DSM program participation, and work to increase participation levels in its DSM programs. The Commission, also, strongly encourages Kentucky Power to educate its customers about the need for greater energy efficiency due to the rising cost of electric energy and the strain that the demand of electric usage at peak times places on both the Kentucky Power and the American Electric Power systems. We believe that Kentucky Power should make every effort to educate its customers that participation in demand-side programs represents one way in which the customers can impact the extent to which ever-increasing energy costs increase their electric bills.

The Commission will closely monitor Kentucky Power's efforts to develop and promote cost-effective DSM programs.

<sup>&</sup>lt;sup>5</sup> Case No. 2009-00459, Application of Kentucky Power Company for a General Adjustment of Electric Rates (Ky. PSC Jun. 28, 2010).

<sup>&</sup>lt;sup>6</sup> Case No. 2011-00401, Application of Kentucky Power Company for Approval of its 2011 Environmental Compliance Plan, for Approval for its Amended Environmental Cost Recovery Surcharge Tariff, and for the Grant of a Certificate of Public Convenience and Necessity for the Construction and Acquisition of Related Facilities, filed Dec. 5, 2011.

## SUMMARY

Based on the evidence of record and being otherwise sufficiently advised, the Commission finds that:

- 1. Kentucky Power has kept the Commission informed of the progress and status of its DSM programs by timely filing summary status reports on these programs.
- 2. Kentucky Power's proposed residential and commercial DSM surcharge factors contained in its August 15, 2011 application are in error and should be denied due to: (1) incorrect lost revenue factors for the Commercial High Efficiency Heat Pump/Air Conditioner Air Conditioner and Heat Pump Replacement Program and Commercial Incentive Program; and (2) incorrect allocation of program costs in the third and fourth quarters of 2011 for the following programs: Residential Efficient Products LED Lights; Residential Load Management Air Conditioning and Water Heating; Commercial High Efficiency Air Conditioning/Heat Pump Heat Pump Replacement; and Commercial HVAC Diagnostic and Tune-up Heat Pump.
- 3. Kentucky Power's corrected proposed residential and commercial DSM surcharge factors as provided in its September 30, 2011 data response,<sup>7</sup> reflecting recovery of costs associated with the implementation of its DSM programs, including net lost revenues and incentives associated with the programs, are reasonable and should be approved.
- 4. Kentucky Power's proposed decreases in the target participation levels of the Commercial High Efficiency Heat Pump/Air Conditioner Program and Residential and Small Commercial Load Management Program are reasonable and should be

<sup>&</sup>lt;sup>7</sup> See Kentucky Power's response to Staff Second Information Request, Item No. 31, Attachment 1, page 1.

approved. As noted above, however, the Commission strongly encourages Kentucky Power to make every effort to educate its customers about the value of energy efficiency and DSM programs in order to increase customer participation in these programs.

- 5. Kentucky Power's proposed increase for 2011 evaluation expense from \$2,000 to \$5,305 for the Commercial High Efficiency Heat Pump/Air Conditioner Program is reasonable and should be approved.
- 6. Kentucky Power's request for a three-year extension, through 2014, of the following programs: Targeted Energy Efficiency; Community Outreach CFL; Energy Education for Students; Mobile Home Heat Pump; Mobile Home New Construction; and High Efficiency Heat Pump is reasonable and should be approved.
- 7. Kentucky Power's request for a two-year extension, through 2013, of the Modified Energy Fitness Program is reasonable and should be approved.

#### IT IS THEREFORE ORDERED that:

- Kentucky Power's proposed residential and commercial DSM surcharge factors contained in its August 15, 2011 application are denied.
- 2. Kentucky Power's corrected proposed residential and commercial DSM surcharge factors as shown in its September 30, 2011 response<sup>8</sup> are approved effective for service rendered on and after January 31, 2012.
- 3. Kentucky Power's proposed decreases in the target participation levels of the Commercial High Efficiency Heat Pump/Air Conditioner Program and Residential and Small Commercial Load Management Program are approved.

<sup>&</sup>lt;sup>8</sup> <u>Id.</u>

- 4. Kentucky Power's proposed increase for 2011 evaluation expense from \$2,000 to \$5,305 for the Commercial High Efficiency Heat Pump/Air Conditioner Program is approved.
- 5. Kentucky Power's request for a three-year extension, through 2014, of the following programs: Targeted Energy Efficiency; Community Outreach CFL; Energy Education for Students; Mobile Home Heat Pump; Mobile Home New Construction; and High Efficiency Heat Pump is approved.
- 6. Kentucky Power's request for a two-year extension, through 2013, of the Modified Energy Fitness Program is approved.
- 7. Within 10 days of the date of this Order, Kentucky Power shall file a revised tariff showing the date of issue and that it was issued by authority of this Order.

By the Commission

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KENTUCKY PUBLIC
RVICE COMMISSION

Executive Director

Lawrence W Cook Assistant Attorney General Office of the Attorney General Utility & Rate 1024 Capital Center Drive Suite 200 Frankfort, KENTUCKY 40601-8204

Lila P Munsey Manager, Regulatory Services Kentucky Power 101A Enterprise Drive Frankfort, KENTUCKY 40601