

**COMMONWEALTH OF KENTUCKY**

**RECEIVED**

**BEFORE THE**

**MAR 14 2014**

**PUBLIC SERVICE  
COMMISSION**

**PUBLIC SERVICE COMMISSION OF KENTUCKY**

**IN THE MATTER OF**

**APPLICATION OF KENTUCKY POWER COMPANY )  
TO AMEND ITS DEMAND-SIDE MANAGEMENT )  
PROGRAM AND FOR AUTHORITY TO IMPLEMENT )  
A TARIFF TO RECOVER COSTS AND NET LOST )  
REVENUES AND TO RECEIVE INCENTIVES )  
ASSOCIATED WITH THE IMPLEMENTATION OF )  
THE PROGRAMS )**

**Case No. 2013-00487**

**KENTUCKY POWER COMPANY RESPONSES TO  
COMMISSION STAFF'S SECOND SET OF DATA REQUESTS**

**March 14, 2014**





## Kentucky Power Company

### REQUEST

Refer to the response to Item 2 of Commission Staff's First Request for Information ("Staff's First Request") to Kentucky Power which states, ". . . and new School Energy Management program estimated at \$6,250 were not shown as individual program pages within the Status Report." Also, refer to paragraph 12 of the Stipulation and Settlement Agreement in Case No. 2012-00578,<sup>1</sup> which states, "The annual DSM funding level for this program will be \$75,000 in 2014."

- a. Explain the new School Energy Management program amount of \$6,250, and how and when this amount will be recovered through the commercial demand-side management ("DSM") factor.
- b. Explain how and when the \$75,000 for the new School Energy Management program will be recovered through the commercial DSM factor.

### RESPONSE

- a/b. The Stipulation and Settlement agreement indicated that \$75,000 would be spent during 2014 for the School Energy Management program. The Company, working with the Kentucky School Board Association, would like to expand the program to include enough funding to have energy managers across the entire Kentucky Power service territory.

This expanded program is possible only if the \$75,000 committed by Kentucky Power can be used throughout the company's service territory. For 2014, the Company's portion of the program expense was \$81,250. The first \$75,000 of the Company's portion is funded by Kentucky Power shareholders. The remaining funding (\$6,250) would be collected through the commercial DSM factor which would be a part of the next DSM annual filing.

**WITNESS:** E J Clayton

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<sup>1</sup> Case No. 2012-00578, Application of Kentucky Power Company for (1) a Certificate of Public Convenience and Necessity Authorizing the Transfer to the Company of an Undivided Fifty Percent Interest in the Mitchell Generating Station and Associated Assets; (2) Approval of the Assumption by Kentucky Power Company of Certain Liabilities in Connection with the Transfer of the Mitchell Generating Station; (3) Declaratory Rulings; (4) Deferral of Costs Incurred in Connection with the Company's Efforts to Meet Federal Clean Air Act and Related Requirements; and (5) All Other Required Approvals and Relief (Ky. PSC Oct. 7, 2013).



## **Kentucky Power Company**

### **REQUEST**

Refer to the response to Item 4 of Staff's First Request to Kentucky Power, which states, "Ten heat pumps are planned for installation in 2014."

- a. Explain why no heat pumps ("HP") were installed in 2013, while ten HPs are planned for 2014.
- b. Explain whether there was a conference call or meeting in 2012 with community action agencies to discuss 2013 participation.

### **RESPONSE**

- a. Based upon information received in conference calls with Community Action agencies, the cost of contracting an HVAC dealer to install heat pumps made the measure too expensive on the MHEA audit per the CAA guidelines. Community Action agencies have been trying to acquire trained HVAC personnel to perform the installation work internally, which is why ten heat pumps are planned for installation in 2014.
- b. Yes. A meeting was held with Community Action agencies in 2012 to discuss the 2013 participation levels. Their input was sought prior to finalizing the program's annual goals.

**WITNESS:** E J Clayton



## Kentucky Power Company

### REQUEST

Refer to the response to Item 17 of Staff's First Request to Kentucky Power.

- a. In Case No. 2012-00367,<sup>2</sup> the following programs were not cost effective: Commercial Incentive Program; Residential Heating Ventilation and Air Conditioning ("HVAC") Diagnostic and Tune-Up Program; Small Commercial HVAC Diagnostic and Tune-Up Program; and Commercial High Efficiency Heat Pump/Air Conditioner Program. Explain how these programs are now cost-effective.
- b. Provide a table of results of the standard California tests, including Utility Cost Test, Ratepayer Impact Measure, Participant Test, and the Total Resource Cost for each program in Kentucky Power's DSM portfolio.

### RESPONSE

- a. The programs listed are currently administered using approved recommendations from the 2012 program evaluations. The prospective (future) economics of the programs are based on improved performance resulting from the implementation of program recommendations.
- b. See attachment for retrospective and prospective test results.

**WITNESS:** E J Clayton

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<sup>2</sup> Case No. 2012-00367, Application of Kentucky Power Company to Amend its Demand-Side Management Program for Authority to Implement a Tariff to Recover Costs and Net Lost Revenues, and to Receive Incentives Associated with the Implementation of the Programs (Ky. PSC Feb 22, 2013).



Kentucky Power Company  
Program Economic Test

|   | Utility Cost Test (UCT) | Ratepayer Impact Measure (RIM) | Participant Cost Test (PCT) | Total Resource Cost (TRC) | Utility Cost Test (UCT) | Ratepayer Impact Measure (RIM) | Participant Cost Test (PCT) | Total Resource Cost (TRC) |
|---|-------------------------|--------------------------------|-----------------------------|---------------------------|-------------------------|--------------------------------|-----------------------------|---------------------------|
|   | <u>Retrospective</u>    | <u>Retrospective</u>           | <u>Retrospective</u>        | <u>Retrospective</u>      | <u>Prospective</u>      | <u>Prospective</u>             | <u>Prospective</u>          | <u>Prospective</u>        |
| <b>Program - Residential</b>                |                         |                                |                             |                           |                         |                                |                             |                           |
| Targeted Energy Efficiency                  | 1.59                    | 0.58                           | N/A                         | 1.59                      | 1.95                    | 0.68                           | N/A                         | 1.95                      |
| Mobile Home High Efficiency Heat Pump       | 3.72                    | 0.74                           | 8.00                        | 5.23                      | 4.72                    | 0.88                           | 8.24                        | 6.41                      |
| Mobile Home New Construction                | 1.67                    | 0.53                           | 3.66                        | 2.25                      | 1.78                    | 0.60                           | 3.84                        | 2.64                      |
| Modified Energy Efficiency                  | 0.90                    | 0.46                           | N/A                         | 1.15                      | 1.07                    | 0.55                           | N/A                         | 1.37                      |
| High Efficiency Heat Pump                   | 2.27                    | 0.65                           | 2.21                        | 1.74                      | 2.72                    | 0.74                           | 2.24                        | 2.03                      |
| Community Outreach CFL                      | 3.47                    | 0.52                           | N/A                         | 4.17                      | 2.73                    | 0.62                           | N/A                         | 3.91                      |
| Energy Education for Students               | 1.79                    | 0.44                           | N/A                         | 2.04                      | 1.28                    | 0.47                           | N/A                         | 1.65                      |
| HVAC Diagnostic and Tune-up - Residential   | 0.88                    | 0.35                           | 2.44                        | 0.71                      | 1.32                    | 0.41                           | 2.82                        | 1.03                      |
| Residential Efficient Products <sup>1</sup> | 4.22                    | 0.45                           | 6.02                        | 2.39                      | N/A                     | N/A                            | N/A                         | N/A                       |
| <b>Program - Commercial</b>                 |                         |                                |                             |                           |                         |                                |                             |                           |
| HVAC Diagnostic and Tune-up - Commercial    | 0.75                    | 0.32                           | 3.57                        | 0.75                      | 1.10                    | 0.38                           | 4.22                        | 1.10                      |
| Small Commercial Heat Pump/Air Conditioner  | 0.75                    | 0.37                           | 3.01                        | 0.76                      | 1.34                    | 0.47                           | 2.56                        | 1.18                      |
| Commercial Incentive                        | 0.60                    | 0.30                           | 15.52                       | 0.63                      | 0.86                    | 0.36                           | 6.61                        | 1.09                      |

1. Prospective analysis was not provided in the 2012 evaluation of the Residential Efficient Products program. The program was cost effective based on retrospective analysis.



## Kentucky Power Company

### REQUEST

Refer to the response to Item 6 of Alexander DeSha and Sierra Club's Initial Set of Data Requests.

- a. Identify the programs that were active in years 2010 and 2013.
- b. Provide, by program, an explanation for the change in kWh impact savings for year 2010 compared to year 2013 for the programs identified in response to part a. of this request, regardless of whether the change is an increase or decrease.

### RESPONSE

- a. The following DSM programs were active in 2010 and 2013:

#### Residential

Targeted Energy Efficiency  
Mobile Home High Efficiency Heat Pump  
Mobile Home New Construction  
Modified Energy Efficiency  
High Efficiency Heat Pump  
Community Outreach CFL  
Energy Education for Students  
HVAC Diagnostic and Tune-up

#### Commercial

HVAC Diagnostic and Tune-up

- b. Kentucky Power understands that the changes in the kWh impact savings between 2010 and 2013 were driven primarily by changes in participation and changes in the programs resulting from intervening program evaluations. Specific details regarding the individual programs are presented below.

## Residential Programs

### Targeted Energy Efficiency

The impact savings decreased from 2010 to 2013 due to a 68% decrease in participation and also because of an 11% decrease in the participant impact savings. In 2010, the Community Action Agencies had access to funding from the American Recovery and Reinvestment Act of 2009 (ARRA) supporting more crews for energy efficiency and weatherization services. The ARRA funding ended in 2012 (KPSC Case No. 2012-00367 Item 1 Commission Staff's First Set of Data Request).

### Mobile Home High Efficiency Heat Pump

The total Impact savings in 2013 increased even though the program participation decreased from 233 in 2010 to 190 in 2013 but an increase in the per participant impact savings of approximately 48% resulted from change to the program following the 2011 evaluation.

### Mobile Home New Construction

Overall impact savings decreased from 2010 to 2013 primarily due to a 46% decrease in participants and a 2% decrease in per participant impact savings. The decrease in program participants reflects the 44% reduction in manufactured housing dealers participating in the program from 2010 to 2013. Seven of the twenty five participating dealerships from 2010 are closed.

### Modified Energy Efficiency

The total Impact savings decreased from 2010 to 2013 due to a 20% decrease in per participant impact savings between 2010 and 2013. Participation remained constant at around 1200 participants.

### High Efficiency Heat Pump

Total Impact savings decreased from 2010 to 2013 due to a 27 % reduction in participation and a 30% decrease in per participant impact savings.

### Community Outreach CFL

Overall impact savings increased from 2010 to 2013 due to an increase in participation of 4% and a 36% increase in per participant impact savings as a result of program changes following the 2011 program evaluation.

### Energy Education for Students

Total impact savings for this program increased from 2010 to 2013 due to a 44% increase in participation. Also, the per participant impact savings increased by 51% as a result of program changes following the 2011 program evaluation.

### HVAC Diagnostic and Tune Up - Residential

Overall impact savings increased from 2010 to 2013 due to an increase in participation of 457% and an increase in the per participant impact savings of 60%.

**Commercial Program**

**HVAC Diagnostic and Tune Up - Commercial**

The total Impact savings increased from 2010 to 2013 due to an increase in participation by 1500% and an increase in the per participant impact savings by 13%.

- a. The programs listed are currently administered using approved recommendations from the 2012 program evaluations. The prospective (future) economics of the programs are based on improved performance resulting from the implementation of program recommendations.
- b. See attachment for retrospective and prospective test results.

WITNESS: E J Clayton