

# Attachment

1

**KENTUCKY POWER COMPANY**

**REQUEST**

By program, provide a schedule of the proposed program costs for 2015.

**RESPONSE**

	Sum of First Half Year	Sum of Second Half Year	Forecast
<b>Total Expense</b>			
<b>Commercial</b>			
Commercial Incentive	610,150.99	856,419.66	1,466,570.65
Commercial High Efficiency Heat Pump/Air Conditioning	3,300.00	4,950.00	8,250.00
General Administrative and Promotion Commercial	111,548.00	0.00	111,548.00
School Energy Management	0.00	0.00	0.00
<b>Commercial Total</b>	<b>724,998.99</b>	<b>861,369.66</b>	<b>1,586,368.65</b>
<b>Residential</b>			
Residential Efficients Products	530,380.91	530,368.11	1,060,749.02
Mobile Home High Efficiency Heat Pump	55,659.09	49,690.91	105,350.00
Mobile Home New Construction	37,390.32	49,109.68	86,500.00
High Efficiency Heat Pump	150,300.00	146,450.00	296,750.00
Targeted Energy Efficiency	133,225.00	161,025.00	294,250.00
Modified Energy Fitness	379,111.41	462,638.99	841,750.40
Community Outreach Compact Fluorescent Lighting	18,108.89	22,872.41	40,981.30
Energy Education for Students	10,727.27	11,665.73	22,393.00
NEW Residential Home Performance	171,600.00	257,400.00	429,000.00
NEW Appliance Recycling	37,480.27	103,070.73	140,551.00
General Administrative and Promotion Residential	111,548.00	0.00	111,548.00
<b>Residential Total</b>	<b>1,635,531.16</b>	<b>1,794,291.56</b>	<b>3,429,822.72</b>
<b>Total Expense Total</b>	<b>2,360,530.15</b>	<b>2,655,661.22</b>	<b>5,016,191.37</b>

**WITNESS:** Ranie K Wohnhas

**Kentucky Power Company**

**REQUEST**

- a. Refer to the response to Alexander DeSha and Sierra Club's Initial Requests for Information, Item 2, which states the Total Costs as of August 31, 2014, is \$1,871,141.61 and the Total Estimated 2014 Cost (as filed) is \$4,078,189.78.
- b. Provide the current year-to-date ("YTD") total DSM program costs for September 2014 and provide the total YTD DSM program costs for the months ending October, November, and December 2014 when they become available.
- c. Explain how Kentucky Power plans to meet the estimated \$4.08 million goal by December 31, 2014, in accordance with Case No. 2012-00578<sup>1</sup>
- d. Explain how Kentucky Power plans to meet the estimated \$5 million goal for 2015 and \$6 million for 2016 and beyond, in accordance with Case No. 2012-00578.<sup>2</sup>
- e. If Kentucky Power were not to expend \$4.08 million in DSM funds for 2014, explain how Kentucky Power would propose to comply with the conditions in the Settlement Agreement in Case No. 2012-00578<sup>3</sup>

**RESPONSE**

- a. \$2,160,018.67 ending September 2014.

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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).

<sup>2</sup> Id.

<sup>3</sup> Id.

- b. Four DSM programs were below the spending target for the nine months ending September 2014. These programs are the Commercial Incentive program, Modified Energy Fitness, Targeted Energy Efficiency, and the Energy Education for Students.

Activities to develop or complete customer participation and/or commercial projects resulting in target spending by the end of year include:

The Energy Education for Students program current shortfall is expected to be eliminated by year's end.

#### Commercial Incentive

- E-mail outreach to over 1,000 commercial accounts on October 30.
- E-mail outreach to over 1,000 commercial accounts on November 14.
- E-mail outreach to over 2,000 accounts in Southeast Kentucky through the Chamber of Commerce.
- Door-to-door canvassing blitzes in multiple communities to generate small projects and program awareness
- Follow-up on direct mail campaign to identify projects.
- Continued direct mail campaign targeting an additional 1,000 small businesses.
- Continued outreach with Express contractors.
- WebEx presentation with Kentucky Power Customer Service personnel to promote program and identify new opportunities for commercial customer projects.
- Continued outreach with electrical contractors and electrical supply dealers to identify potential customer projects.

#### Targeted Energy Fitness

- Conference calls with Community Action Agency (CAA) Weatherization personnel.
- Opportunities for customer heat pump replacement identified for specific agencies.
- The Community Action Agencies receive weatherization program funding from multiple sources. The agencies relied more heavily upon LIHEAP and DOE funds through the 3<sup>rd</sup> quarter of 2014 than they will in the fourth quarter. Beginning the second half of 2014 the agencies have expanded their use of Company DSM funds to increase crew assignments and expanded weatherization services for several agencies. This increase will contribute to the Company's ability to meet its 2014 spending target.

Modified Energy Fitness

- One permanent auditor and four temporarily reassigned auditors have been added to the Kentucky Power service area, for a total of seven auditors, to achieve the increased target of weatherizing 2,000 homes.
- Rigorous auditing guidelines have been implemented to assure customers receive the maximum value of weatherization measures and services per home.
- Promotional brochures are delivered to homeowners receiving an audit with request to deliver to family and neighbors who would be eligible for home weatherization services.
- Further Press releases describing the program through targeted media.
- Coordinating customer notifications for weatherization services with Kentucky Power marketing events within the community.
- Direct mail campaign to customers.
- Radio ad campaign promoting the program.

In addition, several programs including Residential Efficient Products and Community Outreach CFL may exceed the program spending targets as a result of customer demand for program products and services.

- c. The Company is adding two new programs in 2015 to expand the DSM portfolio. This will result in increased DSM spending of \$569,551. The Company also has proposed modifying and expanding several existing DSM programs through this proceeding. Please see Staff\_2\_5\_Attachment1 for the forecasted budget.

Other internal opportunities for new or expanded DSM programs will be evaluated during the first half of 2015, in conjunction with the Company's evaluation from the results from the Market Potential Study. All new or expanded programs would be submitted for approval with our next DSM Status Report scheduled for August 15, 2015 with implementation to begin in late 2015, or 2016.

- d. First, the Company as stated in b above, is making every effort to meet the 2014 target. If the Company fails to meet its 2014 targeted spend level, the Company would add the deficiency to its targeted level for 2015 and would need to modify its 2015 levels above what is currently projected in c above.

**November 26, 2014 Supplemental Response**

a. The total YTD DSM program costs ending October 2014 is \$2,519,018.36.

**December 15, 2014 Supplemental Response**

a. The total YTD DSM program costs ending November 2014 is \$2,853,222.27

**January 16, 2015 Supplemental Response**

a. The total YTD DSM program costs ending December 2014 was \$3,736,548.97. The Company intends to “roll-over” the \$ 263,451.03 difference between this amount and the \$4,000,000 amount required by paragraph 12 of the July 2, 2013 Stipulation and Settlement Agreement in Case No. 2012-00578 by adding it to the \$5,000,000 required to be expended in 2015.

**WITNESS:** Ranie K Wohnhas

**Kentucky Power Company**

**REQUEST**

Referring to the Application at 3 and Exhibit 2, please provide updated year-to-date total DSM/EE costs for 2015, including total program costs, incentive payments and realized lost revenues and indicating the costs of each of these three categories. Please also provide updated projected estimates for the entire 2015 year, if available.

**RESPONSE**

YTD DSM Total Cost through September 2015: \$3,758,591.  
YTD Incentives through September 2015: \$426,662.  
YTD Lost Revenues through September 2015: \$1,036,366.

Projected 2015 DSM Total Cost: \$5,288,083.  
Projected 2015 Incentives: \$607,031.  
Projected 2015 Lost Revenues: \$1,086,072.

**WITNESS:** John A Rogness

**Kentucky Power Company**

**REQUEST**

Please provide the projected incremental energy savings for each of the years 2016 through 2018, expressed in both kilowatt hours and as a percentage of retail sales, for each program in KPC's DSM plan and for the plan as a whole

**RESPONSE**

Please see [KPCO\\_R\\_SC\\_11\\_Attachment1.xls](#) for this response.

**WITNESS:** John A Rogness



Sierra Club Question No. 11 Revised

Sector	Program Name	kWh Savings			% Retail Sales			
		2016	2017	2018	2016	2017	2018	
Residential	Residential Efficient Products	7,484,386	7,359,356	7,147,337	0.11%	0.11%	0.11%	
Residential	Appliance Recycling	322,450	333,625	344,800	0.00%	0.01%	0.01%	
Residential	New Manufactured Homes	271,678	284,977	298,277	0.00%	0.00%	0.00%	
Residential	Whole House Efficiency	2,596,412	2,810,363	3,013,367	0.04%	0.04%	0.05%	
Residential	Residential Home Performance	9,604,000	11,760,000	11,760,000	0.15%	0.18%	0.18%	
Residential	Targeted Energy Efficiency	443,798	443,798	443,798	0.01%	0.01%	0.01%	
Residential	Community Outreach	172,000	172,000	172,000	0.00%	0.00%	0.00%	
Residential	School Energy Education	147,400	147,400	147,400	0.00%	0.00%	0.00%	
Commercial	Commercial Incentive Program	3,029,302	3,180,519	3,312,525	0.05%	0.05%	0.05%	
Commercial	Express Install	710,842	799,697	888,552	0.01%	0.01%	0.01%	
Commercial	New Construction	216,885	216,885	216,885	0.00%	0.00%	0.00%	
Commercial	School Energy Manager	558,200	558,200	558,200	0.01%	0.01%	0.01%	
Commercial	Retrocommissioning	694,022	694,022	694,022	0.01%	0.01%	0.01%	
	<b>Total Portfolio</b>	<b>26,251,376</b>	<b>28,760,843</b>	<b>28,997,162</b>	<b>0.40%</b>	<b>0.44%</b>	<b>0.44%</b>	
	<b>Portfolio as a % Kentucky Power Sales</b>	<b>0.40%</b>	<b>0.44%</b>	<b>0.44%</b>				

Forecast

6,601,615,330

6,609,766,367

6,614,651,771

**Kentucky Power Company**

**REQUEST**

For each of the following programs, please provide the expected change in demand and energy savings for each program from 2015 to 2016:

- a. Residential Efficient Products
- b. Appliance Recycling Program
- c. Targeted Energy Efficiency Program
- d. Energy Education for Students
- e. Community Outreach CFL Program

**RESPONSE**

Please see [KPCO\\_R\\_SC\\_19\\_Attachment1.xlsx](#) for the requested information.

**WITNESS:** John A Rogness

KPCO Response to Sierra Club Data Request No. 19 - Revised

	Gross Participant Energy Savings at Meter (kWh)		Change Energy savings (kWh)	Gross Participant Demand Savings at Meter (MW)		Change Demand Savings (MW)
	2015	2016		2015	2016	
Residential Efficient Products	17,090,538	9,473,906	-7,616,632	1,645	973	-672
Targeted Energy Efficiency	341,279	526,835	185,556	76	162	86
Community Outreach Compact Fluorescent Lighting	560,836	400,000	-160,836	58	44	-14
Energy Education for Students	210,700	220,000	9,300	23	24	1
Appliance Recycling	507,150	460,643	-46,507	44	56	12
<b>Total</b>	<b>18,710,503</b>	<b>11,081,384</b>	<b>-7,629,119</b>	<b>1,845</b>	<b>1,259</b>	<b>-586</b>

Note: 2016 data revised to match Benecost design model and rounded values represented by Table 4-22 & Table 4-24 Exhibit 6

## **Kentucky Power Company**

### **REQUEST**

Refer to Applied Energy Group, Inc.'s ("AEG") Market Potential Assessment Final Report ("Potential Assessment") filed July 30, 2015, pursuant to the Commission's final Order in Case No. 2014-00271 ,(See Footnote below) Executive Summary, page 3.

- a. An overall conclusion notes the largest potential for energy efficiency savings exists within the residential sector through lighting, water heating, and cooling measures. Explain how Kentucky Power's new and modified Demand Side Management ("DSM") programs support this finding.
- b. An overall conclusion is that the industrial sector has untapped savings potential with regard to applying variable speed drives to motor end uses. Explain why Kentucky Power did not propose an industrial DSM program involving motor end uses, and how it intends to address this finding in the future.
- c. An overall conclusion is that there is some potential savings through a Time of Use rate for medium and large commercial and industrial customers. Explain how Kentucky Power will address this finding.
- d. Provide the cost for the Potential Assessment and how it is to be either charged or recovered.

### **RESPONSE**

- a. Each end use identified in the Residential sector of the Market Potential Assessment is represented in the proposed DSM programs. Lighting measures are included in the Residential Efficient Products, Whole House Efficiency, and Targeted Energy Efficiency programs. Water heating and cooling (mainly in the form of insulation savings for cooling) measures are included in the Whole House Efficiency and Targeted Energy Efficiency programs.
- b. Industrial customers' participation in the Company's DSM programs is voluntary and all have exercised their option to opt out of the program. The Commercial Prescriptive Custom and New Construction programs include incentive measures for customer projects

having variable speed drive application. These programs are readily adaptable for industrial customers. Please also see the Company's response to KPSC 1-30.

- c. Page 16 of the Demand Response Analysis of the Market Potential Assessment indicates the Time of Use rates will not be cost effective for Industrial and Commercial customers prior to 2020. The Company will revisit the potential for Time of Use rates as a DSM program in the future.
- d. The total cost (through September 30, 2015) is proposed for recovery based on the following table. Cost incurred after September 30, 2015 representing consulting support with the DSM case by Applied Energy Group, will be submitted for recovery based on allocation by customer sector.

	<b>2014</b>	<b>2015</b>	<b>Total</b>
<b>Commercial</b>	\$16,962.47	\$213,554.71	\$230,517.18
<b>Residential</b>	\$16,962.48	\$146,472.43	\$163,434.91
<b>TOTAL</b>	\$33,924.95	\$360,027.14	\$393,952.09

WITNESS: John A Rogness

**Kentucky Power Company**

**REQUEST**

Referring to the Application at page 14, please explain why the New Construction Program is not available to industrial customers and builders.

**RESPONSE**

Expected customer participation levels, attendant program costs were selected at the Mid Scenario level and the DSM surcharge was designed for the commercial customer class only. The Company's selection of the Mid Scenario participation level reflects the fact that industrial customers have chosen to opt out of participating in the Company's DSM programs. Please also see the Company's response to KPSC 1-30.

**WITNESS:** John A Rogness

## **Kentucky Power Company**

### **REQUEST**

Referring to the Company's response to Sierra Club Initial Data Request No. 21:

- a. Please describe all efforts the Company has undertaken to determine "industrial customers' interest in Company-sponsored DSM programs" and provide all supporting documentation.
- b. Is it the Company's position that industrial customers would never be interested in a voluntary DSM program? Please explain.
- c. Please describe how, in the Company's view, an industrial customer would "demonstrate an interest in participating in, or having the Company establish pursuant to KRS 278.285, industrial DSM programs."

### **RESPONSE**

a-c. Kentucky Power initially offered DSM/EE programs to its industrial customers. Due to a lack of participation by industrial customers, the Company requested that the industrial DSM/EE programs be discontinued. In its Order dated October 27, 1998 in Case No. 95-427, the Commission authorized Kentucky Power to discontinue those programs.

In the intervening 17 years Kentucky Power's industrial customers have not expressed sustained interest in Company-sponsored DSM/EE programs for industrial customers. The Company's customer service engineers regularly meet with the industrial customers. During these meetings industrial customer personnel sometimes inquire about the availability of Company-sponsored DSM/EE programs. Upon learning that any Company-sponsored DSM/EE program would require the payment of a DSM surcharge by the Company's industrial customers, interest in the Company-sponsored programs evaporates.

In addition, Kentucky Industrial Utility Customers, Inc. is a frequent intervenor in the Company's cases and has a proven track record of aggressively pursuing the interests of its members through Commission litigation. Following the termination of the Company's industrial DSM/EE programs, KIUC has not intervened in any Kentucky Power DSM filings. Nor has it ever made a filing requesting that the Company implement DSM/EE programs for KIUC members. Finally, KIUC has not sought to re-join the Company's DSM collaborative.

Finally, the Kentucky Public Service Commission sponsored a series of three DSM Stakeholder Meetings in 2013. These informal meetings were attended by utility, government and industrial representatives including Kentucky Power. The meetings focused on issues surrounding industrial DSM program implementation, as well as impediments, challenges and industrial program successes, and included discussions of stakeholder points of view. At the meetings, there were presentations by industrial customers who were successfully implementing their own DSM/EE programs, and which supported the industrial customer viewpoint that formal utility sponsored industrial DSM/EE programs were not necessary.

KRS 278.285(3) permits industrial customers to pursue their own DSM/EE programs and thereby avoid paying a DSM surcharge. It appears to the Company that its industrial customers have chosen to pursue their DSM/EE needs individually under the aegis of KRS 278.285(3). Kentucky Power remains open to any form of request by one or more industrial customers for Company-sponsored DSM/EE programs. In addition, the Company will continue to investigate ways to include smaller industrial customers in appropriate DSM/EE programs.

**WITNESS:** John A Rogness



**Kentucky Power Company**

**REQUEST**

Refer to the Company's response to Staff's Initial Data Request No. 1(b), in which the Company states that the Commercial Prescriptive Custom and New Construction programs are "readily adaptable for industrial customers." Given this statement, please explain why these programs are not available to industrial customers and builders, i.e. why has the Company not adapted these programs for industrial customers.

**RESPONSE**

Please see the response to SC 2-4.

**WITNESS:** John A Rogness

**Kentucky Power Company**

**REQUEST**

Please explain what, if any, DSM programs would be available to KPC's industrial customers if the Company's proposed plan is approved. If none, please explain why.

**RESPONSE**

The practical effect of KRS 278.285(3), which permits industrial customers to "opt-out" of industrial DSM programs under certain circumstances, has been to eliminate or significantly restrict its industrial customers' interest in Company-sponsored DSM programs. Moreover, even in the absence of "opt-out" provisions such as KRS 278.285(3), participation in DSM programs is voluntary. Kentucky Power's industrial customers have not demonstrated an interest in participating in, or having the Company establish pursuant to KRS 278.285, industrial DSM programs.

There are no DSM programs available to industrial customers in the Company's proposed program plan. The specific commercial program services and rates have been designed for that class of customers. Please also see the Company's response to KPSC 1-30.

**WITNESS:** John A Rogness

## Kentucky Power Company

### REQUEST

Provide a discussion of Kentucky Power's intentions with regard to adding industrial DSM programs.

### RESPONSE

Kentucky Power previously offered demand-side management programs to its industrial customers. The Commission granted the Company's application to discontinue these programs effective December 31, 1998 because of lack of participation by the Company's industrial customers in the programs. *(See In the Matter Of: The Joint Application Pursuant To 1994 House Bill 501 For The Approval Of The Kentucky Power Company ("KPCO") Collaborative Demand-Side Management Programs, And For Authority For KPCO To Implement A Tariff To Recover Costs, Net Lost Revenues, And Receive Incentives Associated With Implementation Of KPCO Collaborative Demand-Side Management Programs, Case No. 95-427 (Ky. P.S.C. October 27, 1998). See also In the Matter Of: The Joint Application Pursuant To 1994 House Bill 501 For The Approval Of The Kentucky Power Company ("KPCO") Collaborative Demand-Side Management Programs, And For Authority For KPCO To Implement A Tariff To Recover Costs, Net Lost Revenues, And Receive Incentives Associated With Implementation Of KPCO Collaborative Demand-Side Management Programs, Case No. 95-427 (Ky. P.S.C. March 25, 1999).)*

The practical effect of KRS 278.285(3), which permits industrial customers to "opt-out" of industrial DSM programs under certain circumstances, has been to eliminate or significantly restrict its industrial customers' interest in Company-sponsored DSM programs. Moreover, even in the absence of "opt-out" provisions such as KRS 278.285(3), participation in DSM programs is voluntary. Both during the period the industrial programs were available, and subsequently, Kentucky Power's industrial customers have not demonstrated an interest in participating in, or having the Company establish pursuant to KRS 278.285, industrial DSM programs.

Kentucky Power nevertheless commissioned Applied Energy Group, Inc., in connection with the Company's market potential study, to assess the industrial energy efficiency and DSM potential in its service territory. The study projected that industrial energy use (GWh) will decline 4.9% between 2013 and 2035. (AEG Kentucky Power Company Market Potential Assessment Study – Executive Summary at 16) That decline is three times greater than the modest 1.6% decline projected for the residential sector.

Commercial sector energy use is projected to grow 2.1% over the same period. (*Id.*) The study also noted that although the industrial sector is the largest of the three sectors in terms of projected GWh use by 2035, its potential for savings was lower than for the residential sector. (*Id.* at 21)

More positively, the AEG study made the following findings regarding the potential for industrial energy efficiency and demand response programs:

Because “[t]echnical potential and economic potential are much closer” in the industrial sector than in the Company’s other two sectors “some of the most efficient [energy efficiency] measures could be installed and are already cost effective.” (*Id.*)

In the short term, the largest savings are in connection with motors and machine drives. The opportunity for these savings will diminish as National Electrical Manufacturer Association standards are implemented. (*Id.*)

The only cost-effective demand response measures are time of use rates for medium and large commercial and industrial customers. (*Id.* at 23).

This case is the final installment in the Company’s three-year program to double its Demand-Side Management/Energy Efficiency spending from \$3 million to \$6 million. Because of the limitations posed by the opt-out available to industrial customers under KRS 278.285(3), and because of need to implement the increase over a relatively limited period of time, the Company’s most recent efforts have focused on the residential and commercial sectors.

Kentucky Power anticipates examining potential industrial sector DSM/EE programs. For example, the Commercial Prescriptive/Custom, New Construction, and Retro-Commissioning programs include incentive measures for customer projects involving variable speed drive motors. Assuming sufficient demand, these programs are readily adaptable for industrial customers.

Full implementation of industrial DSM/EE is likely to require legislative amendment of KRS 278.285(3). The Commission’s leadership in any effort to effect such a change is essential to its success.

**WITNESS:** John A Rogness