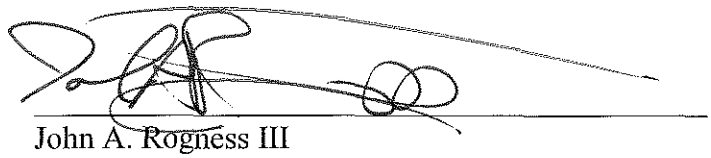
VERIFICATION

The undersigned, John A. Rogness III, being duly sworn, deposes and says he is the Director Regulatory Services for Kentucky Power, that he has personal knowledge of the matters set forth in the forgoing responses for which he is the identified witness and that the information contained therein is true and correct to the best of his/her information, knowledge and belief.



John A. Rogness III

COMMONWEALTH OF KENTUCKY)
) Case No. 2015-00271
COUNTY OF FRANKLIN)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by John A. Rogness III, this the 11th day of November, 2015.

Notary Public

My Commission Expires: January 23, 2017

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 th is 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.

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

WITNESS: John A Rogness

Kentucky Power Company

REQUEST

Refer to the Application, page 9, paragraph 18. Kentucky Power proposes to increase the rebate amount for its Appliance Recycling Program and refers to AEG's Demand Side Management Program Plan in Exhibit 6. In Exhibit 6, pages 48- 52 of 1 05, the suggested increase is listed but there is no explanation for the increase. Provide the basis for the proposed increase.

RESPONSE

The program incentive increase was based on recommendation from Applied Energy Group and the program implementation contractor, JACO. Customer participation with the Appliance Recycling program during the initial program year (2015) has lagged projected targets. Through the 3rd quarter 2015, the program received 48% of the projected 750 units recycled. The increased incentive range is intended to drive added participation in the program.

WITNESS: John A Rogness

Kentucky Power Company

REQUEST

Refer to the Application, page 9, paragraph 20. Kentucky Power proposes to increase the weatherization and energy services amount for its Targeted Energy Efficiency Program to $2,000 per home. Provide the basis for this proposed increase.

RESPONSE

The proposed changes to the program are based on collaboration between Kentucky Power and Community Action Kentucky during the Market Potential Assessment Study and DSM Program Plan processes. This allowed Community Action Kentucky to provide feedback and recommendations which were considered in the proposed program design.

Based upon market assessment, the Kentucky Power service area has a large percentage of housing (both site built and mobile home construction) with electric resistance space heating. The increase in cost per home to $2,000 allows for additional measures to be installed such as upgrading to a high efficiency heat pump system in both site built and mobile homes.

WITNESS: John A Rogness

Kentucky Power Company

REQUEST

Refer to the Application, page 10, paragraph 22. Kentucky Power proposes to expand the target audience for the Energy Education for Students program to include middle school students. Explain whether Kentucky Power has considered further expanding its target audience, for example to include elementary students or to target specific school environmental and science clubs.

RESPONSE

Yes, the Company considered further expansion. The Company's proposal for the program was based upon discussions with NEED which indicated it would best conform with the curricula of the schools in the Company's service territory.

WITNESS: John A Rogness

Kentucky Power Company

REQUEST

Refer to the Application, page 10, paragraph 24; Exhibit 6, page 14 of 105; and Exhibit 7, page 6 of 21.

a. Confirm that Kentucky Power proposes to modify and continue the Community Outreach program and that AEG recommended discontinuing the unrevised program.

b. Provide the "energy conservation measures" referenced in the revised tariff that are proposed to be distributed to customers through the Community Outreach program.

c. Confirm that Kentucky Power proposes to expand this revised program beyond compact fluorescent lighting ("CFL") but continue to focus on energy efficient lighting for residential customers.

RESPONSE

a. Confirmed. AEG recommended that the program be discontinued because it was not cost effective with the additional cost of an outside contractor administering the program. The Company will continue to administer the program.

b. The energy conservation measures continue to be 13 watt CFL. The Company will seek supplier quotes for other energy conservation measures (ECMs) that are cost effective based on the approved list of measures from the Market Potential Assessment study.

c. Confirmed. The Company may introduce other ECMs that could be delivered to customers based on need which is determined during discussion at community program events. ECMs such as aerators, low flow shower fixtures, LED fixtures are examples that will be explored for application with this program.

WITNESS: John A Rogness

Kentucky Power Company

REQUEST

Refer to the Application, page 11 , Paragraph 28; Exhibit 6, pages 58 and 59; and Exhibit 7, pages 19-21 of 21.

a. Confirm that the Whole House Efficiency program will be available to residential customers with manufactured homes.

b. Confirm that energy conservation measures will be provided to customers free of charge and installed by the professional energy auditor in relation to the Home Energy Audit. If not, explain how customers will receive these measures and the incentive levels for each, if applicable.

c. Explain how interested customers are to contact participating dealers and professional energy auditors. Explain whether Kentucky Power will facilitate the communication by providing contact information to customers.

d. State whether customers may participate in any combination of the three options available under the proposed Whole House Efficiency program.

RESPONSE

a. Yes, the program will be available to residential customers with manufactured homes.

b. Confirmed.

c. Kentucky Power will facilitate participating customer contacts by providing a listing of participating dealers and auditors / contractors on the Kentucky Power website. Customers will directly contact participating dealers and auditors. In addition, a marketing campaign will be implemented to encourage customer participation. An implementation contractor will be employed to support program administration.

d. Yes, customers can participate in all three program options in any combination.

WITNESS: John A Rogness

Kentucky Power Company

REQUEST

Refer to the Application, page 23, paragraph 75. Explain why the residential DSM factor increased by 714 percent while the commercial DSM factor increased by only 25 percent.

RESPONSE

Two factors principally contributed to the difference in the percentage increases for the residential and commercial factors. First, the residential sector under-recovery ($900,000) is almost 2.5 times larger than the commercial sector under-recovery ($375,000). In addition, the current commercial DSM adjustment factor of $0.001473 is almost four times the existing residential factor of $0.000383.

WITNESS: John A Rogness

Kentucky Power Company

REQUEST

Refer to the Application, the Direct Testimony of John A. Rogess III ("Rogness Testimony"), page 16. Mr. Rogness says the primary differences between AEG's recommended DSM program and the Company's proposed program is the incentive level for the Commercial Incentive Prescriptive Custom Program and the program evaluation schedule. With regard to these differences, reconcile Kentucky Power's 2016 Program Year DSM Budget numbers from Exhibit 5 with the budget numbers from the AEG Demand Side Management Program Plan in Exhibit 6, page 24 of 105

RESPONSE

Please see KPCO_R_PSC_8_Attachment1.xlsx for the response.

WITNESS: John A Rogness

Kentucky Power Company

REQUEST

Refer to the Rogness Testimony, page 16, lines 14-19.

a. Confirm that the program budget for the Commercial Incentive Prescriptive Custom program in line 15 is for 2016 and not 2015.

b. Reconcile the proposed Commercial Incentive Prescriptive Custom program incentive budget of $540,600 with the recommended 2016 High Scenario budget incentive amount of $595,701 on page 77 of 105 of Exhibit 6.

c. Explain whether Kentucky Power is expecting a High or Mid scenario participation rate, and on what basis. If Kentucky Power is expecting a High participation rate, state whether it believes the proposed $540,600 incentive budget will be adequate for the High Scenario projected customer participation level.

RESPONSE

a. & b.

Because of a Company error, the question beginning at line 11 of page 16 of Mr. Rogness' testimony and accompanying response included incorrect dates and amounts. The corrected question and answer reads:

Q. PLEASE EXPLAIN HOW THE COMPANY'S PROPOSED INCENTIVES DIFFER FROM AEG'S RECOMMENDATIONS FOR THE 2016 BUDGET.

A. The primary difference is in the Commercial Incentive Prescriptive Customer program. For that program's budget, AEG allocated $392,932 for incentives in 2016 based upon Mid Scenario customer participation levels. The Company's proposed program budget includes $595,701 in incentives (which is based upon the High Scenario customer participation level). This additional amount is necessary to help ensure robust customer participation levels.

As corrected, Kentucky Power confirms that the program budget for the Commercial Incentive Prescriptive Custom program in line 15 is for 2016 and not 2015. Accordingly, no reconciliation is required.

c. Kentucky Power is projecting a mid-scenario participation rate of 170. Based on historical program performance, the Company estimates that the high scenario budget amount is required to produce the mid scenario participation rate.

WITNESS: John A Rogness

Kentucky Power Company

REQUEST

Refer to the Rogness Testimony, page 17, lines 1-14. Provide the estimated program measurement, evaluation and verification ("EMV") budget for the second half of 2016 and for 2017.

RESPONSE

The total EMV budget for 2016 is $41,445 and the estimate for the second half of 2016 is $19,441. The EMV budget (process plus impact evaluations) for 2017 is $149,294.

WITNESS: John A Rogness

Kentucky Power Company

REQUEST

Refer to the Rogness Testimony, page 21 .

a. Confirm that the 2016-2025 1.28 - 1.53 Total Resource Cost ("TRC") Score shown for the new Retro-Commissioning program represents the Industrial High potential, and that the Commercial TRC scores are as shown on page 33 of the Rogness Testimony.

b. Explain why the Residential Home Performance program is not listed in the table.

c. Explain why the 2012-2013 TRC scores for the Energy Education Program and the Community Outreach Program were used to illustrate the programs' cost - effectiveness.

RESPONSE

a. Confirmed. However, the Total Resource Cost scores in the Table on page 21 for Retro-Commissioning should read 1.23 - 1.45.

b. The programs listed in the table are proposed to be canceled, modified or are new. The Company is proposing text changes to the Residential Home Performance program Tariff Sheet 22-14, but is not canceling or modifying the program.

c. The 2012-2013 TRC scores were used because they represent the most recent evaluation in the manner in which the Company proposes to continue to operate the program. The proposed modifications represent only slight changes to the 2012-2013 programs.

WITNESS: John A Rogness

Kentucky Power Company

REQUEST

Refer to the Rogness Testimony, page 29. Explain how integrating the small commercial HVAC program into the new Commercial Incentive Prescriptive Custom Program, then dividing it into three captures economies of scale.

RESPONSE

The proposed program plan divides the current Commercial Incentive program into three new programs: Commercial Incentive Prescriptive Custom, Express Install, and Commercial New Construction. The current Small Commercial HVAC program services are then to be incorporated into the broader Commercial Incentive Prescriptive Custom program. Doing so allows for economies of scale in multiple ways. First, there will be a single implementation contractor administering the program. Second, marketing will be streamlined for a single program instead of bifurcating the market with multiple programs. Lastly, it simplifies utility administration where a single program is monitored and reported instead of multiple programs.

WITNESS: John A Rogness

Kentucky Power Company

REQUEST

Refer to the Rogness Testimony, page 30, line 20. Confirm that the projected energy savings shown is for the High level participation scenario and not the Mid-level participation scenario, as shown on page 75 of Exhibit 6.

RESPONSE

Confirmed. The sentence on page 30 beginning on line 20 should read, "Annual net incremental energy savings (Mid level participation) for this program are projected to be 3,029 MWh in 2016 increasing to 4,441 MWh in 2025."

WITNESS: John A Rogness

Kentucky Power Company

REQUEST

Refer to the Rogness Testimony, page 31 , lines 8-9. Confirm that the projected energy savings of 8OO MWh is for the High level participation scenario and not the Mid-level participation scenario, as shown on page 81 of Exhibit 6.

RESPONSE

Confirmed. The sentence beginning on line 7 should read, "Annual incremental net energy savings (Mid-level participation) for this program are projected to be 711 MWh in 2016 and increasing to 1,511 in 2025."

WITNESS: John A Rogness

Kentucky Power Company

REQUEST

Refer to the Rogness Testimony, page 33, line 3. Explain why Kentucky Power references the annual net incremental energy savings for High level participation instead of Mid-level, and whether this is indicative of Kentucky Power's expectation of the attractiveness of the Retro-Commissioning program to customers.

RESPONSE

Mid-scenario 'commercial customer' participation was used in the design. The sentence on page 33 line 3 should read "Annual net incremental energy savings (Mid-level participation Commercial class only) for this program are projected to be 694 MWh in 2016 increasing to 1,110 MWh in 2025."

WITNESS: John A Rogness

Kentucky Power Company

REQUEST

Refer to the Rogness Testimony, page 37, lines 1-8.

a. Provide the calculation for the 1 ,389 kWh average usage for the residential class.

b. Clarify the average usage for the commercial class, and provide the calculation.

c. Lines 6-8 say that the programs provide significant benefits. Provide a quantification of the benefits as compared to the total costs of the DSM programs for 2016.

RESPONSE

a. (2,304,998,341 kWh/12 months) / 138,252 residential customers = 1,389 average kWh

2,304,998,341= billed kWh for 12 months ended July 2015.
138,252 = number of customers as of the end of July 2015.

b. The average usage for the commercial class is 3,720 kWh.

(1,358,934,604 kWh/12 months) / 30,442 commercial customers = 3,720 average kWh

1,358,934,604= billed kWh for 12 months ended July 2015.
30,442 = number of customers at the end of July 2015.

c. Please see the columns labeled 2016 in KPCO_R_PSC_16_Attachment1.xls for the requested information.

In addition, these programs can increase customer satisfaction and lower energy bills over time. Also, these programs help to lower harmful emission levels and forestall the need for additional generation capacity which keeps electricity rates lower to the benefit of all customers.

WITNESS: John A Rogness

Kentucky Power Company

REQUEST

Refer to the Rogness Testimony, JAR Exhibit 1.

a. Explain why this exhibit, which is not referenced in the testimony, is included with the Rogness Testimony.

b. Explain whether JAR Exhibit 1, which is titled AEG Demand Side Management Program Plan, Final Report and is dated July 31, 2015, was a draft of the document contained in Exhibit 6 of the Application, which has a date of August 10, 2015.

c. Explain whether there was any cost for JAR Exhibit 1 that was charged to the 2015 DSM expenditures.

RESPONSE

a. The reference to the exhibit was omitted inadvertently. Please refer to Rogness Testimony at page 4. The sentence on line 15 should read "The DSM Program Plan is attached as Exhibit 6 to the Application and as JAR Exhibit 1."

b. Subsequent to the final report dated July 31, 2015, AEG discovered a blank page between pages 58 and 60. In addition to correcting minor grammatical and labeling items, the August 10, 2015 final report removes the blank page. There were no substantive changes made to the final report dated July 31, 2015.

c. There was no additional cost for JAR Exhibit 1.

WITNESS: John A Rogness

Kentucky Power Company

REQUEST

Refer to the Application, Exhibit 2, page 30 of 63, which states that 9 percent T&D loss is applied to the kWh savings and 10 percent T&D loss is applied to the kW savings. Refer also to Exhibit 6, page 98 of 106, which provides the generalinputs, specifically the energy line loss of 5.66 percent and peak line loss of 7.06 percent.

a. Explain why different loss rates than those provided in Exhibit 6 were used by Kentucky Power to calculate savings.

b. Explain the impact of the choice of line loss rates for energy savings on the calculation of program benefits and lost revenues.19. Refer to the Application, Exhibit 2, page 53 of 63

RESPONSE

a. The differing line loss values referenced represent different methods for estimating the gross energy savings based on system losses.

The nine percent (kWh) and ten percent (kW) line losses noted on page 30 of 63 of Exhibit 2 to the application represent cumulative (transmission, sub-transmission, primary, and secondary) line losses at the secondary distribution level. The energy line loss (5.66 percent) and peak line loss (7.06 percent) values shown as inputs on page 98 of 106 of Exhibit 6 represent AEG's calculation of the average line loss for the same four voltage levels. If AEG had used the higher losses shown on page 30 of 63 of Exhibit 2 in lieu of those shown on page 98 of 106 of Exhibit 6 in calculating cost-effectiveness, it would have resulted in higher cost-effectiveness values.

b. The lost revenues calculated in Schedule C are calculated as a product of the fixed cost of retail rates and net participant savings at the meter. As a result, system line loss does not affect the calculations.

The calculation for shared benefits includes system loss with the avoided energy and demand cost represented with the net present benefits calculation used with the Total Resource Cost test (TRC). If AEG had used the higher losses shown on page 30 of 63 of Exhibit 2 in lieu of those shown on page 98 of 106 of Exhibit 6 in calculating program benefits, it would have resulted in higher shared benefit values.

WITNESS: John A Rogness

Kentucky Power Company

REQUEST

Refer to the Application, Exhibit 2, page 53 of 63, the Commercial Incentive status report. Explain why there is not a new and separate status sheet for the Commercial Incentive Prescriptive Custom Program since, according to the Rogness Testimony, page 28, lines 22-23, the existing program is being discontinued in 2016.

RESPONSE

The status sheet was inadvertently omitted. Please see KPCO_R_PSC_19_Attachment1.pdf.

WITNESS: John A Rogness

KENTUCKY POWER COMPANY

PROGRAM INFORMATION	
PROGRAM:	**Commercial Incentive Prescriptive Custom**
PARTICIPANT DEFINITION:	Number of Participants Projects Installed
CUSTOMER SECTOR:	Commercial
REPORTING PERIOD:	January 1, 2016 - December 30, 2016

New Participants	Projects Installed
Jan	
Feb	
Mar	
Apr	
May	
Jun	
Jul	
Aug	
Sep	
Oct	
Nov	
Dec	
YTD	**0**
PTD	**0**

Impacts

	Year-To-Date	Program-To-Date
Estimated in Place Energy (kWh) Savings	**0**	**0**
Anticipated Peak Demand (kW) Reduction:		
Summer	**0**	**0**
Winter	**0**	**0**

Costs

Description	Year-To-Date	Retroactive Adjustment	Program-To-Date
Total Evaluation	$0	$0	$0
Equipment/Vendor:	$0	$0	$0
Promotional:	$0	$0	$0
Customer Incentives:	$0	$0	$0
Other Costs:	$0	$0	$0
Total Program Costs	**$0**	**$0**	**$0**
Lost Revenues:	**$0**	**$0**	**$0**
Efficiency Incentive:	**$0**	**$0**	**$0**
Maximizing Incentive:	**$0**	**$0**	**$0**
Total Costs	**$0**	**$0**	**$0**

COMMENTS:

The Commercial Incentive program offers energy savings for all commercial business customers through promotion of high efficiency electric lighting, HVAC, pumps, and motors. Primary objectives include; increasing the market share and installation rate of high efficiency technologies, and improving the operating efficiencies of existing long life equipment for commercial customers.

The program will be modified in 2016 to include only prescriptive and custom services. The 2016 participant and expense forecast is 170 and $1,023,984 respectively. The 2016 program design will include prescriptive and custom measures.

Kentucky Power Company

REQUEST

Refer to the Application, Exhibit 6, page 10 of 105. Explain the selection strategy for Kentucky Power so that an educated and qualified dealer network is secured, and how Kentucky Power intends to maintain a successful dealer network.

RESPONSE

The Company's implementation contractor will recruit and develop the dealer network. Kentucky Power retains oversight over the dealer network that is chosen. The implementation contractor is evaluated based on the programs meeting their targets, which in turn in part are driven by the quality and education of the dealer network.

WITNESS: John A Rogness

Kentucky Power Company

REQUEST

Refer to the Application, Exhibit 6, page 24 of 105, Table 4-16. Explain how the TRC Test numbers are calculated.

RESPONSE

As defined in the California Standard Practice Manual, the TRC test measures the net costs of a demand-side management program as a resource option based on the total costs of the program, including both the participants and the utility's costs. The benefits calculated in the TRC are the avoided supply costs and capacity costs valued at marginal cost for the periods when there is a load reduction. The costs in the test are the program costs paid by both the
utility and the participants.[1] All results are presented in net present value where future costs and benefits are brought back to present day dollars using a discount rate.

[1] California Standard Practice Manual, http://www.cpuc.ca.gov/nr/rdonlyres/004abf9d-027c-4be1-9ae1-ce56adf8dadc/0/cpuc_standard_practice_manual.pdf

WITNESS: John A Rogness

Kentucky Power Company

REQUEST

Refer to the Application, Exhibit 6, page 41 of 105. Under Estimated Participation, the analysis assumed that on average a customer would purchase eight CFL or LED light bulbs. Confirm the projected net energy and demand savings shown on page 42 of 1 05 of Exhibit 6 is estimated using an average of eight standard CFL bulbs and eight LED bulbs for a total of 16 bulbs.

RESPONSE

Confirmed.

WITNESS: John A Rogness

Kentucky Power Company

REQUEST

Refer to the Application, Exhibit 6, page 58 of 1 05. The Whole House Efficiency program consists of three options. Provide the number of options in which a residential customer can participate and explain whether there is a cap to all of the energy conservation measures.

RESPONSE

As proposed, a customer can participate in all three program options. The only limit is they can only receive a single Home Energy Audit (with corresponding free measures). There is no limit in Weatherization Measures or HVAC Equipment except for the physical limitations/capacity of the home.

WITNESS: John A Rogness

Kentucky Power Company

REQUEST

Refer to the Application, Exhibit 6, page 79 of 1 05. Explain whether there is some time limit to receive Express Install program incentive payments if identified efficiency measures cannot feasibly be installed the same day as the audit.

RESPONSE

A time limit has yet to be determined. Based upon the recommendation from the third party contractors selected for implementation, a time limit may be imposed.

WITNESS: John A Rogness

Kentucky Power Company

REQUEST

Refer to the Application, the first line of page 4 and to Exhibit 3 KPCO_APP Exhibit_3_Schedule_C.xls ("Exhibit 3"), tab Exh C. Reconcile the program costs through June 30, 2015, of $36,251 ,403, as shown on page 4, to the spread sheet in Exh C. If the reconciled costs cause any change to the spreadsheet, provide an update to Exhibit 3.

RESPONSE

Please see KPCO_R_PSC_25_Attachment1.xls for the reconciliation. The reconciliation reflects the correction of an error in cells C9 and C36 of Exhibit 3, Tab Exh C. Please see KPCO_R_PSC_25_Attachment2.xls for an updated Exhibit 3. As a result of the correction, the DSM Factors changed to $0.003159 for residential customers and $0.001835 for commercial customers.

WITNESS: John A Rogness

Kentucky Power Company

REQUEST

Refer to the Application, Exhibit 3; tab Exh C. Refer to cell C9, the sum of the amount to be recovered years 1 through the first half of year 19.

a. Explain why the sum includes the amount 1,408,558 as opposed to the Total Actual Costs to be Recovered for 2013 (second half) as seen in tab Y18b, cell 054 of $1, 446,520.

b. Explain why 9,543 is subtracted from the sum

RESPONSE

Please see the response to Commission Staff 1-25.

WITNESS: John A Rogness

Kentucky Power Company

REQUEST

Refer to the Application, Exhibit 3, tab Exh C. Explain why the $415,751 of "Expected Future Recoveries" for the second half of 2015 is significantly lower than the "Revenues Recovered - Residential" for prior periods

RESPONSE

The expected future recoveries for the second half of 2015 are expected to be less than prior periods because of a lower DSM Factor. Before the current DSM Factor of $0.000383 was approved in Case No. 2014-00271, the residential DSM Factor was $0.001447. The prior periods shown in the tab Exh C reflect the approved DSM Factor of $0.001447 that was in effect for the second half of 2014 and through most of February 2015.

WITNESS: John A Rogness

Kentucky Power Company

REQUEST

Refer to the Application, Exhibit 3, tab Y21.

a. Explain why Appliance Recycling is included as a commercial program

RESPONSE

Although the appliance recycling program has commercial applications, the Company believes it is best implemented initially by focusing the program's efforts on residential customers. Exhibit 3, tab Y21, line 67 includes a line item for the appliance recycling program, it does not include any participant numbers, costs, incentives or lost revenues, or foregone revenue values for the program. The Company may expand the program to commercial customers based on the residential customer results.

WITNESS: John A Rogness

Kentucky Power Company

REQUEST

Refer to the Application. Explain the variance between the 2016 DSM Budget numbers shown in Exhibit 5 and those provided in Exhibit 6, page 25 of 105, Table 4-18.

RESPONSE

Please see the Company's response to Staff 1-8.

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