

VERIFICATION

The undersigned, Edgar J Clayton, being duly sworn, deposes and says he is the Energy Efficient & Consumer Programs Manager 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 information, knowledge and belief

Edgar J Clayton
Edgar J Clayton

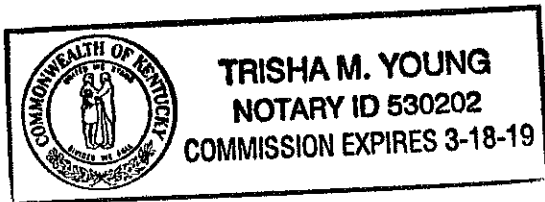
COMMONWEALTH OF KENTUCKY) Case No. 2017-00097
COUNTY OF BOYD)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Edgar J Clayton, this the 5th day of June, 2017.

Trisha M. Young Blum
Notary Public

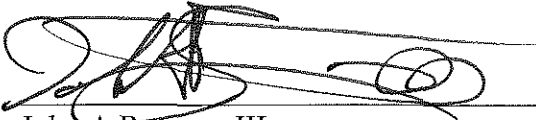
Notary ID: 530202

My Commission Expires: 3-18-19



VERIFICATION

The undersigned, John A. Rogness III being duly sworn, deposes and says he is the Director Regulatory Services for Kentucky Power Company, 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 information, knowledge and belief



John A Rogness III

COMMONWEALTH OF KENTUCKY)	
)	Case No. 2017-00097
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 8th day of June, 2017.

Notary Public *Judy K. Rozquist*
Notary ID: 571144
My Commission Expires: January 23, 2021

KPSC Case No. 2017-00097
Sierra Club's Second Set of Data Requests
Item No. 1
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Witness: Edgar J Clayton

Q - 1 Refer to KPC's Response to Sierra Club's Initial RFI no. 2.

a. Please provide all of the criteria used for determining whether a low-income residential customer qualifies for support under the Targeted Energy Efficiency ("TEE") program.

b. Please explain how the Company derived the 700 kWh average monthly minimum usage requirement for the TEE program, both for primary electric heat and non-primary electric heat customers.

c. Please provide (i) the total number of low-income customers in KPC's service territory, as determined by the designated poverty guidelines as administered by the local community action agency); and (ii) the total number of low-income customers in KPC's service territory who meet the 700 kWh average monthly minimum usage requirement for the TEE program, including for primary electric heat and non-primary electric heat customers.

d. Please explain how cost allocations between KPC TEE funding and other Community Action Agency Weatherization funding are determined, including: i. Please explain what rules govern determinations of measures to fund for a given home that receives services through the TEE ("project") and the funds to use. ii. Please state whether each individual project is funded by a single funding source. If not, please explain.

i. Please explain what rules govern determinations of measures to fund for a given home that receives services through the TEE ("project") and the funds to use.

ii. Please state whether each individual project is funded by a single funding source. If not, please explain.

iii. If individual projects are funded by multiple funding sources, please explain how the attribution of energy savings to the various funding sources determined.

iv. Please state whether KPC reports only the energy savings that are directly attributable to its funding under the TEE program.

v. In its response to Sierra Club's Initial RFI No. 2, KPC report that, in 2016, 89 households received weatherization and education services and 55 households received high efficiency heating systems. Please state whether these projects were fully funded by KPC. If not, please describe all funding sources.

e. Please state whether KPC tracks participation of low income customers in the programs it describes in response to Sierra Club's Initial RFI No. 2 as being available to all customers (aside from TEE program).

i. If the answer is yes, please provide all available data on the participation of low income customers in these programs.

ii. Please state whether KPC has conducted outreach targeting low-income customers in an effort to increase participation in the programs described.

f. Please explain how KPC determines the appropriate level of investment in DSM programs targeting low-income customers.

g. Please state whether KPC has examined opportunities to offer additional DSM programs targeting low-income customers.

A - 1

a. The Targeted Energy Efficiency Program is available on a voluntary basis to individual residential customers receiving retail electric service from the Company, who have primary electric heat and use an average of 700 kWh per month. Residential customers without primary electric heating may also be eligible for limited efficiency measures if they have electric water heating and use an average of 700 kWh per month from November through March. In addition, to qualify the household must meet

the single- family income guidelines set forth at <http://www.kyhousing.org/Development/Single-Family/Pages/Weatherization-Assistance-Program-Eligibility.aspx> for weatherization assistance.

b. The 700 kWh minimum monthly usage requirement was part of the program eligibility standards proposed by Kentucky Power and approved by the Commission in connection with the Commission's initial approval of the program by Order dated December 4, 1995 in Case No. 95-497. The Targeted Energy Efficiency Program was modeled on similar low income weatherization programs implemented by Appalachian Power Company in Virginia and West Virginia. The 700 kWh minimum monthly usage requirement is used to identify those customers who use electricity for heat or otherwise have high baseload consumption.

c. (i) 51,015 customers.

(ii) 33,259

d. and (d)(i) The subject community action agency evaluates eligible applicant's residences and identifies cost-effective measures. Expenses are allocated between the Targeted Energy Efficiency Program and applicable weatherization assistance program funding by the Community Action Agency on a residence-by-residence basis based upon available funding and the eligibility of the cost-effective measure for funding under each program.

(ii) Weatherization projects may be funded solely by a Community Action Agency Weatherization Assistance program or the Targeted Energy Efficiency Program or funded through a combination of the two.

(iii) The responsible Community Action Agency allocates program expense between measures funded by a weatherization assistance program and those measures funded by the Targeted Energy Efficiency Program.

The Company calculates the savings based on the most recent program plan filed in Case No. 2015-00271. Please see KPCO_R_SC_2_1_attachment1.pdf and KPCO_R_SC_2_1_attachment2.pdf for the forms used to report the expenses to Kentucky Power.

(iv) Kentucky Power reports only those savings resulting from the measures funded through the Targeted Energy Efficiency Program.

(v) The weatherization and education services provided to each of the 89 households identified were funded by both the Weatherization Assistance Program and Targeted Energy Efficiency program. The 55 households receiving high efficiency heating systems comprise a subset of the 89 household receiving weatherization and education services. Three households receiving high efficiency heating systems were provided units funded solely by the Targeted Energy Efficiency program, although the remaining weatherization and education services received by the three households were funded at least in part by the Weatherization Assistance Program.

e. Kentucky Power does not track customer participation in other DSM programs by income levels.

(ii) Energy efficiency kits have been delivered to Northeast Kentucky Community Action Agency for delivery to low-income customers applying to the community action agency for heating assistance. Kentucky Power also promotes its DSM programs at Community Outreach events scheduled throughout the utility service area.

f. Using historical participation data Kentucky Power works with participating Community Action Agencies to develop the budget and participation targets for the Targeted Energy Efficiency Program.

g. Yes. Kentucky Power is examining a Residential Construction Program that may benefit low-income customers receiving new home construction services through non-profit organizations.

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Witness: Edgar J Clayton

- Q - 2** Refer to KPC's Response to Sierra Club's Initial RFI no. 4. Please provide the Company's "fundamental analysis of energy."
- A - 2** Please see KPCO_R_SC_2_2_Attachment1.xlsx for energy cost, capacity, and the environmental externalities values used in KSPC 1-5 attachment KPCO_R_KPSC_1_5_Attachment2.xlsx general inputs tab. The natural gas values were provided by AEG in connection with its calculation of the TRC test and may also be found in the general inputs tab of KPCO_R_KPSC_1_5_Attachment2.xlsx.

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Witness: Edgar J Clayton

Q - 3 Refer to KPC's Response to Sierra Club's Initial RFI no. 5. Please provide the Company's "fundamental price analysis."

A - 3 The fundamental price analysis referred to in the Company's response to SC 1-5 is the same document denominated as fundamental analysis of energy referred to in the Company's response to SC 1-4.

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Witness: John A Rogness

- Q - 4** Refer to KPC's Response to Sierra Club's Initial RFI no. 11. Regarding the Company's net lost revenue calculations:
- a. Please explain how KPC derives the "net lost revenue factor" for each program.
 - b. Please confirm that KPC collects net lost revenues to recover only the lost contribution to fixed costs. If your answer is anything other than "confirmed," please explain.
 - c. Please confirm that net lost revenues are designed only to capture program effects that occur between base rate cases, at which time the impact of reduced sales due to DSM is addressed through base rates. If your answer is anything other than "confirmed," please explain
 - d. Please confirm that KPC adjusts fixed costs in base rate cases to reflect the full lost revenue effects of DSM that have occurred since the previous base rate case. If your answer is anything other than "confirmed," please explain.
 - e. Once KPC has adjusted base rates to reflect the effects of DSM in reducing the volume of energy sales across which fixed costs must be collected, please state whether KPC continues to collect lost revenues for the DSM programs whose impacts occurred prior to the base rate case. If the answer is anything other than "no," please explain.
 - f. Please explain whether KPC collects lost revenues for three years regardless of the measure lives of the programs.
- A - 4** a. The net lost revenue factor is calculated by dividing the Annual Savings per Customer (\$) by the Annual Net Savings (kwh). Please refer to KPCO_R_SC_1_11_Attachment2, Column 32 (Labeled "Net Lost Revenue") in tab Residential Net Lost Revenue and rows 80, 161, and 242 (Labeled "Net Lost Revenue") in tab Commercial Net Lost Revenue for the calculations for each program.

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b. Confirm.

c. Confirm.

d. Confirm.

e. No.

f. Absent an intervening base rate case, the “sunset provision” proposed by Kentucky Power in Case No. 95-427 establishing the Company’s DSM program provides for the recovery of lost revenues for a three-year period.

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Witness: John A Rogness

Q - 5 Refer to KPC's Response to Sierra Club's Initial RFI no. 13.

- a. Please provide the residential and commercial tariff rates in effect at the time that corresponds to each change in the DSM surcharge reflected in KPC's response to subpart (a) of the RFI.
- b. Please explain what caused the residential surcharge to increase from 0.000383 to 0.008013 over the two-year time frame between March 2015 and the present.

A - 5 a. Please see KPCO_R_SC_2_5_Attachment1.pdf for this response.

b. The increased surcharge factor resulted from several factors:

(i) The Company's annual DSM program expenditures increased by 74% from \$3,736,549 in calendar year 2014 to \$6,514,395 in calendar year 2016.

(ii) Kentucky Power's DSM factor is calculated in reference to the second half of the calendar year (July 1 – December 31) in which the application is filed and the first half (January 1 – June 30) of the following year. For example, the DSM factors proposed in Kentucky Power's application in Case No. 2015-00271, which was filed September 15, 2015, were calculated in reference to the Company's forecasted DSM program expenditures, lost revenues, incentives, and cumulative under-recovery for the period July 1, 2015 through June 30, 2016. The Company anticipated that the DSM factors proposed in Case No. 2015-00271 would become effective early in 2016.

The Company's DSM program expenditure obligation under the Settlement Agreement approved by the Commission in Case No. 2012-00578 was based on a calendar year. As a result, during the period (calendar years 2014-2016) in which the Company was required to increase its DSM program expenditures

annually by \$1 million there was a mismatch between the period in reference to which the factor was designed and the increased spending obligation during the approximate period the factors were anticipated to be in effect.

By way of rough illustration only, the factors proposed in Case No. 2015-00271 were based on required DSM program expenditures of \$2.5 million in the second half of 2015 (one-half of the Company's \$5 million 2015 calendar year DSM program obligation) *plus* \$3 million in the first half of 2016 (one-half of the Company's \$6 million 2016 calendar year DSM program obligation) or \$5.5 million. This resulted in a \$0.5 million mismatch between the Company's 2016 \$6 million DSM expenditure obligation and the approximate amount of DSM program expenditures (\$5.5 million) in reference to which the factors were calculated. This in turn produced an increasing under-recovery that was required to be recovered in subsequent factors during the period of the Company's increasing expenditure obligation (2014-2016).

(iii) This mismatch was modestly exacerbated to the extent the factors did not become effective January 1 of the year following the filing of the Company's application.

(iv) The Company's sales declined beginning in 2015. As a result, the proposed factors did not produce the anticipated levels of revenue. Please refer to the Company's response to KPSC 1-2.

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Witness: Edgar J Clayton

Q - 6 Regarding the Residential Home Performance Program:

- a. Please provide the measure life used to develop savings estimates for this program.
- b. Please state for how long KPC claims lost revenues for this program.
- c. Please state whether KPC has targeted any portion of the Residential Home Performance Program to low-income ratepayers.
 - i. If yes, please explain how KPC has done so.
 - ii. If no, please explain whether KPC has analyzed the benefits of such targeting.

A - 6

- a. One year.
- b. Please see the Company's response to SC 2-4(f).
- c. c. and (c) (ii) Kentucky Power does not target low-income customers for participation in the Residential Home Performance program. Criteria for participation in the Residential Home Performance program are: (a) current Kentucky Power customer; and (b) have not previously participated in Residential Home Performance Program. After eliminating statistical outliers, customers with an undeliverable address, and those customers who have opted out, the contractor selects customers with the highest energy usage for participation.

The Company has not analyzed the benefits of targeting low-income customers for participation in the program. Targeting customers based on their income level and without regard to their energy usage would be inconsistent with the program's goal of targeting higher energy using customers first. In addition, the program contractor, Oracle, reports evaluations from other states have found that low-income customers save energy at the same rate as other customers when receiving standard home energy reports.

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Witness: John A Rogness

Q - 7 Refer to KPC's Response to Sierra Club's initial data request no. 14, in which KPC states that "it is not possible" to state how much, if any, of the current DSM surcharge is intended to make up for past under-collection of expenditures that have already been made. Notwithstanding the fungibility of money and the current lack of allocation of the DSM factor, please explain why "it is not possible" to compute how much of the current DSM surcharge is intended to make up for past under-collection of expenditures that have already been made.

A - 7 This data request requires Kentucky Power to assume away the reasons provided in the Company's response to SC 1-14 for its inability to respond to the original data request. Notwithstanding the assumptions contained in this data request the Company remains unable to make the requested calculation.

Further, please refer to the Summary Tab on KPCO_R_SC_1_11_Attachment2. Under Column E (Year 2017 1st Half), Line 4. There, the Company forecasted a total of \$10,233,302 to be recovered during the period. On Line 6, the Company forecasted the proposed factor would recover \$8,725,687, leaving an ongoing under-recovery of \$1,507,615. No part of the calculation allocates current period program costs, current period lost revenues, current period incentives, or past under-recoveries to the \$8,725,687 forecasted to be recovered through the factors or the \$1,507,615 forecasted under-recovery.

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Q - 8

Please refer to KPC's Response to Sierra Club's Initial RFI no. 16, in which KPC provides a spreadsheet that indicates that the amount of residential and commercial surcharges needed to collect an ongoing annual expenditure of \$6M, including associated lost revenues and incentives, would be 0.002071 and 0.001938, respectively.

a. Please confirm that the following chart reflects the difference between the current DSM surcharge and DSM surcharge estimates provided in response to Sierra Club's Initial RFI no. 16. If your answer is anything other than "confirmed," please explain.

	RES	COM
Current Surcharge	0.008013	0.004206
Q16 Surcharge for ongoing \$6M expenditure	0.002071	0.001938
Difference	0.005942	0.002268
Difference as a % of current surcharge	74%	54%

b. Please confirm that the difference between the DSM surcharge estimates provided in response to Sierra Club's Initial RFI no. 16 and the current surcharges is primarily due to the current collection of previously under-collected funds. If your answer is anything other than "confirmed," please explain.

c. Please identify and explain the factors that lead to the current level of previously under-collection funds.

A - 8

a. Confirmed.

b. Kentucky Power objects to this data request because of the ambiguity of the phrase "primarily due to..." Kentucky Power further objects to this data request to the extent it is premised upon the assumption the Company is not entitled to recover prior unrecovered program expenditures, lost revenues, and incentives. Notwithstanding these objections, Kentucky Power cannot confirm the statement. The 0.002071 (residential) and 0.001938 (commercial) factors, as well as the current DSM factors, represent the midpoint between the factors projected to be required to recover only past under-recoveries (floor) and the factor required to recover \$ 6 million in DSM program expenditures plus lost revenues and incentives (ceiling).

c. Please see the response to SC 2-5(b).