CASE NO. 2017-00321

Response to Duke Request For Information To The Kentucky School Boards Association

Question No. 1

Responding Witness: Ronald Willhite

1. Other than Mr. Willhite, please identify any persons, including experts whom KSBA has consulted or retained, or is in the process of retaining with regard to evaluating the Company's Application in this proceeding.

Response

None other than Counsel and district personnel.

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Question No. 2

Responding Witness: Ronald Willhite

2. For each person identified in (prior) response to Interrogatory No. 1 above, please state (1) the subject matter of the discussions/consultations/evaluations; (2) the written opinions of such persons regarding the Company's Application; (3) the facts to which each person relied upon; and (4) summary of the person's qualifications render such а to discussions/consultations/evaluations.

Response

District personnel provided billing information and concerns with the proposed increase.

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Response to Duke Request For Information To The Kentucky School Boards Association

Question No. 3

Responding Witness: Ronald Willhite

- 2. For each person identified in response to Interrogatory No. 1 above, please identify all proceedings in all jurisdictions in which the witness/persons has offered evidence, including but not limited to, pre-filed testimony, sworn statements, and live testimony. For each response, please provide the following:
 - (a) the jurisdiction in which the testimony or statement was pre-filed, offered, given, or admitted into the record;
 - (b) the administrative agency and/or court in which the testimony or statement was pre-filed, offered, admitted, or given;
 - (c) the date(s) the testimony or statement was pre-filed, offered, admitted, or given;
 - (d) the identifying number for the case or proceeding in which the testimony or statement was pre-filed, offered, admitted, or given; and
 - (e) whether the person was cross-examined.

Response

N/A

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Question No. 4

Responding Witness: Ronald Willhite

4. Identify and provide all documents or other evidence that KSBA may seek to introduce as exhibits or for purposes of witness examination in the above-captioned matter.

Response

Any pre-filed testimony or data request responses from any of the parties.

CASE NO. 2017-00321

Response to Duke Request For Information To The Kentucky School Boards Association

Question No. 5

Responding Witness: Ronald Willhite

5. Please identify all proceedings in all jurisdictions in the last five years in which Mr. Willhite has offered evidence, including but not limited to, pre-filed testimony, sworn statements, and live testimony and analysis. For each response, please provide the following:

- (a) the jurisdiction in which the testimony, statement or analysis was pre-filed, offered, given, or admitted into the record;
- (b) the administrative agency and/or court in which the testimony, statement or analysis was pre-filed, offered, admitted, or given;
- (c) the date(s) the testimony, statement or analysis was pre-filed, offered, admitted, or given;
- (d) the identifying number for the case or proceeding in which the testimony, statement or analysis was pre-filed, offered, admitted, or given;
- (e) whether the witness was cross-examined;
- (f) the custodian of the transcripts and pre-filed testimony, statements or analysis for each proceeding; and
- (g) copies of all such testimony, statements or analysis.

Response

PSC Case Nos. 2016-00371 & 00372, 2017-00179, 2014-00370 & 0371, 2014-00396 and 2012-00221 & 00222 which are available on the Commission's website.

CASE NO. 2017-00321

Response to Duke Request For Information To The Kentucky School Boards Association

Question No. 6

Responding Witness: Ronald Willhite

6. Please provide copies of any and all documents, analysis, summaries, white papers, work papers, spreadsheets (electronic versions with cells intact), including drafts thereof, as well as any underlying supporting materials created by Mr. Willhite as part of his evaluation of the Company's Application or used in the creation of Mr. Willhite's testimony.

Response

KSBA_R_DEK_6_Exhibit 2 Graphs

KSBA_R_DEK_6_Occupied_Non-Occupied

Please refer to the Response Staff1 3c.

CASE NO. 2017-00321

Response to Duke Request For Information To The Kentucky School Boards Association

Question No. 7

Responding Witness: Ronald Willhite

7. Please provide copies of any and all documents not created by Mr. Willhite, including but not limited to, analysis, summaries, cases, reports, evaluations, *etc.*, that Mr. Willhite relied upon, referred to, or used in the development of his testimony.

Respond

Districts provided copies of utility trackers and/or access to the Company's website to facilitate accumulation of billing data. Please refer to the response to Staff1 3c.

CASE NO. 2017-00321

Response to Duke Request For Information To The Kentucky School Boards Association

Question No. 8

Responding Witness: Ronald Willhite

8. Please provide copies of any presentations, power point, etc., made by Mr. Willhite in the last three (3) years that discuss any of the following: 1) utility rate-making; 2) school energy usage; 3) participation in utility-offered demand-side management; and 4) intervention in utility rate cases.

Response

See attached.

CASE NO. 2017-00321

Response to Duke Request For Information To The Kentucky School Boards Association

Question No. 9

Responding Witness: Ronald Willhite

9. Referring to Page 4, Lines 4 - 7 of Mr. Willhite's testimony where he states that "...schools are not typically in session during the Company's peak period with most class dates beginning mid to late August ..." is it Mr. Willhite's belief that Duke Energy Kentucky has not or will not experience peak load or near peak load days in mid to late August or during the month of September?

(a) If the answer is in the affirmative, please provide all documents relied upon and analysis and studies performed by Mr. Willhite to support such conclusion.

Response

Refer to Response to Staff1 Item 1.

CASE NO. 2017-00321

Response to Duke Request For Information To The Kentucky School Boards Association

Question No. 10

Responding Witness: Ronald Willhite

10. Referring to the first chart on Page 4 of Mr. Willhite's testimony, please provide a version of this chart showing amounts on the y-axis.

Response

There are no amounts. The Chart depicts Company system peak times to typical first student day.

CASE NO. 2017-00321

Response to Duke Request For Information To The Kentucky School Boards Association

Question No. 11

Responding Witness: Ronald Willhite

- 11. Referring to the second chart on Page 4 of Mr. Willhite's testimony:
 - (a) Please provide the data underlying the graph.
 - (b) Please identify each customer and each customer's demand represented in the chart and indicate whether or not each school is a customer of Duke Energy Kentucky.

Response

- a. Please refer to the Response to Item 5.
- b. All data was supplied by Duke and is for its customers.

CASE NO. 2017-00321

Response to Duke Request For Information To The Kentucky School Boards Association

Question No. 12

Responding Witness: Ronald Willhite

- 12. Referring to Page 5, Lines 2 3 of Mr. Willhite's testimony:
 - (a) Please provide all of the data used by Mr. Willhite to compute the \$260,000 figure.
 - (b) Does Mr. Willhite agree that the savings he calculates has no effect on the Company's overall revenue requirement?
 - (c) If the answer to (b) is "yes," does Mr. Willhite agree that, if his proposal is approved, the \$260,000 saved by the group of schools in his calculation would have to be recovered from other retail customers in order for Duke Energy Kentucky to fully recover its cost of service?
 - (d) Confirm that Mr. Willhite's estimate of \$260,000 includes only public schools, K-12?
 - (e) If the \$260,000 is only for public schools, K-12, please provide Mr. Willhite's estimate of the overall impact of his recommendation on Page 8, Lines 23 26, that the rate be available to public and private schools, K-12, with average monthly demands greater than 50 KW.

Response

- a. Please refer the Response to Staff1 3c
- b. Yes
- c. Yes, as it should to align cost with cost recovery.
- d. Confirmed
- e. Mr. Willhite does not have billing data for non-public schools.

CASE NO. 2017-00321

Response to Duke Request For Information To The Kentucky School Boards Association

Question No. 13

Responding Witness: Ronald Willhite

13. Referring to Page 5, Line 12 of Mr. Willhite's testimony, is he asserting that no other customers on Rate DS are required to have energy management policies?

- (a) If the answer is in the affirmative, please explain the basis of such belief.
- (b) If the answer is in the negative, please explain how the presence of an energy management policy distinguishes schools from other customers taking service under the Company's Rate DS who are required to have energy management policies.

Response

Mr. Willhite is not aware of any other customer who is statutorily required to have an energy management plan.

CASE NO. 2017-00321

Response to Duke Request For Information To The Kentucky School Boards Association

Question No. 14

Responding Witness: Ronald Willhite

14. Referring to Page 5, Lines 16 - 17 of Mr. Willhite's testimony, please provide all studies, analyses, or other materials to support Mr. Willhite's assertion that public schools have usage characteristics that are different from <u>all</u> other DS customers.

Response

Please refer to RLW Exhibit 2.

CASE NO. 2017-00321

Response to Duke Request For Information To The Kentucky School Boards Association

Question No. 15

Responding Witness: Ronald Willhite

- 15. Referring to Page 5, Lines 18 19 of Mr. Willhite's testimony:
 - (a) Please identify Duke Energy Kentucky's electric tariff sheet number for the referenced Tariff L.G.S.
 - (b) Please explain why he believes that "public schools provide less risk to serve than other customers served on Tariff L.G.S."
 - (c) Please list all types of risk(s) that Mr. Willhite is referring to in this statement.
 - (d) Please provide all studies, analyses, or other material Mr. Willhite relied upon to assert that "public schools provide less risk to serve than other customers served on Tariff L.G.S."

Response

Please refer to Response Staff Item 2

CASE NO. 2017-00321

Response to Duke Request For Information To The Kentucky School Boards Association

Question No. 16

Responding Witness: Ronald Willhite

16. Referring to Page 6, Lines 18 - 30 of Mr. Willhite's testimony, please identify how many industries there are in Duke Energy Kentucky's service territory that operate 2^{nd} and 3^{rd} and weekend shifts.

Respond

The Company was unable to provide an accurate list of the number of customers by SIC code.

CASE NO. 2017-00321

Response to Duke Request For Information To The Kentucky School Boards Association

Question No. 17

Responding Witness: Ronald Willhite

17. Referring to Pages 7 - 8 of Mr. Willhite's testimony, and the table on Page 8, where he discusses and displays the 24-hour monthly system peak day profiles for schools, Rate DS, and total system:

- (a) Please describe in detail how Mr. Willhite performed the calculations for the schools category.
- (b) What is the source of the information used by Mr. Willhite in making his calculations?
- (c) If these computations were performed in Excel or some other file, please provide the file electronically with all formulas intact.
- (d) Does witness Willhite believe that the monthly 24 hour load profiles for schools presented are statistically representative of all schools in Company's service area?
 - i. If the answer to part (d) is in the affirmative, please explain the basis of this belief.
- (e) Are the profiles representative of the schools witness Willhite intends to be eligible for the rate described on Page 8?

Response

- a. The calculations were performed using the Company's COSS model submitted in STAFF-DR-02-088_Attachment Error re Ref. Refer to the testimony and Response to Staff1 Item 3c.
- b. Refer to the testimony and Response to Staff1 Item 3c.
- c. Refer to the testimony and Response to Staff1 Item 3c.
- d. Yes. The data used was provided by the Company.
- e. Yes

CASE NO. 2017-00321

Response to Duke Request For Information To The Kentucky School Boards Association

Question No. 18

Responding Witness: Ronald Willhite

18. On Page 7, Lines 4 - 27 of witness Willhite's testimony, an explanation is provided on the development of a Cost of Service Study (COSS). Please provide a copy of the COSS performed by Mr. Willhite, in electronic format with all formulas intact.

Response

Please refer to the Response Staff Item 3c.

CASE NO. 2017-00321

Response to Duke Request For Information To The Kentucky School Boards Association

Question No. 19

Responding Witness: Ronald Willhite

19. Referring to Page 7, Lines 6 - 9, please identify by county and district, all school account load data used by Mr. Willhite in his COSS.

(a) Please confirm whether Mr. Willhite only used load and demand data for school accounts located in the Company's service territory.

Respond

Mr. Willhite used the data provided by the Company in their following responses:

KSBA-DR-02-001_Supplemental_1A_1B (Ref_ID)

KSBA-DR-02-001_Supplemental_1C_1D_part_A(Ref_ID)

KSBA-DR-02-001_Supplemental_1C_1D_part_B_(Ref_ID)

CASE NO. 2017-00321

Response to Duke Request For Information To The Kentucky School Boards Association

Question No. 20

Responding Witness: Ronald Willhite

20. Please confirm that Mr. Willhite is proposing a P-12 rate class and tariff to be applicable for accounts with an average monthly demand of 50 kW or greater.

Respond

Yes. Please refer to the Response to Staff Item 4.

CASE NO. 2017-00321

Response to Duke Request For Information To The Kentucky School Boards Association

Question No. 21

Responding Witness: Ronald Willhite

21. Please confirm that in performing his analysis on Pages 7 - 8 of his testimony, Mr. Willhite is only using school accounts that have an annual maximum demand of 100 kW or greater.

- (a) If the response is in the negative, please provide a schedule showing the number of accounts and demand profiles used by Mr. Willhite in his COSS, identifying all accounts that have annual maximum demand less than 100 kW and those accounts with annual maximum demand greater than or equal to 100 kW.
- (b) If the response is in the positive, please explain how a COSS based upon accounts having an annual maximum demand of not less than 100 kW is representative of the customers Mr. Willhite is proposing to be eligible for Rate P 12 (i.e., average monthly demands greater than 50 kW)?
- (c) Please provide any and all data, studies, and analysis that was performed by and/or relied upon by Mr. Willhite to verify that customers with maximum demands of 100 kW or greater is representative of customers with average monthly demands greater than 50 kW.

Respond

- Yes
- a. N/A
- b. Please refer to the Response to Staff Item 4
- c. Please refer to the Response to Staff Item 4

CASE NO. 2017-00321

Response to Duke Request For Information To The Kentucky School Boards Association

Question No. 22

Responding Witness: Ronald Willhite

22. With regard to Mr. Willhite's recommendation that the Commission order Duke Energy Kentucky to reopen rate SP, has Mr. Willhite quantified the number of sports fields in the Company's service territory that are not currently on rate SP?

(a) If the answer is in the affirmative, please provide such analysis.

Respond

Districts identified three separately metered sports fields not currently on rate SP.

CASE NO. 2017-00321

Response to Duke Request For Information To The Kentucky School Boards Association

Question No. 23

Responding Witness: Ronald Willhite

23. Referring to Page 10 of Mr. Willhite's testimony where he discusses the proposed SEMP, has Mr. Willhite conducted any study or analysis regarding the costs of Duke Energy Kentucky implementing and managing such a program?

(a) If the response is in the affirmative, please provide all such analysis.

Respond

Yes.

a. SEMP provides a 50 percent salary match for a district employed energy manager, where a full-time position is assumed to serve 20 P - 12 schools. A district's match is then determined based on the ratio of number of P - 12 schools in the utilities service area to the district total P -12 schools times 20. The district provides the other 50 percent plus local benefits of approximately 2.5 percent. The Department of Education as it does for other certified employees provides health insurance and retirement costs. KSBA-SEMP staff provides analytical, engineering and technical support in addition to initial training and ongoing professional development for the energy managers and other district personnel.

See Attachment: KSBA_R_DEK_23_SEMP Cost

CASE NO. 2017-00321

Response to Duke Request For Information To The Kentucky School Boards Association

Question No. 24

Responding Witness: Ronald Willhite

24. Has Mr. Willhite conducted any study or analysis to determine the rate impact to Duke Energy Kentucky's customers for implementing the SEMP as part of the Company's DSM program?

Respond

None other than the cost provided in Response to Item 23 above.

CASE NO. 2017-00321

Response to Duke Request For Information To The Kentucky School Boards Association

Question No. 25

Responding Witness: Ronald Willhite

25. Is Mr. Willhite aware of any P-12 schools in Duke Energy Kentucky's service territory that are currently taking advantage of the Company's existing suite of DSM programs?

(a) If the answer is in the affirmative, is Mr. Willhite aware if <u>all</u> P-12 schools are taking advantage of all possible DSM programs currently offered by Duke Energy Kentucky?

Respond

Yes. It has been SEMP's experience, among of significant benefits, that the presence of a skilled energy professional – Energy Manager in districts greatly enhances the utilization of a utility's DSM programs.

CASE NO. 2017-00321

Response to Duke Request For Information To The Kentucky School Boards Association

Question No. 26

Responding Witness: Ronald Willhite

26. If Mr. Willhite's recommendation regarding the implementation of the SEMP as part of the Company's DSM program is ordered by the Commission and the Commission further orders the creation of a separate P-12 tariff, does Mr. Willhite agree that, in accordance with KRS 278.285(3), a separate DSM rate should also be established for the P-12 customer class for cost recovery of DSM programs that are only available to schools in the P-12 class?

(a) If the response is in the negative, please explain why a separate DSM rate should not also be established.

Response

The P-12 tariff would have a DSM adder. Since DSM programs are intended to be a least-cost option all customers benefit from a program and as such cost recovery is appropriately assigned to multiple rate classes.

CASE NO. 2017-00321

Response to Duke Request For Information To The Kentucky School Boards Association

Question No. 27

Responding Witness: Ronald Willhite

27. What effects will it have on other customer classes if Duke Energy Kentucky participates in the SEMP?

Respond

Other customers will benefit from the cost avoidance of higher cost options.

CASE NO. 2017-00321

Response to Duke Request For Information To The Kentucky School Boards Association

Question No. 28

Responding Witness: Ronald Willhite

28. Referring to Page 5 of Mr. Willhite's testimony, was billing data from all school districts within Duke Energy Kentucky's service territory used in the calculations? Please provide the data used.

Respond

Yes. Please refer to the Response to Staff 3c.