

VERIFICATION

STATE OF OHIO)
) SS:
COUNTY OF HAMILTON)

The undersigned, Thomas Wiles, Director Analytics, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of his knowledge, information and belief.


Thomas Wiles, Affiant

Subscribed and sworn to before me by Thomas Wiles on this 15th day of NOVEMBER, 2017.

ADELE M. FRISCH
Notary Public, State of Ohio
My Commission Expires 01-05-2019


NOTARY PUBLIC

My Commission Expires: 1/5/2019

VERIFICATION

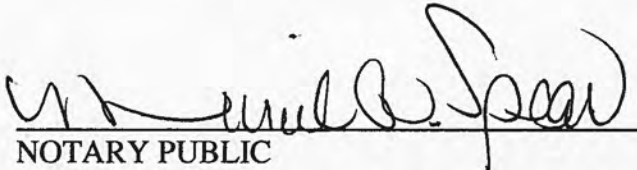
STATE OF NORTH CAROLINA)
) SS:
COUNTY OF MECKLENBURG)

The undersigned, Scott Park, being duly sworn, deposes and says that he is the Director of Integrated Resource Planning & Analytics - Midwest, and that he has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of his knowledge, information and belief.



Scott Park, Affiant

Subscribed and sworn to before me by Scott Park, on this 25th day of October,
2017.



NOTARY PUBLIC


My Commission Expires: Oct. 20, 2018



VERIFICATION

STATE OF NORTH CAROLINA)
) **SS:**
COUNTY OF MECKLENBURG)

The undersigned, Scott Burnside, Manager Post Analyst & Regulatory Support, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing data requests are true and correct to the best of his knowledge, information and belief.



Scott Burnside, Affiant

Subscribed and sworn to before me by Scott Burnside on this 31 day of October _____, 2017.

KATIE JAMIESON
Notary Public, North Carolina
Gaston County
My Commission Expires _____




NOTARY PUBLIC

My Commission Expires: June 14, 2021

VERIFICATION

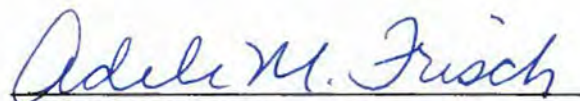
STATE OF OHIO)
)
 COUNTY OF HAMILTON) SS:

The undersigned, Trisha Haemmerle, Senior Strategy & Collaboration Manager, being duly sworn, deposes and says that she has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of her knowledge, information and belief.


 Trisha Haemmerle, Affiant

Subscribed and sworn to before me by Trisha Haemmerle on this 23rd day of OCTOBER, 2017.

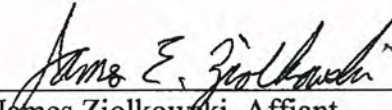
ADELE M. FRISCH
 Notary Public, State of Ohio
 My Commission Expires 01-05-2019


 NOTARY PUBLIC
 My Commission Expires: 1/5/2019

VERIFICATION

STATE OF OHIO)
) SS:
COUNTY OF HAMILTON)

The undersigned, James Ziolkowski, Director of Rates & Regulatory Planning, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of his knowledge, information and belief.


James Ziolkowski, Affiant

Subscribed and sworn to before me by James Ziolkowski on this 23RD day of OCTOBER, 2017.

ADELE M. FRISCH
Notary Public, State of Ohio
My Commission Expires 01-05-2019


NOTARY PUBLIC

My Commission Expires: 1/5/2019

KyPSC Case No. 2017-00324
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REQUEST:

Refer to the Company's response to AG-DR-01-001, wherein Duke objected to answering the portion relating to MW impact, on the basis that "the information does not exist."

- a. Why does this information not exist?
- b. If the answer to (a), above, is that the information is not ascertainable, explain why it should be used as a metric when projecting DSM impacts when it is unable to be confirmed after the fact.

RESPONSE:

- a. The projected MW impact information included in Table 4-A of the 2014 Integrated Resource Plan ("IRP") was forecast using a methodology that is not applicable to the determination of the "actual" amounts of MW impacts as the Company understood the original AG-DR-01-001. The methodology used in the IRP Analysis employed the following steps:
 - In order to estimate the MW impacts included in the IRP, the Company first had to estimate the annual expected participation for each individual EE measure. From that information, an hourly shape of the KW savings was created for each measure.

- These individual hourly impacts from all projected measures must be aggregated to create an hourly savings profile across all hours included in the IRP. In addition, because participation in these measures will occur over time rather than all customers adopting these projected measures immediately, this hourly savings profile must also include a forecast of the timing at which these measures will be adopted throughout the entire planning period of the IRP.
- The IRP planning model was run with the forecasted EE hourly KW savings impacts to compute the expected system MW load in each hour of the IRP planning period. This provides the forecast of the hour in which the Company can expect to see the Peak MW usage in each forward year.
- Once the Peak MW hour has been determined, the IRP planning group examines the hourly EE KW savings profile provided to the model and identifies the projected MW savings from EE forecast during that hour. This is the information that was provided in the IRP Table 4-A.

In order to determine the “actual” MW impacts from EE during the years requested in this Data Request, the Company would be required to recreate an hourly EE MW savings profile using the timing of actual customer participation by measure. In addition, as the Company interpreted the question from the AG, the Company would be required to use the actual system load, which already included the impacts of EE measures, and would have to adjust the system load for any differences in the actual time of the system Peak versus when it would have occurred absent the impact of the EE measures, as well as differences

between the actual time of the system peak and the time that resulted from the IRP planning process.

The Company has not performed this analysis, therefore, the Company correctly stated in the original response that the information does not exist.

This analysis would be extremely burdensome and, even if it could be performed, would still only provide an estimate of the “actual” influence that EE measures had on the overall system peak load for a given year.

However, the company has previously filed the capability for KW peak reduction that was created in a given year as part of the annual cost recovery filings. These values are listed below in an updated table provided as AG-DR-02-001 Attachment.

It is clear that these values are higher than the original numbers by more than 5%. The Company does not have the capability to dictate customer participation in programs, therefore, any differences between what was projected in the IRP and what actually occurred is a result of multiple factors, including higher or lower participation than what was originally projected. This is further explained in the response to AG-DR-03-001.

- b. The ability to ascertain the Peak MW savings capability from a given EE measure is not in question and in fact, the Peak MW savings from EE measures are included as part of the normal Evaluation, Measurement and Verification process for EE programs and are the basis for the values that are included in the Company’s annual cost recovery filings.

As the Company interpreted the original question, however, the ability to provide actual Peak MW reduction results from a given year on the same basis as those presented in the IRP Table 4-A is not possible for reasons explained in the response to part a above.

PERSON RESPONSIBLE: Tom Wiles

Table 4-A
Projected DSM Impacts

Year	EE Impacts - MWh	EE Impacts - MW	DR Impacts - MW			Total DSM Impacts - MW
			Power Share	Power Manager	Total	Total
2014	20,291	2.4	21.3	11.2	32.5	34.9
2015	41,924	6.3	14.7	11.9	26.6	32.9
2016	64,858	10.6	16.9	12.1	29.0	39.6

Actual DSM Impacts*

Year	EE Impacts - MWh	EE Impacts - MW	DR Impacts - MW			Total DSM Impacts - MW
			Power Share	Power Manager	Total	Total
2014	33,366	6.1	22.3	11.5	33.8	39.9
2015	57,702	9.9	25.0	11.8	36.9	46.8
2016	92,905	15.6	18.1	12.5	30.6	46.2

% Difference

Year	EE Impacts - MWh	EE Impacts - MW	DR Impacts - MW			Total DSM Impacts - MW
			Power Share	Power Manager	Total	Total
2014	64%	157%	5%	3%	4%	14%
2015	38%	58%	70%	-1%	39%	42%
2016	43%	48%	7%	4%	6%	17%

* "EE Impacts - MW" represents the annual capability for Gross Peak MW reduction

Duke Energy Kentucky
Case No. 2017-00324
Attorney General's Second Set Data Requests
Date Received: October 20, 2017

AG-DR-02-002

REQUEST:

Refer to the Company's response to AG-DR-01-003, wherein Duke stated that a 5% RPS by 2028 is reasonable.

- a. Confirm that the request notes that the 2014 IRP assumed 5% of retail sales would be met with renewable energy beginning in 2019, and increasing into 2028.
- b. Confirm that the response provided states that a 5% RPS by 2028 is reasonable.
- c. Reconcile the response to AG-DR-01-003 with the quote from the 2014 IRP, given that they seem to indicate two different timelines.

RESPONSE:

We still believe that a 5% RPS by 2028 is reasonable and can represent a specific regulatory requirement or renewable generation that could reasonably be added to the system. Specifically, the 2014 IRP assumed that that .5% of energy would be served by renewable resources in 2019 and that would increase .5% per year up to 5% of energy being served by renewable resources in 2028.

The reference on the bottom of page 52 of the IRP that states "This IRP assumes that 5% of retail sales would be met with renewable energy sources beginning in 2019, increasing 0.5% annually through 2028" includes a typographical error and should actually state .5% instead of 5%.

PERSON RESPONSIBLE: Scott Park

REQUEST:

Refer to the Company's response to AG-DR-01-004, wherein Duke objected to the request "because it is not appropriate to compare the projection in the 2014 IRP . . . to the actual performance" of the DSM portfolio.

- a. Considering the objection made by Duke, provide the Attorney General with the information Duke deems as proper to compare against the performance of the "dynamic" DSM programs in determining whether the programs still provide a net benefit to the Company's customers.
- b. Considering the objection made by Duke in response to AG-DR-01-004, does the Company believe it should be the arbiter of what information should or should not be used to determine the reasonableness of the program it implements and profits from?

RESPONSE:

The Company's response to AG -01-04 merely points out that the comparison to what was projected as part of the Company's 2014 IRP reflected assumptions as to costs and program participation projections that were anticipated at that single point in time, namely the spring of 2014 when those forecasts were performed. The Company's DSM program is dynamic in that in the intervening years since the 2014 IRP was prepared, the Company has added additional programs, added and removed various program measures

as a result of cost-effectiveness changes, had robust and greater than anticipated program participation, had a key vendor go out of business, and entered into new contracts with other vendors. All of these inputs have impacted the DSM Program making the comparison of the current portfolio to that reflected in the 2014 IRP akin to comparing apples and oranges. A more appropriate comparison is to evaluate the current program portfolio based upon its actual performance and whether or not it remains cost-effective. The Company makes annual filings in this regard with the Commission.

PERSON RESPONSIBLE: Tom Wiles

Duke Energy Kentucky
Case No. 2017-00324
Attorney General's Second Set Data Requests
Date Received: October 20, 2017

AG-DR-02-004

REQUEST:

Refer to the Company's response to AG-DR-01-005. Confirm that the amounts listed in the third column under the title, "Purchased Power from PJM" are designated as "Revenue". Do these amounts represent revenue to Duke? If so, why?

RESPONSE:

The amounts listed in the third column under the title "Purchased Power from PJM" were erroneously titled "Revenue" in the Company's response to AG-DR-01-005. The correct title for the third column is "Cost". A corrected table is provided below.

Purchased Power from PJM		
<u>Calendar Year</u>	<u>MWh</u>	<u>Cost</u>
2013	913,020	\$ 33,247,522
2014	1,528,738	\$ 77,228,058
2015	600,495	\$ 19,368,455
2016	1,033,765	\$ 30,343,791

PERSON RESPONSIBLE: Scott Burnside

Duke Energy Kentucky
Case No. 2017-00324
Attorney General's Second Set Data Requests
Date Received: October 20, 2017

AG-DR-02-005

REQUEST:

Refer to the Company's response to AG-DR-01-008(b). Does the Company anticipate filing amended tariff sheets Nos. 62 and 78, on or before November 15, 2017?

RESPONSE: Yes. The amended tariff sheets will be filed as part of annual cost recovery of Demand Side Management.

PERSON RESPONSIBLE: Trisha Haemmerle

Duke Energy Kentucky
Case No. 2017-00324
Attorney General's Second Set Data Requests
Date Received: October 20, 2017

AG-DR-02-006

REQUEST:

Refer to the Company's response to AG-DR-01-011(c). In responding with "unknown", is Duke stating that it has received previous permission from the Commission to change the PI amount but does not know in what case or matter Commission approval was received? Explain the response, "unknown", in complete detail.

RESPONSE:

Upon information and belief, the change occurred with the Commission's approval of the Company's Application in Case No. 2004-00389. As part of its application beginning on page 33, the Company described its lost revenue and shared savings calculation, including using a 10 percent incentive.

PERSON RESPONSIBLE: James E. Ziolkowski