## VERIFICATION

STATE OF OHIO	)	
	)	SS:
COUNTY OF HAMILTON	)	

The undersigned, Theodore H. Czupik, Jr., Rates & Regulatory Strategy Manager, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing post hearing data requests, and that the answers contained therein are true and correct to the best of his knowledge, information and belief.

Theodore H. Czupth Dr.
Theodore H. Czupik Jr. Affiant

Subscribed and sworn to before me by Theodore H. Czupik, Jr., on this 26 day of APRIL \_\_, 2017.

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

Adulu M. Frisch

NOTARY PUBLIC

My Commission Expires: 1/5/2019

## **VERIFICATION**

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

The undersigned, John D. Swez, Director of General Dispatch & Operations, Power Trading and Dispatch, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing post hearing data requests, and that the answers contained therein are true and correct to the best of his knowledge, information and belief.

John D. Swez, Affiant

Subscribed and sworn to before me by John D. Swez on this 21 day of April, 2017.

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

My Commission Expires: June 14,2021

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Duke Energy Kentucky Case No. 2017-00005

STAFF'S POST HEARING First Set Data Requests

Date Received: April 21, 2017

STAFF-POST HEARING-DR-01-001

REQUEST:

Refer to Duke Kentucky's confidential response to the Commission's February 6, 2017

Request for Information ("Commission's First Request"), Item 5. Explain why some

months contain no information.

**RESPONSE:** 

The Company utilizes a commercially available production cost model (GenTrader) to

develop the forecast utilized in the Company's FAC filings. All of the Company's

generating units are represented in the model with their key characteristics, such as

capacity, fuel type, heat rate, and emission rates. Other inputs include projected fuel

costs for each unit, planned outages, forced outage rates, the market price for power,

emission allowance costs, and the Company's load forecast for native load

customers. The GenTrader model simulates the economic dispatch of the Company's

generating fleet in PJM and projects generation and purchases to meet the forecasted load

for future periods. For the time periods forecasted, the model provides projections of

how generating units are expected to operate, including projections of fuel consumption

and emissions. The model also allocates the generation between native and non-native

load and projects energy purchases when economical.

The Company's response to the above-cited information request was based upon

forecasted data available at the time the response was prepared. During the months that

contained no information, the Company's production cost model projected zero

generation at the particular unit(s) and thus zero fuel or fuel costs was attributed to that

unit. As explained above, the reason for zero generation appearing for a particular unit

was based upon planned outages or forecasts of dispatch against anticipated market

prices. In the latter case, market purchases were forecasted to be more economic than unit

dispatch.

PERSON RESPONSIBLE:

John Swez

Duke Energy Kentucky Case No. 2017-00005

STAFF'S POST HEARING First Set Data Requests

Date Received: April 21, 2017

STAFF-POST HEARING-DR-01-002

**REQUEST:** 

Refer to the attachment to Duke Kentucky's response to the Commission's First Request,

Item 13. The response shows that Duke Kentucky's line loss at the beginning of the two-

year review period was 7.35 percent and ended the review period at 8.16 percent.

However, in the middle of the review period, it decreased to a low of 4.48 percent.

Explain why the line loss decreased so significantly and then increased to just above its

level at the beginning of the review period.

**RESPONSE:** 

Staff-DR-01-013 Attachment calculates losses based on "unaccounted for energy", which

is the difference between (1) the known calendar month available sources of energy,

either generated or purchased, and (2) the estimated uses of energy which include

calendar month sales of energy (determined by actual billed sales plus an estimate of

unbilled sales for a month) and company use of energy. The calculation of the loss

percentage is performed using a 12 month rolling average.

The Company believes its loss percentages are reasonable. Since the generating assets

were transferred to Duke Energy Kentucky, there has always been a fluctuation in the

loss percentages over any given two year period.

While it is unable to pinpoint the exact reason for the variations, the Company believes

that the variations in the loss percentages over the two year review period are likely due

to a combination of the following technical and non-technical factors:

Technical losses include:

1. Heat dissipation resulting from current passing through resistance in conductors

and magnetic losses in transformers.

2. Varying load conditions.

Non-Technical losses include:

1. Power lines making contact with tree limbs,

2. Unmetered load,

3. Metering,

4. Billing corrections,

5. Theft and non-payment,

6. Meter read errors,

7. Estimation errors for accounting, and

8. Timing differences

PERSON RESPONSIBLE: Theodore H. Czupik Jr./ John Swez

**Duke Energy Kentucky** Case No. 2017-00005

STAFF'S POST HEARING First Set Data Requests

Date Received: April 21, 2017

STAFF-POST HEARING-DR-01-003

**REQUEST:** 

Refer to the attachment to Duke Kentucky's response to the Commission's First Request,

Item 14. The response shows that each of the Woodsdale units experienced an outage

labeled as "Boroscope and Fire Protection Upgrade." Explain why the outages for

Woodsdale units 1, 2, and 3 lasted more than twice as long as they did for units 4, 5 and

6.

**RESPONSE:** 

During the Boroscope and Fire Protection Upgrade outages in April and May of 2016,

planned outages of approximately 2 weeks in length were scheduled for Woodsdale units

1, 2, and 3 while planned outages of approximately 1 week in length were scheduled for

Woodsdale 4, 5, and 6. For these outages, the fire protection upgrade part of the outage

was the critical path. Since the fire protection system was a new system, the first three

units were planned to take longer. After these outages were completed, knowledge

gained from the first three outages was applied and thus, the next three outages were

completed approximately 1 week quicker.

PERSON RESPONSIBLE:

John Swez