

KyPSC Case No. 2025-00342
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VERIFICATION

STATE OF OHIO)
)
COUNTY OF HAMILTON) **SS:**

The undersigned, Libbie S. Miller, Rates & Regulatory Strategy 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 information contained therein is true and correct to the best of her knowledge, information, and belief.



Libbie S. Miller, Affiant

Subscribed and sworn to before me Libbie S. Miller on this 17th day of February, 2026.



NOTARY PUBLIC

My Commission Expires: July 8, 2027



EMILIE SUNDERMAN
Notary Public
State of Ohio
My Comm. Expires
July 8, 2027

Duke Energy Kentucky
Case No. 2025-00342
STAFF Second Request for Information
Date Received: February 6, 2026

STAFF-DR-02-001

REQUEST:

Refer to the Direct Testimony of James J. McClay, (McClay Direct Testimony), page 4, lines 4-7. Discuss the long-term outlook for U.S. natural gas supplies and the natural gas industry's ability to meet rising demand beyond 2028.

RESPONSE:

The same robust natural gas supply dynamics that I discussed in my testimony exist beyond 2028 and will continue to support the long-term outlook for natural gas supply and the ability for the industry to meet rising demand. The U.S. possesses massive proven natural gas reserves to support substantial production increases for several decades to meet both domestic and LNG demand. Ongoing improvements in drilling efficiency, hydraulic fracturing and extraction technologies in key basins like the Permian and Haynesville enable higher per-well yields and lower costs, which is expected to allow producers to ramp up output responsively to meet demand surges from data centers and LNG exports through the 2030's. EIA and IEA projections indicate long-term balance as official forecasts show U.S. dry natural gas production increasing to 42-44 TCF in early 2030's and remaining stable through 2050 supported by associated gas from oil production and remaining sufficient to meet demand from population growth, manufacturing reshoring, and digital demand.

PERSON RESPONSIBLE: James "Jim" J. McClay

PUBLIC STAFF-DR-02-002

REQUEST:

Refer to the McClay Direct Testimony, page 4, lines 18-19. Explain the timing of actively soliciting bids from gas suppliers for intra-day dispatch from when PJM notifies Duke Kentucky that one or more combustion turbines need to ramp up such that additional gas will need to be acquired in the intra-day market.

RESPONSE:

CONFIDENTIAL PROPRIETARY TRADE SECRET

Before 10:00 on market days, the gas trader will pull the next day price indication from [REDACTED] off the Intercontinental Exchange (ICE). The trader will also request a same day and next day price indication directly from the bilateral market. This information is then shared with the power traders to assist in building a model to offer the Woodsdale units into PJM for the day ahead.

When the PJM Day Ahead awards are posted at 13:30 by the generation dispatcher, gas is procured to cover that awarded run:

- The trader will determine the volume needed to cover the awarded run.
- The trader will request a quote from suppliers, requesting volumes for the appropriate gas day (considering the power day and gas day do not align). The current gas day purchases at intraday (ID2) pricing. The next day purchases would be an evening cycle purchase.
- The best offer will be selected.

When PJM requests a Woodsdale unit to ramp without a Day Ahead award for the gas day, the generation dispatcher will contact the gas trader expeditiously. The gas trader determines the necessary volume and requests a quote from suppliers and selects the best offer. Woodsdale units have a minimum runtime of 1 hour; therefore, the gas trader requests a volume that represents a reasonable runtime and monitors, as needed, to purchase additional gas for the system conditions. If a run approaches the end of the day's market liquidity, the gas trader will consult with the generation dispatcher to assess current conditions with PJM (current LMPs, how the running units are being utilized, duration of the day ahead award, day ahead hourly pricing forecast, etc.) to determine a probable duration of the reliability assessment commitment (RAC) and will purchase additional volumes, as needed, to cover this duration. If there is an operational flow order (OFO) on TETCO, Duke Energy Kentucky is not permitted to burn more than the original nomination without financial penalty; this forces the generation dispatcher to change the offer for the Woodsdale units to reflect a price on fuel oil and unavailable on gas before the original nomination is depleted. Without an OFO, the units may be permitted to use a long imbalance, if available, and approved by TETCO gas control operators.

PERSON RESPONSIBLE: James "Jim" J. McClay

Duke Energy Kentucky
Case No. 2025-00342
STAFF Second Request for Information
Date Received: February 6, 2026

STAFF-DR-02-003

REQUEST:

Refer to the McClay Direct Testimony, page 11, lines 11-14. Explain whether the \$887,000 in capacity performance credits were passed back to ratepayers through the Fuel Adjustment Clause (FAC) and if so, identify where the credits were included in the FAC filing.

RESPONSE:

Capacity performance credits and assessments were approved by the Commission for inclusion in the Profit Sharing Mechanism (Rider PSM) per the April 13, 2018 Order in Case No. 2017-00321.¹ Therefore, the \$887,000 in capacity performance credits were not passed back to the ratepayers through the FAC. Instead, the capacity performance credits were shared with the ratepayers on the Capacity Transactions Schedule 4 of Rider PSM.

PERSON RESPONSIBLE: James “Jim” J. McClay, III
Libbie S. Miller

¹ See *In the Matter of the Electronic Application of Duke Energy Kentucky, Inc. For: 1) An Adjustment of the Electric Rates; 2) Approval of An Environmental Compliance Plan and Surcharge Mechanism; 3) Approval of New Tariffs; 4) Approval of Accounting Practices to Establish Regulatory Assets and Liabilities; And 5) All Other Required Approvals and Relief*, Case No. 2017-00321, Order, pp. 50-52, 80 (Ky. P.S.C. April 13, 2018).

Duke Energy Kentucky
Case No. 2025-00342
STAFF Second Request for Information
Date Received: February 6, 2026

STAFF-DR-02-004

REQUEST:

Refer to the Direct Testimony of John D. Swez (Swez Direct Testimony), page 6, footnote

1. Explain why PJM Interconnection, LLC (PJM) is eliminating payments for reactive power within the standard power factor range and how PJM will mitigate the need for reactive power.

RESPONSE:

On October 17, 2024, FERC issued Order No. 904, finding that it is unjust and unreasonable for transmission providers to separately charge transmission customers for a generating facility’s provision of reactive power within the standard power factor range, and that such charges result in unjust and unreasonable transmission rates.¹ FERC noted that providing separate compensation for the provision of reactive power within the standard power factor range risks “overcompensation and market distortion in ways that did not exist prior to the existence of organized markets.”² FERC further stated that “generating facilities providing reactive power within the standard power factor range are only meeting their obligations under their interconnection agreements and in accordance with good utility practice, and in doing so, incur no or at most de minimis variable costs beyond the cost of providing real power.”³

¹ *Comp. for Reactive Power Within the Std. Power Factor Range*, 189 F.E.R.C. P61,034, at P61,258 and P61,265 (Oct. 17, 2024).

² *Id.*, at P61,264.

³ *Id.*

On June 6, 2025, FERC issued its rehearing of Order No. 904, sustaining its prior determination that transmission providers separately charging transmission customers for reactive power within the standard power factor range is unjust and unreasonable.⁴ Due to these FERC orders, PJM eliminated payments for reactive power within the standard power range. However, generating facilities are expected to continue to provide reactive power within the standard power factor range as part of the interconnection agreement obligations, in accordance with good utility practice. Additional compensation is provided for supply of reactive power outside of the standard power factor range.

PERSON RESPONSIBLE: John D. Swez

⁴ *Comp. for Reactive Power Within the Std. Power Factor Range*, 191 F.E.R.C. P61,188, 2025 FERC LEXIS 792, at *25 (June 6, 2025) (“We sustain the Commission’s determination in Order No. 904 that allowing transmission providers to charge transmission customers for a generating facility’s provision of reactive power within the standard power factor range is unjust and unreasonable.”).

Duke Energy Kentucky
Case No. 2025-00342
STAFF Second Request for Information
Date Received: February 6, 2026

PUBLIC STAFF-DR-02-005

REQUEST:

Refer to the Swez Direct Testimony, page 8, lines 9-11, and page 11, lines 14-17. Explain why it makes a difference, and how performance risk is minimized, when East Bend is committed as “must run” as opposed to “economic” for December, January, and February.

RESPONSE:

CONFIDENTIAL PROPRIETARY TRADE SECRET

In the PJM Energy Market, since a typical coal-fired generating unit may at times be either “marginal” (situations when energy market revenues from operation of the unit are approximately equal to the units variable cost) or “out of the money” (situations when energy market revenues from operation of the unit are less than the unit’s variable cost), having the ability to offer a generating unit with an Economic commitment status could be utilized in these situations. However, before offering a unit with a commitment status of Economic, many factors are considered, such as the amount of energy margin from operation in the PJM energy market, the unit’s initial status (on-line or off-line), required unit testing, risk to de-commitment, ability to cycle the unit, startup and shutdown costs, ability to receive certain PJM credits such as Operating Reserve credits, minimum up and down time, and potential for PJM capacity performance assessment hours and capacity performance penalties, among other factors, to ensure that this action creates value for customers.

As an example of how performance risk is considered and minimized, during the recent cold weather and high PJM energy market prices experienced in late January and early February 2026, the expected energy margin for operation of East Bend was approximately [REDACTED] at the market's peak on Tuesday, January 27, 2026. Thus, the revenue received on this day was [REDACTED] more per day than the variable cost necessary to operate the unit. In addition, although there were no PJM performance assessments and therefore no capacity performance penalties during this time, had there been one, the capacity performance penalty from having East Bend unavailable due to a forced or maintenance outage is estimated at over \$24M per day¹. Thus, had PJM had a 24-hour capacity performance event period over the cold weather / high market peak and East Bend were off-line due to a forced or maintenance outage, the economic loss from not operating East Bend would have been not only a loss of [REDACTED] for additional purchase energy (market replacement cost minus the units avoided variable cost), but also an additional capacity performance penalty of approximately \$24M, for a total lost value of [REDACTED] for this one day under this scenario.

In examining the weekend prior to this cold weather arriving, January 17 and 18th, 2026, the Company's forecast showed East Bend was slightly "out of the money," before including startup costs, and with no consideration of risk. Over this weekend, the economic impact from operating East Bend was a small loss of approximately [REDACTED]. Since the unit's hot startup cost is currently [REDACTED], which is greater than the avoided cost of [REDACTED], it did not make economic sense to de-commit the unit for that weekend, since it does not make sense to incur an additional shutdown/startup cost of [REDACTED] to avoid a

¹ Assumes a \$2,000/MWh PJM Capacity Performance penalty rate, East Bend ICAP of 600 MW and an 83% ELCC value; 600 MW x .83 x \$2,000/MWh x 24 hours = \$24M

█ expense. However, had the weekend loss for January 17th and 18th been forecasted at a higher amount, the Company would still not have elected to decommit the unit, since by not shutting down the unit the Company avoided the risk associated with cycling the unit and potentially the unit being unavailable when market replacement power costs were far higher. As stated in my direct testimony, to lessen the impact and risk of PJM capacity performance events, the company offers East Bend as a Must Run unit when the unit is available during the months of December, January, and February. Thus, once risk adjusted, maintaining the unit on-line and avoiding the risks associated with a shutdown and startup cycle reduced the risk of a potential large economic loss and minimizes customer expenses during Winter periods.

PERSON RESPONSIBLE: John D. Swez

Duke Energy Kentucky
Case No. 2025-00342
STAFF Second Request for Information
Date Received: February 6, 2026

STAFF-DR-02-006

REQUEST:

Refer to the Direct Testimony of Kimberly Hughes (Hughes Direct Testimony), page 4, lines 14-21.

a. Describe the ranges of the of the historic weather and commodity price data used in the model. Include in the response whether the weather data was taken from local area weather stations.

b. Does Duke agree with the premise that there has been an apparent increase in severe and frequent weather events? If so, explain whether the model places more weight upon data derived from more recent weather events.

RESPONSE:

a. The Company currently uses historic weather patterns spanning 1998 to 2022 in order to simulate future weather-driven volatility in load and prices, with Kentucky-specific dynamics informed by local weather, including temperatures from the Cincinnati and Northern Kentucky International Airport (CVG) and solar irradiance and related parameters from local Kentucky sites available in the NREL National Solar Radiation Database (NSRDB). Price histories used in the model span back to 2014, but future price pathways rely on forward market curves and stochastic price simulations based on future year characteristics and the 1998-2022 weather history.

b. Duke Energy Kentucky makes no assertions as to whether there has been an apparent increase in severe weather occurrences in recent years. However, it is important

to note that the Company believes its weather-history driven approach to future simulations helps capture real-world extremes and variability experienced in the Duke Energy Kentucky service territory. Amidst this broader weather history, the 1998 to 2022 time period covers key extreme hot and cold events including the 2012 heat wave, the intense 2014 and 2018 polar vortex cold snaps, and the impacts of Winter Storm Elliot in 2022. Each year is given equal weight in future simulations, but as the Company updates its rolling weather history through time, changing weather dynamics become embedded in future forecasts.

PERSON RESPONSIBLE: Patrick O'Connor

REQUEST:

Refer to the Direct Testimony of Libbie S. Miller (Miller Direct Testimony), page 4, lines 13-16.

- a. Explain whether the 2027 forecast average fuel rate of \$0.41365 \$/kWh is a typo and should read \$0.041365 \$/kWh.
- b. Explain the driving factors that resulted in the 2027 average fuel rate increasing from the 2026 average fuel rate.

RESPONSE:

- a. Yes, the 2027 forecast average fuel rate should read \$0.041365 in my Direct Testimony on page 4, lines 13-16.
- b. Two key factors contribute to the 2027 average fuel rate increasing from the 2026 average fuel rate.
 - 1. The projections include East Bend scheduled for a 30-day planned outage in 2026 and an 82-day planned outage in 2027. The disparity in outage days between the two forecasted years results in the 2027 average FAC rate to be over 10% higher than in 2026, primarily caused by the need to replace East Bend generation with either Woodsdale generation or power purchased from PJM.
 - 2. Price of coal consumed trended higher in 2027 as the contracted price of long-term coal increased year over year, which resulted in higher

costs in 2027. Spot coal consumption prices also are projected to increase from 2026 to 2027.

PERSON RESPONSIBLE: Libbie S. Miller

Duke Energy Kentucky
Case No. 2025-00342
STAFF Second Request for Information
Date Received: February 6, 2026

STAFF-DR-02-008

REQUEST:

Refer to Duke Kentucky's response to Commission Staff's First Request for Information (Staff's First Request), Item 7.

- a. Explain the fuel oil inventory.
- b. If PJM requires the Woodsdale units to run and natural gas is not available, explain how long the units can run all other things being equal.

RESPONSE:

a. The Woodsdale Station ultra-low-sulfur diesel ("ULSD") backup fuel system stores nearly 4 million gallons of diesel fuel (in total) in two separate 2,000,000 gallon tanks. Normally, the tanks are maintained at a full fuel oil storage level, with deviation from full possible when the units are or have been recently operating. This fuel oil storage allows for 72 hours of operation at full load for all six combustion turbines before the station exhausts its supply of fuel oil and if there were no deliveries during the time. However, PJM seldom dispatches all six Woodsdale units at full load for a long period, so in practicality, the units can typically be operated for longer than a 72 hour duration on fuel oil, with the additional length of time dependent on the level of Woodsdale unit PJM dispatch between minimum and maximum loading, and also any deliveries of fuel oil during the time. Further, the ULSD fuel system is designed with two fuel oil unloading stations, which allows Woodsdale Station to refill the fuel oil tanks at a rate of six trucks per hour, delivering approximately 45,000 gallons of fuel oil per hour, with the

units capable of burning 51,000 gallons per hour at full load. Finally, note that there are multiple diesel fuel terminals in the greater Cincinnati area that are sourced from pipelines or barges.

- b. See response to part (a) above.

PERSON RESPONSIBLE: John D. Swez

Duke Energy Kentucky
Case No. 2025-00342
STAFF Second Request for Information
Date Received: February 6, 2026

STAFF-DR-02-009

REQUEST:

Refer to Duke Kentucky's response to Staff's First Request, Item 28, Attachment. Except for the FAC tariff page beginning at page 60 of 61, explain how the submitted redlined tariff pages showing changes in customer class energy charges applies to this proceeding.

RESPONSE:

The redlined tariff pages, except the FAC tariff page beginning at page 60 of 61, showing changes in customer class energy charges are applicable to this proceeding because the Company's proposed base fuel rate of \$0.035797 is a component of the Energy Charge for the applicable tariffs. For example, in STAFF-DR-01-028 Attachment, page 1 of 61, the Energy Charge for the Residential Service Rate RS presently in effect is \$0.126104. Embedded within this rate is the present base fuel rate of \$0.033780. The Company is proposing a new base fuel rate of \$0.035797, which would be embedded in the proposed RS rate of \$0.128121. If the base fuel rate changes, then the Energy Charge must change too. STAFF-DR-01-027 Attachment shows the present and proposed rates in comparative form and how the base fuel rate is a component of the Energy Charge.

PERSON RESPONSIBLE: Libbie S. Miller

**Duke Energy Kentucky
Case No. 2025-00342
STAFF Second Request for Information
Date Received: February 6, 2026**

**CONFIDENTIAL STAFF-DR-02-010
(As to Attachment only)**

REQUEST:

Refer to Duke Kentucky's response to Staff's First Request, Item 32. Provide an update to the response showing the projected fuel requirements for fuel oil.

RESPONSE:

CONFIDENTIAL PROPRIETARY TRADE SECRET (As to Attachment only)

Please see STAFF-DR-02-010 Confidential Attachment for 2025 actual data and 2026/2027 projected data. The Company chose to provide 2025 actual data rather than 2025 projected data due to the actual data rendering the projections obsolete.

PERSON RESPONSIBLE: Libbie S. Miller

CONFIDENTIAL PROPRIETARY TRADE SECRET

CONFIDENTIAL ATTACHMENT DR-02-010

FILED UNDER SEAL

Duke Energy Kentucky
Case No. 2025-00342
STAFF Second Request for Information
Date Received: February 6, 2026

STAFF-DR-02-011

REQUEST:

Refer to Duke Kentucky's response to Staff's First Request, Item 45. Duke Kentucky states that when the forecast energy market price is below a unit's variable costs over an appropriate period, and the unit is "out of the money," the unit may be offered with an Economic commitment status offer. When Duke Kentucky states that the unit is "out of the money," explain whether that means that the unit's variable cost exceeds the energy market price over the whole 24-hour period. If not, provide a more detailed explanation of how a unit is bid into the energy market in this situation.

RESPONSE:

Although the typical time used when discussing how much a coal-fired unit's variable cost to operate exceeds the energy market revenues is a 24-hour/day period, the minimum period necessary to evaluate the economics of offering a unit with an economic commitment status in the energy market is the unit's minimum down time. In the case of East Bend, the unit's minimum down time is 84 hours (3.5 days). The minimum down time is the least amount of time a unit would be decommitted and would need to remain off-line before returning to service. Although PJM only allows a maximum value for the minimum run time offer of 24 hours, any analysis the Company performs regarding unit commitment decisions is over the unit's minimum downtime of 84 hours. The mismatch between the allowed PJM offer and the actual unit's minimum down time is another factor the Company

considers in determining a unit's commitment status offer. In addition, please see the Company's response to STAFF-DR-02-005

PERSON RESPONSIBLE: John D. Swez