

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF DUKE ENERGY)	
KENTUCKY, INC. FOR AN ADJUSTMENT TO)	CASE NO.
RIDER NM II RATES AND FOR TARIFF)	2025-00258
APPROVAL)	

ORDER

On August 4, 2025 Duke Energy Kentucky, Inc. (Duke Kentucky) filed an application to revise its current Rider Net Metering II Tariff Sheet No. 84 (Rider NM II) to use a single Avoided Cost Excess Generation Credit (ACEGC) value for both residential and non-residential customers, instead of using two different values.¹ Duke Kentucky is a jurisdictional electric utility that generates, transmits, distributes, and sells electricity to approximately 155,082 customers in Boone, Campbell, Grant, Kenton, and Pendleton counties.² On August 18, 2025, the Commission determined that an investigation was necessary to determine the reasonableness of the proposed tariff, found that the investigation could not be completed by Duke Kentucky's proposed effective date of September 4, 2025, and suspended the effective date of the proposed tariff for five months, up to and including February 4, 2026.³ On the same date, the Commission also

¹ Application (filed Aug. 4, 2025) at 1.

² *Annual Report of Duke Kentucky to the Public Service Commission for the Year Ending December 31, 2024* (2024 Annual Report) at 4–5.

³ Order (Ky. PSC Aug. 18, 2025).

established a procedural schedule in this case.⁴ No requests for intervention in this matter have been received and four public comments have been filed in this case.⁵ Duke Kentucky responded to five rounds of requests for information.⁶ On December 4, 2025, Duke Kentucky requested that the matter be submitted for decision based upon the existing evidentiary record.⁷ This matter now stands before the Commission for decision.

LEGAL STANDARD

Duke Kentucky filed its application to revise its current Rider Net Metering II, KYPSC Electric No. 2, Sheet No. 84, in accordance with KRS 278.465 through 278.468 and with the Commission’s previous order in Case No. 2023-00413.⁸ The Commission’s standard of review of a utility’s request for a tariff is well established. In accordance with statutory and case law, Duke Kentucky is allowed to charge its customers “only ‘fair, just and reasonable rates.’”⁹ Further, Duke Kentucky bears the burden of proof to show that the proposed tariff is just and reasonable, under KRS 278.190(3).

⁴ Order (Ky. PSC Aug. 18, 2025).

⁵ The Public Comments for this case are available at psc.ky.gov.

⁶ Duke Kentucky’s Response to Commission Staff’s First Request for Information (Staff’s First Request) (filed Sept. 17, 2025); Duke Kentucky’s Response to Commission Staff’s Second Request for Information (Staff’s Second Request) (filed Oct. 15, 2025); Duke Kentucky’s Response to Commission Staff’s Third Request for Information (Staff’s Third Request) (filed Nov. 24, 2025); Duke Kentucky’s Response to Commission Staff’s Fourth Request for Information (Staff’s Fourth Request) (filed Dec. 4, 2025); Duke Kentucky’s Response to Commission Staff’s Fifth Request for Information (Staff’s Fifth Request) (filed Jan. 16, 2026).

⁷ Duke Kentucky’s Letter requesting the matter be submitted on the record (filed Dec. 4, 2025).

⁸ Application at 1. Case No. 2023-00413, *Electronic Application of Duke Energy Kentucky, Inc. for an Adjustment to Rider NM Rates and for Tariff Approval* (Ky. PSC Oct. 11, 2024).

⁹ KRS 278.030; and *Pub. Serv. Comm’n v. Com. ex rel. Conway*, 324 S.W.3d 373, 377 (Ky. 2010).

The review of Rider NM II, particularly the export rate for energy exported onto the electric grid, is governed by KRS 278.465 and 278.466. In accordance with KRS 278.465(1)–(2), Rider NM II applies to eligible customer-generators who own and operate an electric generating facility with a rated capacity of 45 kW or less that is located on the customer's premises for the primary purpose of supplying all or part of the customer's own electricity requirements.

Pursuant to KRS 278.466(3), customers taking service under Rider NM II will be compensated for electricity fed into the grid over a billing period at a rate set by the Commission using ratemaking processes authorized by KRS Chapter 278 in a proceeding initiated by a retail electric supplier. KRS 278.466(4) provides that compensation:

[S]hall be in the form of a dollar-denominated bill credit. If an eligible customer-generator's bill credit exceeds the amount to be billed to the customer in a billing period, the amount of the credit in excess of the customer's bill shall carry forward to the customer's next bill. Excess bill credits shall not be transferable between customers or premises. If an eligible customer-generator closes his or her account, no cash refund for accumulated credits shall be paid.

KRS 278.466(5) provides that net metering rates should be developed as follows:

Using ratemaking process provided by this chapter, each retail electric supplier shall be entitled to implement rates to recover from its eligible customer-generators all costs necessary to serve its eligible customer-generators, including but not limited to fixed and demand-based costs, without regard for the rate structure for customers who are not eligible customer-generators.

According to KRS 278.466(2), the utility is financially responsible for providing net metering customers with a standard kWh meter capable of registering a bidirectional flow of electricity. Additional meters, distribution upgrades to monitor the bidirectional electricity flow, and any upgrade of the interconnection between the utility and net

metering customer-generator are made at the expense of the customer-generator, pursuant to KRS 278.466(2) and (9).

KRS 278.466(6) provides that customers taking service under Rider NM-II will continue to be compensated on a one-to-one kWh denominated energy credit for electricity fed into the grid for at least 25 years:

For an eligible electric generating facility in service prior to the effective date of the initial net metering order by the commission in accordance with subsection (3) of this section, the net metering tariff provisions in place when the eligible customer-generator began taking net metering service, including the one-to-one (1:1) kilowatt-hour denominated energy credit provided for electricity fed into the grid, shall remain in effect at those premises for a twenty-five (25) year period, regardless of whether the premises are sold or conveyed during that twenty-five (25) year period. For any eligible customer-generator whom this subsection applies, each net metering contract or tariff under which the customer takes service shall be identical, with respect the energy rates, rate structure, and monthly charges, to the contract or tariff to which the same customer would be assigned if the customer were not an eligible customer-generator.

BACKGROUND

Case No. 2019-00256¹⁰ was opened by the Commission to discuss the implementation of Net Metering with the electric utilities. The December 18, 2019 Order establishing the proceedings stated that the process for the implementation of net metering rates should be thorough and transparent.¹¹ Additionally, in that Order, the Commission noted that the net metering ratemaking processes should consider utility-

¹⁰ Case No. 2019-00256, *Electronic Consideration of the Implementation of the Net Metering Act* (Ky PSC Dec. 18, 2019).

¹¹ Case No. 2019-00256, Dec. 18, 2019 Order at 31.

specific costs, and not a uniform rate for all electric utilities.¹² Subsequently, the Commission incorporated those principles in Louisville Gas and Electric Company's (LG&E) and Kentucky Utilities Company's (KU) (jointly, LG&E/KU) initial net metering cases¹³ as well as Kentucky Power Company's (Kentucky Power) initial net metering case.¹⁴ For Kentucky Power, the Commission outlined several principles that utilities should consider when determining their net metering rates and proposals.¹⁵ Specifically, those principles were to: evaluate eligible generating facilities as a utility system or supply side resource; treat benefits and costs symmetrically; conduct a forward-looking, long-term, and incremental analysis; avoid double counting; and ensure transparency.¹⁶ The Commission also noted that, when considering rate designs for either export or consumption, "it is important to consider the above principles alongside the additional principles of stability and simplicity."¹⁷ Therefore, while the principles above were offered in the context of compensating eligible customer-generators, similar principles also apply to rate design.

¹² Case No. 2019-00256, Dec. 18, 2019 Order at 32.

¹³ Case No. 2020-00349, *Electronic Application of Kentucky Utilities Company for an Adjustment of its Electric and Gas Rates, A Certificate of Public Convenience and Necessity to Deploy Advances Metering Infrastructure, Approval of Certain Regulatory and Accounting Treatments, and Establishment of a One-Year Surcredit*, (Ky PSC Sept. 24, 2021); Case No. 2020-00350, *Electronic Application of Louisville Gas and Electric Company for an Adjustment of Its Electric and Gas Rates, a Certificate of Public Convenience and Necessity to Deploy Advances Metering Infrastructure, Approval of Certain Regulatory and Accounting Treatments, and Establishment of a One-Year Surcredit* (Ky PSC Sept. 24, 2021).

¹⁴ Case No. 2020-00174, *Electronic Application of Kentucky Power Company for (1) A General Adjustment of its Rates for Electric Service; (2) Approval of Tariffs and Rates; (3) Approval of Accounting Practices to Establish Regulatory Assets and Liabilities; (4) Approval of a Certificate of Public Convenience and Necessity; and (5) All Other Required Approvals and Relief* (Ky. PSC May 14, 2021).

¹⁵ Case No. 2020-00174, May 14, 2021 Order at 21–24.

¹⁶ Case No. 2020-00174, May 14, 2021 Order at 21–24.

¹⁷ Case No. 2020-00174, May 14, 2021 Order at 24.

In Case No. 2023-00413, the Commission ordered Duke Kentucky to update its Rider NM II tariff and rates either 60 days after the conclusion of its 2024 integrated resource plan (IRP) case or 90 days prior to Duke Kentucky reaching its 1 percent net metering cap pursuant to KRS 278.466(1), whichever occurs first.¹⁸ On June 4, 2024, Duke Kentucky’s 2024 IRP case, Case No. 2024-00197, was concluded by Commission Order.¹⁹ Case No. 2023-00413 is currently on appeal in Franklin Circuit Court.²⁰

Additionally, the Commission, to remain consistent with its assessment of the other vertically integrated electric utilities in Kentucky,²¹ directed Duke Kentucky to utilize publicly available data and accessible information to calculate avoided capacity costs.²² These sources of data include the national renewable electric laboratory (NREL) annual technical baseline (ATB), the PJM Net Cost of New Entry (Net CONE) or explain why the Commission should rely upon other “confidential” information in future filings.²³ Additionally, the Commission directed Duke Kentucky to file updated and additional evidence in regard to avoided transmission and distribution value and utilize updated avoided transmission capacity and distribution capacity cost information from its 2024 IRP filing to reflect more accurate avoided costs in its next filing.²⁴ Finally, the Commission

¹⁸ Case No. 2023-00413, Oct. 11, 2024 Order at 43-44.

¹⁹ Case No. 2024-000197, *Electronic 2024 Integrated Resource Plan of Duke Energy Kentucky, Inc.* (Ky. PSC June 4, 2025).

²⁰ *Kentucky Solar Energy Society and Kentuckians for the Commonwealth vs. PSC, Duke Energy Kentucky, Atty General and Kentucky Solar Industries Association, Inc.*, Franklin Circuit Ct., Div. II, Civil Action No. 24-CI-01217.

²¹ Case No. 2023-00413, Oct. 11, 2024 Order at 33.

²² Case No. 2023-00413, Oct. 11, 2024 Order at 34

²³ Case No. 2023-00413, Oct. 11, 2024 Order at 34.

²⁴ Case No. 2023-00413, Oct. 11, 2024 Order at 33.

stated that it “expects Duke Kentucky to file additional evidence and testimony in the next NM case regarding the ancillary services based on the IRP findings as well as any other environmental compliance impacts that may impact those costs.”²⁵

PROPOSED TARIFF

Duke Kentucky proposed to update and modify its Rider NM II tariff.²⁶ Duke Kentucky’s proposed revisions include using a single ACEGC value for both residential and non-residential customers, instead of using two different values and proposed to set the ACEGC credit value to \$0.065427 per kWh.²⁷ Duke Kentucky’s proposed ACEGC represents an increase from both the residential and non-residential current values (\$0.062924 and \$0.063255, respectively).²⁸ Duke Kentucky did not propose any other changes to the Rider NM II tariff.²⁹ Duke Kentucky argued that its revisions to Rider NM II comply with the statutory requirements of KRS 248.465 to 248.468 and implement, as much as possible, the guidance given in the order in Case No. 2023-00413.³⁰

DISCUSSION AND FINDINGS

In Case No. 2023-00413, Duke Kentucky stated that the Rider NM-2 will be available on a first come, first served basis up to a cumulative capacity, including capacity participating under Rider NM-1, of 1 percent of Duke Kentucky’s single hour peak load in Kentucky during the previous year. Once the 1 percent threshold is met, Duke Kentucky’s

²⁵ Case No. 2023-00413, Oct. 11, 2024 Order at 36.

²⁶ Application at 4.

²⁷ Application at 6.

²⁸ Application at 1.

²⁹ Application at 7.

³⁰ Application at 6.

obligation to offer net metering to a new customer-generator may be limited.³¹ In its response to Commission Staff's First Request for Information, Duke Kentucky stated that October 2025 is no longer a reasonable prediction for reaching the net metering cap because installation rates and Duke Kentucky's peak load for the prior year are variable.³²

The Commission finds that Rider NM II is approved with the modifications discussed further below. The following avoided cost values are reasonable and approved by the Commission or are to be recalculated using the approved methodology as discussed below.

Avoided Cost Category	ACEGC (\$/kWh)
Energy	To be recalculated by Duke Kentucky
Environmental	Included in Energy
Carbon	Included in Energy
Ancillary Services	\$0.000360
Generation	To be recalculated by Duke Kentucky
Transmission	To be recalculated by Duke Kentucky
Distribution	To be recalculated by Duke Kentucky
Job Creation	Not Included
Total	To be recalculated by Duke Kentucky

The Commission finds that, when Duke Kentucky provides calculations for each of the avoided cost values, Duke Kentucky should include in the filing the above table with each specific avoided cost value as well as the overall credit cost. The Commission

³¹ Case No. 2023-00413, Oct. 11, 2024 Order at 8.

³² Duke Kentucky's Response to Staff's First Request, Item 1.

further finds that this table should be included in Duke Kentucky’s tariff when it updates its tariff sheets with the new NM-2 credit value.

The Commission finds that Duke Kentucky should update each avoided cost value in accordance with the methodologies described further below, and file updated tariffs reflecting the same, every two years to coincide with Duke Kentucky’s cogeneration and small power production sale and purchase tariff sheets starting in 2028.

Avoided Cost Excess Generation Credits

Duke Kentucky proposed to use a single ACEGC value for both residential and non-residential customers, instead of using two different values.³³ Duke Kentucky explained that using a single value enables it to increase its reliance on publicly available PV Watts data and results in an increase from both the residential and non-residential current values.³⁴ To calculate the proposed ACEGC, Duke Kentucky considered and reviewed the potential avoided costs associated with energy, environmental compliance, carbon, ancillary services, generation capacity, transmission capacity, distribution capacity, and potential job benefits.³⁵ Duke Kentucky provided the following summary for its proposed ACEGC:³⁶

Avoided Cost Category	ACEGC (\$/kWh)
Energy	\$0.057770
Environmental	Included in Energy
Carbon	Included in Energy
Ancillary Services	Not Included
Generation	\$0.003577

³³ Application at 6.

³⁴ Application at 7.

³⁵ Application at 7.

³⁶ Direct Testimony of Bruce Sailors (Saliers Direct Testimony) (filed Aug. 4, 2025) at 13.

Transmission	\$0.000331
Distribution	\$0.003749
Job Creation	Not Included
Total	\$0.065427

Duke Kentucky stated that the increase or decrease in each avoided cost value resulted from the use of more current data, including lower ELCC values, as well as new publicly available data sources.³⁷

Avoided Energy Costs

Duke Kentucky forecasted hourly Locational Marginal Prices (LMP) from Duke Kentucky’s IRP models and used the forecasted prices to develop average annual prices for the next 25 years, starting in the year 2026, as the basis for its avoided energy cost calculation.³⁸ Duke Kentucky stated that to calculate its avoided energy costs, it used the weighted average cost of capital (WACC) approved in Case No. 2023-00354 and the annual average prices are discounted through a net present value (NPV) calculation.³⁹ The resulting value is \$0.057770/kWh for residential and non-residential customer classes,⁴⁰ which is an increase from Duke Kentucky’s current avoided energy cost of \$0.041491.⁴¹

Through discovery, Duke Kentucky updated its avoided energy cost with its weighted average cost of capital (WACC) of 7.41 percent approved in Case No. 2024-

³⁷ Duke Kentucky’s Response to Staff’s First Request, Item 11a.

³⁸ Sailers Direct Testimony at 8-9.

³⁹ Sailers Direct Testimony at 9.

⁴⁰ Sailers Direct Testimony at 9.

⁴¹ Sailers Direct Testimony at 9.

00354,⁴² resulting in an updated avoided energy cost of \$0.057743 \$/kWh for residential and non-residential customer classes.⁴³ Additionally, Duke Kentucky provided an updated credit using two years of avoided energy costs, which resulted in a slightly lower avoided energy value of \$0.056765 \$/kWh.⁴⁴ Duke Kentucky explained that it used the same methodology to calculate its avoided energy costs as in Case No. 2023-00143 and stated the increase resulted from updated values reflecting the impact of the phase out of the Inflation Reduction Act.⁴⁵

Having considered the record and being otherwise sufficiently advised, the Commission finds that Duke Kentucky's avoided energy cost should be denied. The Commission finds that calculating avoided energy cost values by discounting the 25-year forecast of avoided energy costs is not reasonable. The Commission notes that a two-year average better reflects what energy prices will be in the short term, as energy price projections in the future are more uncertain. Duke Kentucky should recalculate its avoided energy costs reflecting a two-year average of energy prices for calendar years 2026 and 2027. The Commission finds that Duke Kentucky should use a two-year average of energy prices, to coincide with the biennial filings required pursuant to 807 KAR 5:054, the regulation related to qualifying facilities. The next NMS-2 filing should

⁴² Case No. 2024-00354, *Electronic Application of Duke Energy Kentucky, Inc. for: 1) an Adjustment of the Electric Rates; 2) Approval of New Tariffs; 3) Approval of Accounting Practices to Establish Regulatory Assets and Liabilities; and 4) All Other Required Approvals and Relief* (Ky. PSC Oct. 2, 2025).

⁴³ Duke Kentucky's Response to Staff's Third Request, Item 3.

⁴⁴ Duke Kentucky's Response to Staff's Third Request, Item 3.

include a two-year average of energy prices that reflect the time period that most closely aligns with when the ACEGC would be in effect.

Line Losses

Duke Kentucky stated that it accounted for transmission and distribution line losses in calculating the avoided energy credit.⁴⁶ In its application, Duke Kentucky used the average annual line loss factor in calculating the avoided energy costs, consistent with its calculation of its avoided energy costs in Case No. 2023-00413.⁴⁷ Through discovery, Duke Kentucky provided an average annual system loss value for only daylight time periods.⁴⁸ Duke Kentucky explained that daylight loss factor resulted in slightly higher losses because higher demand typically occurs during daylight hours in most months, which results in higher losses on the system.⁴⁹

The Commission finds that Duke Kentucky should use the daylight line loss factor, which coincides with the time period when energy is produced from solar, in its recalculation of the avoided energy credit. The Commission further finds that the updated line loss factor should also be applied to the calculation of the avoided generation capacity credit, the avoided transmission capacity credit and the avoided distribution costs.

Avoided Environmental Costs

Duke Kentucky stated that the avoided environmental costs are included in the forecasted marginal energy prices and imbedded into the avoided energy costs in such a

⁴⁶ Duke Kentucky's Response to Staff's Third Request, Item 3.

⁴⁷ Sailers Direct Testimony at 8-9.

⁴⁸ Duke Kentucky's Supplemental Response to Staff's Fifth Request (filed Jan. 16, 2026) (Jan. 16, 2026 Supplemental Filing), Item 3.

⁴⁹ Duke Kentucky's Response to Staff's Fifth Request, Item 3.

manner that a separate estimate of the value cannot be provided.⁵⁰ Duke Kentucky stated that the forecasted energy prices incorporate variable costs such as sulfur dioxide and nitrogen oxide allowance costs, reagent costs for emissions controls that are included in the variable operating costs for fossil generators, and production tax credits that directly influence the marginal cost of energy.⁵¹ Duke Kentucky explained that fixed costs such as the capital cost of emissions control equipment and investment tax credits affect the relative economics of different types of generation and influence future resource additions and retirements in the simulation and, by shaping the resource mix, indirectly influence the marginal cost of energy in the future.⁵²

Having considered the record and being otherwise sufficiently advised, the Commission agrees with Duke Kentucky that there is no need for any additional values for avoided environmental costs. Therefore, the Commission finds that Duke Kentucky's exclusion of avoided environmental costs from the ACEGC is reasonable and consistent with the Commission's approval of Duke Kentucky's inclusion of its avoided environmental and avoided carbon costs in the avoided energy category in its previous net metering case.⁵³

Avoided Carbon Costs

Duke Kentucky explained that the avoided energy cost incorporates all current applicable laws and requirements.⁵⁴ Duke Kentucky stated that no additional value for

⁵⁰ Sailers Direct Testimony at 9.

⁵¹ Direct Testimony of Nicolas Gagnon (Gagnon Direct Testimony) (filed Aug. 4, 2025) at 6.

⁵² Gagnon Direct Testimony at 6.

⁵³ Case No. 2023-00413, Oct. 11, 2024 Order at 36.

⁵⁴ Sailers Direct Testimony at 9.

carbon was added because there are no current laws requiring a carbon tax or other costs related to carbon.⁵⁵ Therefore, Duke Kentucky stated that it did not include a price on carbon emissions in its analysis because there is currently no regulation in place that imposes such a cost, such as a carbon dioxide tax.⁵⁶

The Commission previously found that there is no need for additional values for carbon costs, as it was included in the avoided energy calculation,⁵⁷ and there have been no changes in law that affect carbon costs. The Commission agrees with Duke Kentucky that there is no need for any additional values for avoided carbon costs as there are no current laws requiring costs related to carbon, and therefore, finds that Duke Kentucky's exclusion of these costs from the ACEGC is reasonable.

Avoided Ancillary Services Costs

In Case No. 2023-00413, the Commission stated that it expected Duke Kentucky to file additional evidence and testimony in the next net metering case regarding ancillary services based on the IRP findings as well as any other environmental compliance impacts that may impact those costs.⁵⁸ In this case, Duke Kentucky provided additional evidence and testimony involving avoided ancillary service costs but argued that the appropriate avoided ancillary service cost should be zero.⁵⁹ Duke Kentucky explained that behind-the-meter resources do not directly participate in the PJM Energy Market.⁶⁰

⁵⁵ Sailers Direct Testimony at 9.

⁵⁶ Gagnon Direct Testimony at 6.

⁵⁷ Case No. 2023-00413, Oct. 11, 2024 Order at 36.

⁵⁸ Case No. 2023-00413, Oct. 11, 2024 Order at 36.

⁵⁹ Direct Testimony of John Swez (Swez Direct Testimony) (filed Aug. 4, 2025) at 3.

⁶⁰ Swez Direct Testimony at 5.

Duke Kentucky explained that behind-the-meter solar generators are primarily considered to reduce overall demand on the grid rather than directly supplying ancillary services, and therefore, no ancillary services costs are avoided as a result of net metering customer-generators' activity.⁶¹

Duke Kentucky stated it is unable to determine the impact on PJM Billing Line Items (BLI) charges or credits from the reduction in load caused by behind-the-meter solar generation.⁶² Duke Kentucky explained that it estimated that there are at least 37 different PJM BLI charges or credits allocated by PJM fully or partially on a load ratio share basis or using load as an input to the BLI calculation.⁶³ Duke Kentucky stated that it does not have access to the PJM software that would be needed to perform the calculations necessary to estimate the amounts of BLI that would have occurred in the absence of net metering customer generation.⁶⁴

Through discovery, Duke Kentucky explained that, for the PJM BLI that are allocated on load ratio share, every MW of load reduction produces a change in the BLI charge or credit.⁶⁵ Duke Kentucky provided an estimated reduction in ancillary services costs with a reduction in load of \$0.000360/kWh.⁶⁶ Duke Kentucky calculated this credit

⁶¹ Duke Kentucky's Response to Staff's First Request, Item 2.

⁶² Swez Direct Testimony at 19,

⁶³ Duke Kentucky's Response to Staff's First Request, Item 6a.

⁶⁴ Duke Kentucky's Response to Staff's First Request, Item 6a.

⁶⁵ Swez Direct Testimony at 18-19.

⁶⁶ Duke Kentucky's Response to Staff's First Request, Item 6c.

by using the total charges in 2024 for each ancillary service BLI which is allocated using the load ratio share divided by the amount of customer demand in 2024.⁶⁷

Having considered the record and being otherwise sufficiently advised, the Commission finds that Duke Kentucky's proposal for zero avoided ancillary service costs is unreasonable and should be denied. While the Commission agrees with Duke Kentucky's analysis regarding behind-the-meter solar generators being primarily considered to reduce overall demand on the grid rather than directly supplying ancillary services, there is still an avoided ancillary cost resulting from the reduction in load. As Duke Kentucky explained, the BLIs that are allocated on load ratio share basis are affected by this reduction. Therefore, the Commission finds that the avoided ancillary cost should be \$0.000360/kWh, which reflects this reduction in load.

Avoided Generation Capacity Credit

Duke Kentucky utilized the PJM Net Cost of New Entry (Net CONE) of a combustion turbine (CT), as the starting point for the avoided capacity cost calculation.⁶⁸ Duke Kentucky then converted the value into a \$/kW-yr value.⁶⁹ Duke Kentucky escalated the Net CONE value for 25 years using an escalation value provided from Duke Kentucky's IRP models.⁷⁰ Duke Kentucky stated that for each year, the PJM effective load carrying capability (ELCC) assigned to fixed tilt solar resources is applied, while holding the last available ELCC constant for the remainder of the 25-year forecast

⁶⁷ Duke Kentucky's Response to Staff's First Request, Item 6c. $\$1,449,739.37 / 4,032,569,000$ kWh = \$0.000360 \$/kWh.

⁶⁸ Sailers Direct Testimony at 10.

⁶⁹ Sailers Direct Testimony at 10.

⁷⁰ Sailers Direct Testimony at 10.

period.⁷¹ Duke Kentucky applied the most updated ELCC values published by PJM to determine its bulk system generation reliability⁷² and to capture the ability of generation resources to address critical peak loads as determined by PJM.⁷³ Duke Kentucky discounted the resulting projected annual avoided generation capacity costs using a NPV calculation.⁷⁴ Duke Kentucky originally utilized a WACC of 7.192 percent in its NPV calculation.⁷⁵

Duke Kentucky explained that the avoided cost value (\$/kW-year) represents the avoided cost of a 1 kW-AC fixed tilt solar installation.⁷⁶ Duke Kentucky explained that this value is divided by the expected annual solar output of 1,509 kWh from a 1 kW-AC solar installation, determined using the PV Watts solar output profile for Covington, Kentucky, which results in an avoided generation capacity cost of \$0.003577/kWh.⁷⁷

Duke Kentucky stated that, if desired by the Commission, it would be agreeable to update its calculations to use the newly approved WACC value if a decision in this case is still pending when a final Order issues in Case No. 2024-00354,⁷⁸ Duke Kentucky's

⁷¹ Sailers Direct Testimony at 10.

⁷² Gagnon Direct Testimony at 3-4; Direct Testimony of Bruce L. Sailers, Attachment BLS-1.

⁷³ Duke Kentucky's Response to Staff's Second Request, Item 6(a).

⁷⁴ Sailers Direct Testimony at 10.

⁷⁵ Sailers Direct Testimony, Exhibit BLS-1 at 6.

⁷⁶ Sailers Direct Testimony at 10-11.

⁷⁷ Sailers Direct Testimony at 9-11.

⁷⁸ Case No. 2024-00354, *Electronic Application of Duke Energy Kentucky, Inc. for: 1) an Adjustment of the Electric Rates; 2) Approval of New Tariffs; 3) Approval of Accounting Practices to Establish Regulatory Assets and Liabilities; and 4) All Other Required Approvals and Relief* (Ky. PSC Oct. 2, 2025).

most recent rate case.⁷⁹ On October 2, 2025, the Commission issued a final Order in Case No. 2024-00354 which approved a WACC of 7.41 percent for Duke Kentucky.⁸⁰ In this case, Duke Kentucky provided updated values based on the updated WACC.⁸¹ The updated value for avoided capacity cost is \$0.003575/kWh.⁸²

Having considered the record and being otherwise sufficiently advised, the Commission finds that the updated avoided capacity cost value using the updated WACC should be accepted. The Commission finds that it is reasonable to utilize the updated WACC as it is reflective of Duke Kentucky's currently approved WACC. The Commission finds that Duke Kentucky's proposed methodology is reasonable to evaluate generation capacity investments. As capacity values are assigned when the system is installed, a longer-term capacity value is more reflective of the avoided cost. Furthermore, capacity values in general are more stable than energy prices, warranting a longer forecast period. However, the Commission finds that the avoided generation capacity cost should be recalculated with the updated line loss factor discussed in the line losses section above.

Avoided Transmission Capacity

Duke Kentucky calculated the avoided capacity cost to expand the transmission system (\$/kW-yr) using installed transmission capacity values from its FERC Form 1 coupled with actual capital and operations and maintenance costs.⁸³ Duke Kentucky then

⁷⁹ Sailers Direct Testimony at 12.

⁸⁰ Case No. 2024-00354, October 2, 2025 Order at 54.

⁸¹ Duke Kentucky's Supplemental Response to Commission Staff's First Request for Information (filed Oct. 24, 2025) (Oct. 24, 2025 Supplemental Filing), Item 8, Attachment 1.

⁸² Oct. 24, 2025 Supplemental Filing Item 8, Attachment 1.

⁸³ Direct Testimony of Dominic "Nick" J. Melillo (Melillo Direct Testimony) (filed Aug. 4, 2025) at 10.

applied escalation factors, ELCC factors, and discounted to NPV, as described above for the avoided generation capacity, which results in avoided transmission costs of \$0.000331 per kWh.⁸⁴

Duke Kentucky maintained that its use of the ELCC value to determine avoided transmission costs is appropriate; however, if the Commission requires an alternative approach, Duke Kentucky recommended using a 25.5 percent capacity factor for transmission which is based on the peak contribution of solar for each month over the past 45 months.⁸⁵ Duke Kentucky also provided a recalculation of the solar net metering rate based on a 4 Coincident Peak (CP) analysis of solar contribution to transmission peak which would result in a 41.5 percent factor.⁸⁶ Duke Kentucky argued that the use of the PJM ELCC value is appropriate because it is vetted at PJM, is a robust analysis by the regional transmission organization, and is publicly available.⁸⁷

Having considered the record and being otherwise sufficiently advised, the Commission rejects Duke Kentucky's proposed cost value for avoided transmission costs because Duke Kentucky's proposed ELCC metric is not appropriate to determine avoided transmission capacity cost. The purpose of the ELCC is to "calculate the contribution of all resources to overall system reliability" and it "sets the capacity value of all resources that offer into the capacity market".⁸⁸ Duke Kentucky described that "ELCC analysis

⁸⁴ Duke Kentucky's Response to Staff's Third Request, Item 2.

⁸⁵ Jan. 16, 2026 Supplemental Filing, Item 2(c).

⁸⁶ Jan. 16, 2026 Supplemental Filing, Item 2(a).

⁸⁷ Jan. 16, 2026 Supplemental Filing, Item 2(b).

⁸⁸ PJM Effective Load Carrying Capacity Measures- Capacity Contributions of All Resources; [elcc-measures-capacity-contribution-of-renewable-and-storage-resources.ashx](#) (accessed May 22, 2026).

results in a value for a class of generation resources to reflect how those resources contribute to load carrying on the most critical days.”⁸⁹ The ELCC is not a metric to determine transmission capacity specifically. Therefore, while the ELCC metric is appropriate for determining avoided generation costs, it is not reflective of avoided transmission costs.

Therefore, the Commission finds that Duke Kentucky should recalculate its avoided transmission costs utilizing the 12 CP methodology, as this aligns with the cost allocations in Case No. 2024-00354⁹⁰ and recalculate transmission avoided energy costs based on the last 24 months of monthly system peak data, to align with the two-year rate update schedule and provide the updated rate within 20 days of the issuance of this Order. Further the Commission rejects Duke Kentucky’s alternative recommendation using 4 CP. The 12 CP methodology averages the highest transmission peak from each of the 12 months and allocates costs according to the relative demand of each rate class in those months, while 4 CP averages the peak from the four highest load months and allocates costs accordingly. Although a 4 CP allocator could be appropriate to calculate the avoided transmission costs when it is focused on the months driving peak capacity costs, the Commission notes the importance of aligning the allocation methodology used to allocate transmission costs among base rates with the allocation methodology used to determine the avoided transmission cost benefit of solar. Because Duke Kentucky utilized the 12

⁸⁹ Duke Kentucky’s Response to Staff’s Second Request, Item 6(a).

⁹⁰ Case No. 2024-00354, *Electronic Application of Duke Kentucky, Inc. for 1) an Adjustment of the Electric Rates; 2) Approval of New Tariffs; 3) Approval of Regulated Accounting Practices to Establish Regulatory Assets and Liabilities and 4) All Other Required Approvals and Relief* (Ky. PSC Oct. 2, 2025), Order at 59.

CP allocator for transmission costs in its last filed cost-of-service study,⁹¹ the Commission finds the 12 CP methodology to be reasonable when calculating its avoided transmission costs. This recalculation should be performed as follows:

- Step 1. Identify the highest peak demand hour for Duke Kentucky's bulk transmission system in each month during calendar year 2024 and 2025;
- Step 2. For the month, day, and hour when each peak occurred, compare the PV Watts solar output in that hour to the nameplate capacity of the solar resource to determine the percent of nameplate contribution to peak; and
- Step 3. Use the average of each of the 24 resulting percentages as a replacement for the ELCC value used in the calculation of avoided transmission costs.

Duke Kentucky should include workpapers in its filing that show the inputs and calculations performed to recalculate the avoided transmission capacity value. Finally, the Commission orders Duke Kentucky to bring forward data in future filings that show the actual distributed solar contribution to transmission system peak varies from the contribution calculated using PV Watts data, as this information may inform future adjustments to the avoided transmission capacity rate.

Avoided Distribution Cost

Like avoided transmission costs, Duke Kentucky calculated the avoided cost value for distribution costs using installed capacity values from FERC Form 1, and actual capital

⁹¹ Case No. 2024-00354, *Electronic Application of Duke Kentucky, Inc. for 1) an Adjustment of the Electric Rates; 2) Approval of New Tariffs; 3) Approval of Regulated Accounting Practices to Establish Regulatory Assets and Liabilities and 4) All Other Required Approvals and Relief* (Ky. PSC Oct. 2, 2025), Order at 59.

and operations and maintenance spend to support the average cost distribution systems which resulted in a avoided distribution capacity value of \$58.26/kW-year.⁹² Duke Kentucky argued that the data used to calculate the avoided cost is publicly available and accurately accounts for localized load growth, which includes new and increased loads from commercial, retail, industrial, and residential customers.⁹³ In Case No. 2023-00413, the Commission found that Duke Kentucky should utilize updated avoided transmission capacity and distribution capacity cost information from its 2024 IRP filing to reflect more accurate avoided costs in its next filing.⁹⁴ Duke Kentucky explained that its 2024 IRP filing⁹⁵ did not include “avoided transmission capacity and distribution capacity cost information” so although it cannot represent the data used is from its IRP filing, it argues that the inputs into the ACEGC for avoided Transmission and Distribution costs are based on the most current available data, and represent the actual capacity added to the system and the actual costs to add that capacity.⁹⁶

Duke Kentucky requested an avoided distribution cost of \$0.003749 \$/kWh, which is a decrease from the Commission’s previously approved \$0.006719 \$/kWh rate.⁹⁷ Duke Kentucky explained that the main driver of this change was that the capacity additions source value changed to FERC Form 1 capacity information from its previous average

⁹² Melillo Direct Testimony at 10 and Attachment NJM-1 at 1.

⁹³ Melillo Direct Testimony at 11.

⁹⁴ Case No. 2023-00413, Oct. 11, 2024 Order at 33.

⁹⁵ Case No. 2024-000197, *Electronic 2024 Integrated Resource Plan of Duke Energy Kentucky, Inc.* (Ky. PSC June 4, 2025).

⁹⁶ Melillo Direct Testimony at 12.

⁹⁷ Duke Kentucky’s Response to Staff’s First Request, Item 11a.

increase in system peak load and that the updated ELCC values are lower in this filing than in the prior filing.⁹⁸

Duke Kentucky was asked to provide an avoided distribution capacity value calculation based on the behind-the-meter solar-expected capacity contribution (ratio of generation in that hour compared to nameplate based on the PV Watts profile used to calculate the avoided energy costs) for the four highest load hour average for a typical residential distribution circuit and a typical commercial distribution circuit across the months of July to September.⁹⁹ In response, Duke Kentucky used the residential and non-residential kW-AC participation values consistent with the information filed in the instant case.¹⁰⁰ Duke Kentucky stated that a reasonable weighting factor for this data would be the amount of solar in the net metering program for residential and non-residential customers, which resulted in an overall contribution of 20.9 percent.¹⁰¹ This resulted in the avoided distribution capacity component increasing from \$0.003772/kWh to \$0.012583/kWh.¹⁰²

In response to a data request on the appropriateness of using ELCC values to determine distribution avoided capacity costs, Duke Kentucky recommended using its proposed ELCC value to calculate avoided distribution capacity costs. However, if the Commission orders the alternative approach, Duke Kentucky recommends that the Commission consider either more hours or a wider time frame than July through

⁹⁸ Duke Kentucky's Response to Staff's First Request, Item 11a.

⁹⁹ Staff's Fifth Request, Item 2a.

¹⁰⁰ Duke Kentucky's Supplemental Response to Staff's Fifth Request, Item 2c.

¹⁰¹ Duke Kentucky's Supplemental Response to Staff's Fifth Request, Item 2c.

¹⁰² Duke Kentucky's Supplemental Response to Staff's Fifth Request, Item 2c.

September.¹⁰³ In Case No. 2024-00354, distribution costs were allocated in the cost-of-service study using “direct assignment” influenced by the results of its approved zero-intercept analysis.¹⁰⁴

Having considered the record and being otherwise sufficiently advised, the Commission finds that Duke Kentucky’s proposed avoided distribution cost value should be denied. The Commission finds that it is not reasonable to utilize the ELCC metric to evaluate avoided distribution costs, as the ELCC is used to determine the proportion of a resource’s capacity that PJM can expect to be available to generate electricity during its system peak. Duke Kentucky should recalculate distribution avoided costs based on the last 24 months of monthly system peak data, to align with the two-year rate update schedule and provide the updated rate within 20 days of the issuance of this Order. This recalculation should be performed as follows:

- Step 1. Identify the highest peak demand hour in each month during calendar year 2024 and 2025 separately for a representative residential feeder and a representative commercial distribution circuit;
- Step 2. For the month, day and hour when each peak occurred, compare the PV Watts solar output in that hour to the nameplate capacity of the solar resource to determine the percent of nameplate contribution to peak;
- Step 3. Calculate the average of each of the 24 resulting percentages for each representative distribution circuit; and

¹⁰³ Duke Kentucky’s Supplemental Response to Staff’s Fifth Request, Item 2d.

¹⁰⁴ Case No. 2024-00354 *Electronic Application of Duke Energy Kentucky, Inc. for: 1) an Adjustment of the Electric Rates; 2) Approval of New Tariffs; 3) Approval of Accounting Practices to Establish Regulatory Assets and Liabilities; and 4) All Other Required Approvals and Relief* (Ky. PSC Oct. 2, 2025) at 56-57.

- Step 4. Determine the average percent of nameplate for the distribution system from a weighted average (weighted on commercial and residential solar installed capacity) of the result of Step 3 for each distribution circuit, and use that value as a replacement for the ELCC value used in the calculation of avoided distribution costs.

Duke Kentucky should include workpapers in its filing that show the inputs and calculations performed to recalculate the avoided distribution capacity value. In future filings, Duke Kentucky should bring forward data that shows how the actual distributed solar contribution to distribution system peak varies from the contribution calculated from PV Watts data and utilize the data to inform its future filings related to avoided distribution costs.

Job Benefits

Duke Kentucky stated that it did not propose any additional value for job creation benefits due to the 1.45 MWs of limited additional solar capacity available before reaching the net metering cap.¹⁰⁵ Duke Kentucky argued that the remaining available capacity under the cap will likely not produce additional job creation, much less net any such benefit against the job benefits from alternative means of meeting energy demands.¹⁰⁶ Although Duke Kentucky explained that it does not have a formal list of factors to use in projection of incremental job benefits, Duke Kentucky stated that, based on the number of active installers at the time of Duke Kentucky's prior case, it does not believe that

¹⁰⁵ Sailers Direct Testimony at 12.

¹⁰⁶ Sailers Direct Testimony at 12.

incremental employment will be necessary to install the remaining net metering capacity.¹⁰⁷

The Commission agrees with Duke Kentucky that there is no need for any additional values for job benefits as there is no measurable increase in jobs created to build additional solar generation to be served under Duke Kentucky's Rider NM II and finds that Duke Kentucky's exclusion of these costs is reasonable.

Rate Design

Duke Kentucky's proposed a single ACEGC credit value for both residential and non-residential customers, calculated using PV Watts data with a 20 degree tilt system reflecting a residential system with pitched roofs.¹⁰⁸ Duke Kentucky's stated that its Rider NM II customers are residential and no non-residential customers are in the queue to participate in Duke Kentucky's Rider NM II program.¹⁰⁹ Duke Kentucky argued that one credit value enables it to increase its reliance on publicly available PV WATTS solar production profile and using the same profile weights for residential and non-residential, which eliminates the need to maintain two separate values for the ACEGC and aligns with the Commission's preference for publicly available data.¹¹⁰

Non-residential roofs are typically flat and applying the PV Watts data with a 0 degree tilt to reflect a non-residential system would likely result in a substantially similar credit for non-residential customers. The Commission finds that the combined rate is

¹⁰⁷ Duke Kentucky's Response to Staff's First Request, Item 8.

¹⁰⁸ Sailers Direct Testimony, Attachment BLS 2.

¹⁰⁹ Duke Kentucky's Response to Staff's Second Request, Item 1.

¹¹⁰ Sailers Direct Testimony at 7, lines 3-15.

reasonable as Duke Kentucky currently has no non-residential net metering customers and there are no non-residential customers queued to participate in Duke Kentucky's Net Metering II program. The Commission accepts Duke Kentucky's use of PV Watts data with a 20-degree tilt to calculate the combined rate and finds Duke's method aligns with the Commission's preference for publicly available data.

IT IS THEREFORE ORDERED that:

1. The rates and charges proposed by Duke Kentucky for Rider NM II are denied.
2. Duke Kentucky's Rider NM II rates shall be modified as set forth in this Order.
3. Duke Kentucky shall update its NM-2 ACEGC every two years to coincide with Duke Kentucky's revisions to its cogeneration and small power production sale and purchase tariff sheets starting in 2028.
4. Duke Kentucky's proposal to use a single ACEGC value for both residential and non-residential customers, instead of using two different values, is approved.
5. Within 20 days of service of this Order, Duke Kentucky shall file its avoided energy costs as described in this order in post-case correspondence reference this case number for review by the Commission. Duke Kentucky shall include all workpapers in Excel spreadsheet format with all formulas, columns, and rows unprotected and fully accessible.
6. Within 20 days of service of this Order, Duke Kentucky shall file its avoided transmission capacity avoided costs as described in this order in post-case correspondence reference this case number for review by the Commission. Duke

Kentucky shall include all workpapers in Excel spreadsheet format with all formulas, columns, and rows unprotected and fully accessible.

7. Within 20 days of service of this Order, Duke Kentucky shall file its avoided distribution capacity avoided costs as described in this Order in post-case correspondence referencing this case number for review by the Commission. Duke Kentucky shall include all workpapers in Excel spreadsheet format with all formulas, columns, and rows unprotected and fully accessible.

8. Within 20 days of service of this Order, Duke Kentucky shall file its avoided generation capacity avoided costs as described in this Order in post-case correspondence referencing this case number for review by the Commission. Duke Kentucky shall include all workpapers in Excel spreadsheet format with all formulas, columns, and rows unprotected and fully accessible.

9. Within 20 days of service of this Order, Duke Kentucky shall include in the filing a table as described in this Order with each specific avoided cost value as well as the overall credit cost.

10. Duke Kentucky shall file an application to update its Rider NM II tariff and rates in accordance with the methodologies described in this Order to coincide with Duke Kentucky's cogeneration and small power production sale and purchase tariff sheets starting in 2028 and every two years thereafter.

11. Within 40 days of the date of service of this Order, Duke Kentucky shall file with the Commission, using the Commission's electronic Tariff Filing System, new tariff sheets setting forth the rates, charges, and modifications approved or as required herein and reflecting their effective date and that they were authorized by this Order.

12. Duke Kentucky shall include the table described in the Order in Duke Kentucky's tariff when it updates its tariff sheets with the new NM-2 credit value.

13. The case shall be closed and removed from the Commission's docket.

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Entered on this 1st day of June, 2026.


PUBLIC SERVICE COMMISSION



Angie Hatton
Chair



Mary Pat Regan
Commissioner



Andrew W. Wood
Commissioner



Barry L. Mayfield
Commissioner

ATTEST:



Linda C. Bridwell, PE
Executive Director

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