

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 RATES AND FOR TARIFF)	2023-00413
APPROVAL)	

**KENTUCKY SOLAR INDUSTRIES ASSOCIATION, INC.
MEMORANDUM BRIEF**

Respectfully submitted,

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Notice And Certification For Filing and Service

Undersigned counsel provides notice that the electronic version of the paper has been submitted to the Commission by uploading it using the Commission's E-Filing System on this 26th of June 2024, in conformity with the Commission's January 5, 2024 Order of procedure in the instant case. Pursuant to the Commission's Orders in Case No. 2020-00085, *Electronic Emergency Docket Related to Novel Coronavirus Covid-19*, the paper, in paper medium, is not required to be filed. No party has been excused from the electronic filing procedures in the instant proceeding.

/s/ David E. Spenard

I INTRODUCTION

On December 11, 2023, Duke Energy Kentucky, Inc. (“Duke” and also “Company”) tendered an Application in the instant proceeding through which it proposes revisions to its current Net Metering Rider tariff (to be renamed “Net Metering I Rider” and hereinafter for this Brief “NM-1”), a new tariff - Rider Net Metering II (hereinafter “NM-2”), and a new interconnection tariff concerning its provision of net metering service.¹ Subsequent to the Company’s filing of information to cure deficiencies in the Application, the Kentucky Public Service Commission (“PSC” and “Commission”) accepted for filing on December 20, 2023.

On January 5, 2024, the Commission entered an Order that, among other things, opened an investigation into the proposed tariff and suspended it for a period of five (5) months.² The Order also established the procedural schedule for the investigation.³

The Kentucky Office of the Attorney General (“OAG” or “Attorney General”) sought and was granted intervention into the proceeding.⁴ Kentucky Solar Industries Association, Inc. (“KYSEIA”) sought and was granted intervention;⁵ likewise, the Kentucky Solar Energy Society (“KSES”) and Kentuckians for the Commonwealth (“KFTC”), by joint motion, sought and were granted intervention (and are proceeding jointly hereinafter

¹ Application (as tendered Dec. 12, 2023) at pages 1 and 2.

² Order (Ky. P.S.C. Jan. 5, 2024).

³ Order (Ky. P.S.C. Jan. 5, 2024) at Appendix.

⁴ Order (Ky. P.S.C. Dec. 21, 2023).

⁵ Order (Ky. P.S.C. Jan. 12, 2024).

“Joint Interventors”).⁶ The foregoing three (3) intervenors (in addition to Duke, as the applicant) are the only parties to this proceeding.

Pursuant to the Order of procedure, Commission Staff and the parties engaged in discovery through various requests for information to and corresponding responses from Duke. The Joint Interventors sponsored and filed the testimony of Dr. Richard J. McCann (“McCann Testimony”),⁷ and discovery requests were propounded to with corresponding responses from Joint Interventors. Duke filed rebuttal testimony.⁸

A public evidentiary hearing was held at the Commission’s Offices in Frankfort, Kentucky on May 21, 2024 for the purposes of receiving public comment upon the Application and the presentation and cross-examination of witnesses. Subsequent to the public hearing, post-hearing requests for information were propounded to with corresponding responses from Duke.

Pursuant to the Order establishing the post-hearing procedures,⁹ KYSEIA tenders its Memorandum Brief. KYSEIA states the following summary of its positions.

- Duke’s proposed tariff change to NM-1 is unlawful because it negates the statutorily created legacy rights granted for existing electric generating facilities.
- Duke’s proposal concerning increases in generating capacity for NM-1 and NM-2 customers is unreasonable because it is contrary to legislative intent; additionally, it suggests a standard of materiality will be used during a review of an increase in generating capacity although Duke’s actual intent is for a per se rule or bright line test.
- The analysis offered by Duke in support of its proposal for successor net metering rates under NM-2 is unreasonable because it does not provide a matching of actual

⁶ Order (Ky. P.S.C. Jan. 29, 2024).

⁷ Pre-filed testimony of Dr. Richard J. McCann (filed Mar. 13, 2024).

⁸ Duke Rebuttal Testimony (filed Apr. 17, 2024).

⁹ Order (Ky. P.S.C. May 24, 2024).

weather conditions to customer usage history and fails to demonstrate the reliability of applying modeled weather conditions to its customer usage history.

- The analysis offered by Duke in support of its proposal for successor net metering rates under NM-2 is unreasonable because it does not demonstrate that the twelve (12) coincidental peak hours (“12CP”) identified in the study period and used for the analysis reliably demonstrate the likely impact of solar generation on Duke’s cost of service for its residential customers who have net metering service.
- Duke’s approach to serving its net metering customers lacks sufficient accountability.

KYSEIA states that the lack of comment upon any other position of Duke should not be construed as an endorsement of or concession to Duke’s position.

II ARGUMENTS

- A. Duke’s proposed tariff change to NM-1 is unlawful because it negates the statutorily created legacy rights granted for existing electric generating facilities.

As part of its amendment of Kentucky’s net metering law,¹⁰ the General Assembly, through plain language, created legacy rights for its existing net metering customers, in this instance, the existing Duke customers identified as receiving service under NM-1. KRS 278.466(6) states:

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 to whom this subsection applies, each net metering contract or tariff under which the customer takes service shall be identical, with respect to energy rates, rate structure, and monthly charges, to the

¹⁰ 2019 Ky. Acts Ch. 101 (also known as “Senate Bill 100”).

contract or tariff to which the same customer would be assigned if the customer were not an eligible customer-generator. **(Emphasis added.)**

The General Assembly could not state its intent more plainly. The legislature through the use of the phrase “shall remain in effect at those premises” intends to mandate legacy rights for eligible customer-generators “regardless of whether the premises are sold or conveyed during” the legacy period. The legacy rights are self-executing because the legislature expressly mandates the legacy rights remain in place regardless of a sale or conveyance withholding any discretion from the utility. Otherwise stated: A sale or conveyance of the premises cannot inactivate or suspend rights legislatively determined to continue in the event of a sale or conveyance. Duke’s proposal is unlawful in that it seeks to violate the plain language of KRS 278.466(6) through making the continuation of legacy rights subject to the discretion of Duke.

While it is reasonable for Duke to have a process in place for the orderly transition of a NM-1 customer-generator at a premises from one customer to a successor at the same premises, it is unlawful to suspend or inactivate legacy rights through that process. Duke’s approach is to deny rights unless and until the successor net metering customer can demonstrate entitlement to them to Duke’s satisfaction is an attempt to exercise a power plainly denied by statute. Any Duke proposal regarding legacy rights consequent to a sale or conveyance must be tailored to preserve the uninterrupted continuation of those rights because a sale of conveyance, of itself, has no impact upon the effectiveness of the legacy rights. Duke’s proposal to suspend if not deny legacy rights because of a sale or conveyance is unlawful and requires denial.

- B. Duke's proposal concerning increases in generating capacity for NM-1 and NM-2 customers is unreasonable because it is contrary to legislative intent; additionally, it suggests a standard of materiality will be used during a review of an increase in generating capacity although Duke actual intent is for a per se rule or bright line test.

Duke's proposal to terminate legacy benefits under NM-1 for an increase in generating capacity does not have textual basis in KRS 278.466 or Senate Bill 100. There is no plain language in KRS 278.466 requiring such a result, and in view of the General Assembly's clear intent to create legacy rights, a construction of KRS 278.466 suggesting that the legislature intends such a result cuts against an express legislative intent to preserve rights for NM-1 customer-generators.

For purposes of carrying out the intent of Senate Bill 100 and KRS 278.466, legacy rights should be construed broadly rather than narrowly. As long as the proposed increase in generating capacity does not result in an exceedance of a rated capacity of forty-five (45) kilowatts, there is no basis in the text of the legislation creating legacy rights for terminating an existing customer's ability to continue net metering service under NM-1.

KYSEIA notes that (assuming for argument that an increase in rated capacity up to forty-five (45) kilowatts may terminate legacy rights) Duke's proposal remains unreasonable even in a narrow construction. Duke's proposed tariff on this point speaks in terms of "a material increase" yet the actual intent is for a per se policy or the application of a bright line test through which any proposed increase in the rated capacity of the inverter for a customer-generator will result in a termination of NM-1 legacy rights if approved and placed into service. The proposed language is unreasonable because it is misleading. If Duke wants to propose a per se policy or bright line test for any increase in inverter rating, then it should unmistakably identify the policy through its Application.

Duke's proposed language does not give fair and reasonable notice to its customers, and the language does not reasonably identify and explain its actual policy. Duke's stated agreement to act lawfully regarding switching customers from NM-1 to NM-2¹¹ is unpersuasive on this point. Customers should be able to readily discern from the plain language of the tariff how Duke intends to treat such a request. Duke's tariff should plainly state what it means and plainly means what it states. Because it fails to properly convey the proposed policy, it should be denied as unreasonable (separate from the fact that the policy is contrary to legislative intent).

- C. The analysis offered by Duke in support of its proposal for successor net metering rates under NM-2 is unreasonable because it does not provide a matching of actual weather conditions to customer usage history and fails to demonstrate the reliability of applying modeled weather conditions to its customer usage history.

Because Duke has not chosen to create a separate rate case for its net metering customers, there are certain simplifications or assumptions for the Company's cost of service study (also "COSS") results that are, arguably, tolerable as being within a range of reason when analyzing the impact of Duke's proposal upon its customers with net metering service. For example, Duke's proposal to simplify multiple definitions of demand used in the cost of service study for allocation purposes into a single demand definition based on the system twelve (12) coincidental peak hours ("12CP") is (arguably) tolerable because it does not suggest a material impact in the results for the analysis, and it does not create antagonism within the analysis calling into question its reliability. However, the rationale of simplification cannot justify an inherently unreliable analysis. Simplicity does

¹¹ Response to Staff Post-Hearing Request for Information (filed Jun. 7, 2024), Item 2 ("Staff Post-Hearing Request").

not constitute a virtue which excuses Duke's unreliable analysis of the impact of solar generation.

The study period for the cost of service study is April 1, 2021 through March 31, 2022. (The 12CP hours for the revised scheduled supplied after the evidentiary hearing remain the same 12CP hours relied upon initially in support of the Application.¹²) There were unique weather conditions specific to this period to which Duke's customers responded to and acted upon, and these weather conditions were not included in the modeled weather conditions serving as the foundation for the PV Watts solar production profile.¹³ The analysis therefore fails to match actual customer behavior with the actual weather conditions influencing and producing the behavior. It is unreasonable to propose to match actual usage results to modeled weather conditions because actual conditions are the conditions producing and explaining the customers' usage that is relied upon.

In terms of the profile created through the PV Watts Calculator, it is for a typical meteorological year. The modeled weather year solar production results have not been demonstrated as reliable for supporting findings of fact or conclusions of law when applied to actual customer usage behavior for the cost of service study period. Duke's projections of solar generation are not based upon the actual generation of Duke's net metering customers.¹⁴ Duke's customers actual usage and generation results for the study period,

¹² Compare Response to KYSEIA Post-Hearing Requests for Information (filed Jun. 7, 2024), Item 1, Attachment Page 113 of 115 ("KYSEIA Post-Hearing Requests") with Response to KYSEIA Supplemental Request for Information (filed Mar. 6, 2024), Item 11, Attachment Page 86 of 116.

¹³ Transcript of Evidence (May 21, 2024) at 09:46:11 to 09:46:35 and 09:52:31 through 09:54:08.

¹⁴ Transcript of Evidence (May 21, 2024) at 09:49:10 through 09:49:46.

therefore, are not weather normalized results. Instead, they are actual usage results which are paired with solar production for a modeled weather year (rather than the actual experience for Duke's net metering solar generation production which are simply omitted from the analysis).

Duke failed to examine, much less demonstrate, how well the actual weather conditions occurring during the days and hours in question match the typical meteorological year weather conditions in the PV Watts model and, in turn, reliably explain and predict customer behavior.¹⁵ In the absence of any such demonstration of reliability, the application of modeled weather year results and the solar generation modeled through them is unreasonable because it does not explain actual behavior caused by the actual weather.

D. The analysis offered by Duke in support of its proposal for successor net metering rates under NM-2 is unreasonable because it does not demonstrate that the 12CP identified in the study period and used for the analysis reliably demonstrate the likely impact of solar generation on Duke's cost of service for its residential customers who have net metering service.

A twelve (12) month cost of service study period corresponds to 8,760 hours. In the instant proceeding, evidence supplied by Duke in support of its Application did not contain a clear reconciliation of the hours and days for the cost of service study and the hours and days for the modeled solar generation. Indeed, Duke concedes error in a response to a post-hearing request for information.¹⁶ It is a critical error because only twelve (12) of those 8,760 hours establish the twelve (12) coincidental peak hours, 12CP, used in the analysis and relied upon by Duke.

¹⁵ See Transcript of Evidence (May 21, 2024) at 09:54:15 through 09:54:51.

¹⁶ Response to KYSEIA Post-Hearing Requests (filed Jun. 7, 2024), Item 1.

Despite Duke's offer of new evidence through a response to a post-hearing request for information (for which there is not an opportunity for the parties to further clarify the new package of information), the fundamental problem remains that the new evidence struggles to demonstrate in a cogent manner that the 12CP from the cost of service study in its most recent rate case properly matches (and reconciles by reference to Eastern Standard Time) the actual customer usage results to the typical weather year modeled solar generation.¹⁷ Duke, as the applicant seeking to change the status quo, is the party with the burden of proof.

The lack of a clear reconciliation of schedules and identification and quantification for the 12CP aggravates or worsens the problem of mixing and matching actual usage results from the cost of service study period with modeled typical year weather results wholly separate from the same study period. Duke is the party with the responsibility for the information. Duke was placed on notice during the evidentiary hearing that the evidence in support of its analysis was not reliable, and Duke concedes the need to correct errors. What Duke has yet to do is present an analysis that, aside from its other problems, is clear and understandable.

Given that Duke identifies a \$29.42/kW unit cost of capacity such that if the 12CP demand for a given month fell by 1kW for one hour the demand component of the cost of service study analysis would fall by \$29.42/kW as well, the failures to reconcile, identify, and quantify are not minor points. All other things equal, higher solar generation corresponds to lower demand values during the 12CP hours. There is a significant risk

¹⁷ KYSEIA points out this flaw without conceding that Duke's approach to analyzing the information is sound and reasonable in the first place.

that Duke's analysis severely understates the reductions Duke would experience by reference to its cost of service study analysis. Duke as the party with the burden of proof is the party that must bear this risk rather than its net metering customers.

Duke's analysis, which also suppresses the value of solar generation through preventing a negative net load hour in the 12CP values, fails to reliably explain or predict customer usage and behavior, and it fails to demonstrate the value of solar exports upon its system from its net metering customers. The analysis offered by Duke is unsound for proper ratemaking.

The analysis offered by Duke in support of its proposal for successor net metering rates under NM-2 is unreasonable because it does not demonstrate that the twelve (12) coincidental peak hours identified in the study period and used for the analysis reliably demonstrate the likely impact of solar generation on Duke's cost of service for its residential customers who have net metering service.

E. Duke's approach to serving its net metering customers lacks sufficient accountability.

A common thread throughout Duke's Application and evidence is that Duke does not offer much coordination of service to its net metering customers. A very telling piece of evidence is that Duke cannot identify who is ultimately responsible or otherwise accountable for decisions concerning net metering switch determinations.¹⁸ Duke's net metering customers are left to, through persistence and speculation, navigate the Duke system to protect and advance their interests. For reasons stated above, Duke needs to

¹⁸ Response to Staff Post-Hearing Request (filed Jun. 7, 2024), Item 2.

change its approach to comply with statute and to provide reasonable service and processing of matters concerning net metering service.

III. CONCLUSION

For the reasons stated above, the Commission should deny Duke's unlawful proposal for suspending statutory legacy rights upon a sale or conveyance of premises with an eligible customer-generator; and deny Duke's unlawful and unreasonable proposal to terminate statutory legacy rights upon an application to increase the rated capacity of a customer-generator up to forty-five (45) kilowatts, and, in any event, reject the proposed facts and circumstances language of "material increase" when Duke plans to implement a per se policy or bright line test regarding increases in rated capacity.

For the reasons stated above, the Commission should reject as unreliable Duke's analysis of the impact of solar generation upon its cost of service. Duke failed to offer a reasonable analysis in support of its Application, and Duke failed to demonstrate that the analysis reasonably and reliably predicts and explains customer usage for customers who engage in net metering. The analysis appears to grossly underestimate the favorable impact upon Duke's system of customers with solar generation.