

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF DUKE ENERGY)	
KENTUCKY, INC. TO BECOME A FULL PARTICIPANT)	
IN THE PJM INTERCONNECTION LLC, BASE RESIDUAL)	CASE NO.
AND INCREMENTAL AUCTION CONSTRUCT FOR THE)	2024-00285
2027/2028 DELIVERY YEAR AND FOR NECESSARY)	
ACCOUNTING AND TARIFF CHANGES)	

APPLICATION OF DUKE ENERGY KENTUCKY, INC. TO TRANSITION TO PARTICIPATION IN THE PJM BASE RESIDUAL AND INCREMENTAL AUCTIONS BEGINNING WITH THE 2027/2028 DELIVERY YEAR AND REQUEST FOR EXPEDITED RELIEF

Now comes Duke Energy Kentucky, Inc. (Duke Energy Kentucky or the Company), by and through counsel, pursuant to Kentucky Revised Statutes (KRS) 278.218 and the Commission’s December 22, 2010 Order in Case No. 2010-00203 (PJM Realignment Order),¹ and hereby respectfully requests authorization: 1) to exit the Fixed Resource Requirement (FRR) and to transition to full participation in the PJM Interconnection LLC (PJM) Reliability Pricing Model (RPM) Base Residual Auction (BRA) and Incremental Auction (IA) construct beginning with the June 1, 2027 through May 31, 2028 (2027/2028) Delivery Year; 2) for approval of amendments to the Company’s Profit Sharing Mechanism (Rider PSM) to account for capacity-related revenues and costs from PJM Billing Line Item (BLI) and bilateral markets; 3) to reconcile the net capacity-related revenues and charges with customers receiving 100 percent of the

¹ *In the Matter of the Application of Duke Energy Kentucky, Inc., for Approval to Transfer Functional Control of its Transmission Assets from the Midwest Independent Transmission System Operator to the PJM Interconnection Regional Transmission Organization and Request for Expedited Treatment*, Case No. 2010-00203, p. 18, (Ky.P.S.C. Order) (December 22, 2010).

benefit or costs of capacity outside of the current sharing percentages for other components of Rider PSM; 4) any necessary accounting treatment; waivers, and approvals necessary; 5) and for expedited treatment to effect transition as early as the 2027/2028 Delivery Year.

In support of this Application, Duke Energy Kentucky states as follows:

I. INTRODUCTION

1. Duke Energy Kentucky is a Kentucky corporation with its principal office and principal place of business at 139 East Fourth Street, Cincinnati, Ohio 45202. The Company's local office in Kentucky is Duke Energy Erlanger Operations Center, 1262 Cox Road, Erlanger, Kentucky 41018. The Company further states that its electronic mail address for purposes of this matter is KYfilings@duke-energy.com.

2. Duke Energy Kentucky is a utility engaged in the natural gas and electric business. Duke Energy Kentucky generates electricity, which it distributes and sells, in the Boone, Campbell, Grant, Kenton, and Pendleton Counties. Duke Energy Kentucky also purchases, sells, stores, and transports natural gas in the Boone, Bracken, Campbell, Gallatin, Grant, Kenton, and Pendleton Counties.

3. Pursuant to 807 KAR 5:001, Section 14(2), Duke Energy Kentucky states that it was originally incorporated in the Commonwealth of Kentucky on March 20, 1901, and attests that it is currently in good standing in said Commonwealth. A copy of a certificate of good standing is included as Exhibit 1 to this Application.

4. Pursuant to KRS 278.380, Duke Energy Kentucky waives any right to service of Commission orders by mail for purposes of this proceeding only. Copies of all orders, pleadings, and other communications related to this proceeding should be directed to:

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II. BACKGROUND

A. PJM Participation

5. In connection with its realignment to PJM Interconnection LLC (PJM), effective January 1, 2012, and in accordance with the PJM Realignment Order, Duke Energy Kentucky began participating in PJM under the FRR option for purposes of meeting PJM's Resource Adequacy requirement.² This initial election generally required the Company to remain as an FRR entity for a minimum term of five consecutive Delivery Years.³ Pursuant to the PJM Realignment Order, the Commission required the Company to participate as an FRR entity until it requested and received Commission approval to

² Prior to January 1, 2011, Duke Energy Kentucky was a member of the Midcontinent Independent System Operator (MISO) f/k/a Midwest Independent System Operator.

³ Duke Energy Kentucky's five-year FRR commitment expired on June 1, 2016.

transition to the RPM capacity auction construct.⁴ Since completing its realignment, the Company has remained an FRR participant in the PJM Capacity market.

6. Under the FRR election, Duke Energy Kentucky supplies its own, unit-specific capacity, identifying the precise generating units in sufficient quantities to satisfy its load obligations, including adequate reserves.⁵ In doing so, the Company does not and cannot directly and freely participate in the PJM capacity RPM auction construct, and is limited in its ability to sell any excess capacity in those auctions. Instead, the Company is required to annually submit an FRR capacity plan to satisfy the unforced capacity (UCAP) obligation for all loads in the Company's FRR service area, including all expected load growth. Upon expiration of the initial five-year FRR commitment in June 2016, Duke Energy Kentucky now has the ability to exit the FRR option and complete a transition so to participate in a future PJM base residual auction for capacity procurement in a future delivery year.

7. Under the RPM BRA/IA construct, generators submit competitive bids into the BRA and IAs, and load serving entities purchase the necessary capacity to satisfy their load obligations. The BRA auction occurs based upon a Delivery Year that is typically three years in the future. Due to recent PJM market changes, the schedule for the BRA was suspended for a period while the Federal Energy Regulatory Commission (FERC) considered changes to the PJM capacity construct. PJM has compressed its auction calendar to return to the three-year-forward procurement basis. As a result, the timing of the PJM BRA has been slightly modified to catch up. Put another way, in its next two

⁴ Realignment Order, pp. 13-14 and 18.

⁵ Unit-specific capacity requires the Company to point to specific assets to satisfy its load obligations that are not otherwise or already committed in the RPM auctions.

BRAs, projected to occur in December 2024, and June 2025, PJM will procure capacity for the 2026/2027 and 2027/2028 Delivery Years, respectively.

B. Transition to RPM Auction Construct

8. Under PJM regulations, the transition from an FRR entity to a full RPM auction participant generally requires a three-year transition, so to align with BRA Delivery Year procurement. This is because PJM's BRA is for a delivery year that is three years into the future. Duke Energy Kentucky regularly evaluates the merits of exiting the FRR option in light of its relative capacity position, and changing PJM, FERC, or environmental rules. While to date, Duke Energy Kentucky has not determined that a move from FRR to RPM is in the best interests of customers and accordingly, has not sought Commission authorization to become a full participant in the PJM auction construct, factors now exist that make such a transition in the public interest.

9. The Company submits that transitioning from the FRR option to the RPM BRA/IA construct has become in the public interest due to multiple factors, including, but not limited to: 1) proactively addressing the potential reliability risk for large and sudden load growth at a rate faster than the Company can construct or acquire additional baseload generation; 2) uncertainty and change in the balance between demand and supply in the Duke Energy Ohio/Kentucky (DEOK) zone in PJM driven by announced generating asset retirements; 3) the lack of bilateral capacity in the DEOK zone should future zonal separation occur;⁶ 4) anticipated changes to PJM's FRR construct that would negatively impact the Company's participation as an FRR entity; 5) the energy transition in PJM due to retirements of fossil generation and PJM's own prediction of shrinking reserve margins

⁶ The DEOK Zone has separated in three (3) of the last five (5) PJM BRAs demonstrating that the zone is capacity constrained and with future announced retirements, will likely continue to be going forward.

and higher capacity prices; and 6) the change in the FRR shortfall penalty to 1.75 x Net Cost of New Entry (Net Cone).

10. Due to PJM's suspension of its auction process as its new rules were under consideration by FERC, and PJM's subsequent efforts to "catch-up" and conduct BRAs on an accelerated period, Duke Energy Kentucky has a unique opportunity to transition to the RPM auction construct sooner than would otherwise and typically be available. If the Company receives authorization to transition to RPM by April 1, 2025, the Company will have adequate time to notify PJM of exiting the FRR so to participate in the anticipated June 2025 BRA for the 2027/2028 delivery year. This would allow the Company to transition a full delivery year or earlier than it otherwise would under the normal BRA cadence. If the Company is unable to provide notice to PJM by April 2025, it will have to remain an FRR through the 2027/2028 delivery year and the next opportunity to transition would be if the Company can provide the required notice by October 2025 so it could participate in the BRA for the 2028/2029 delivery year estimated to be held in December 2025. If the Company misses that date, the earliest it could transition would be the 2029/2030 delivery year.

C. Rider PSM

11. Duke Energy Kentucky's Rider PSM was first approved as part of the Company's acquisition of three generating stations, East Bend, Miami Fort Unit 6, and Woodsdale from Duke Energy Ohio in Case No. 2003-00252.⁷ The purpose of the rider was to provide customers with the benefit of net off-system sales, which allow customers

⁷ *In the Matter of the Application of the Union Light Heat and Power Company for a Certificate of Public Convenience To Acquire Certain Generation Resources and Related Property; For Approval of Certain Purchase Power Agreements; For Approval of Certain Accounting Treatment, and for Approval of Deviation from Requirements of KRS 278.2207 and 278.2213(9); (Ky.P.S.C. Interim Order, pp. 18-20) (Dec. 5, 2003).*

to experience the actual benefit (or costs) of participating in the wholesale energy markets. As initially approved, Rider PSM included a 50/50 sharing of net off-system sales after the first \$1 million.

12. Since its inception, the Commission has authorized Rider PSM modifications on multiple occasions, including the following:

- a. In Case No. 2008-00489, Rider PSM was modified to include sales in the then newly implemented Midwest Independent System Operator Ancillary Services Market;⁸
- b. In the PJM Realignment Order, the Commission conditioned the Company's re-alignment to PJM, among other things, upon changing the sharing percentage from a 50/50 split between the customers and the Company to a 75/25 percent split between customers and the Company, respectively;⁹
- c. In Case No. 2014-00201, the Commission authorized a change to the Rider PSM to include net capacity plan obligations (purchase and sales) in the rider;¹⁰
- d. In Case No. 2017-00321, the Commission authorized a change to Rider PSM to expand the categories of revenues (net of costs) available for

⁸ *In the Matter of the Application of Duke Energy Kentucky, Inc., to Modify Rider PSM Off-System Sales Profit Sharing Mechanism to Account for Changes in Off-System Sales Due to the Initiation of the Midwest Independent System Operator Ancillary Services Market*, Case No. 2008-00489, (Ky.P.S.C. Order) (January 30, 2009).

⁹ Realignment Order, p. 18.

¹⁰ *In the Matter of the Application of Duke Energy Kentucky, Inc. For (1) A Certificate of Public Convenience And Necessity Authorizing the Acquisition of the Dayton Power & Light Company's 31% Interest in the East Bend Generating Station; (2) Approval of Duke Energy Kentucky, Inc.'s Assumption of Certain Liabilities in Connection with the Acquisition; (3) Deferral of Costs Incurred As Part of the Acquisition; And (4) All Other Necessary Waivers, Approval, and Relief*; Case No. 2014-00201, (Ky.P.S.C. Order) (December 4, 2010).

inclusion in the rider and to streamline its administration and calculation. Rider PSM was modified to: 1) reflect PJM billing line items that are related to credits and charges attributable to the off-system sales shared with customers; 2) to include all wholesale energy, capacity, and ancillary services markets (net of costs and credits) that are now available or may become available in PJM, including the capacity performance market requirements; 3) to include short-term capacity purchases necessary to meet Duke Kentucky's three-year FRR; 4) costs of any capacity payments made to cogeneration facilities under the terms of its cogeneration tariffs; 5) net proceeds from the sale of renewable energy certificates derived from any Company-owned renewable generating resources; and 6) to change the sharing mechanism percentages with customers receiving 90 percent of net proceeds and/or costs, and eliminating the initial \$1 million threshold.¹¹

13. As part of this Application, the Company requests herein a modification to Rider PSM to include the PJM BLIs that the Company will begin being billed by PJM once it commences participation in the RPM BRA and IAs and any costs or revenues in bilateral markets to meet PJM's FERC-approved reliability requirements. Amending Rider PSM will enable the Company to net the costs with anticipated revenues of participating in the PJM RPM auction constructs.

14. The Company further requests authorization to modify the sharing mechanism to separately account for the capacity portion of Rider PSM so to net 100

¹¹ *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, (Ky.P.S.C. Order) (April 13, 2018).

percent of the costs and revenues of participating in the capacity markets to customers. Customers will receive 100 percent of the net benefits or costs as a result of the Company's participation in the RPM BRA and IAs and any costs or revenues in bilateral markets to meet PJM's FERC-approved reliability requirements. Rider PSM will continue to operate as it does today in all other respects.

III. KENTUCKY LAW

15. The transition from the FRR self-supply capacity construct to one that is market based and procured via a competitive, yet structured, auction construct constitutes a change in the right to control, or functional control, of a utility asset.

16. KRS 278.218 provides in relevant part that “No person shall acquire or transfer ownership of or control, *or the right to control*, any assets that are owned by a utility. without prior approval of the commission, if the assets have an original book value of one million dollars (\$1,000,000) or more and:

1. The assets are to be transferred by the utility for reasons other than obsolescence; or *
2. The assets will continue to provide the same or similar service to the utility or its customers.”¹²

KRS 278.218(2) further sets forth the standard under which the Commission will consider a transaction, providing in relevant part, that the “Commission shall grant its approval if the transaction is for a proper purpose and consistent with the public interest.”¹³

17. In the PJM Realignment Order, the Commission conditioned its approval of Duke Energy Kentucky's transition from MISO to PJM based upon the Company agreeing

¹² KRS 278.281 *Emphasis added.*

¹³ *Id.*

to several commitments. One such commitment was that Duke Energy Kentucky should participate in PJM under an FRR self-supply construct until it requests and receives Commission approval to participate in the RPM market capacity auction construct.¹⁴

18. Thus, to effectuate a transition from the FRR self-supply construct to the RPM BRA/IA construct, the Company must request, and the Commission must approve, such a transition. And the standard for doing so is 1) whether the proposed transfer is for a proper purpose; and 2) is the transfer consistent with the public interest.

IV. TRANSITIONING TO FULL RPM PARTICIPATION IS FOR A PROPER PURPOSE AND IS IN THE PUBLIC INTEREST

19. The Company respectfully submits that the transfer to full RPM participation is for a proper purpose. The transfer to full participation in the RPM BRA/IA construct will not adversely affect the Company's reliability or its supply of generation to meet its demand. In fact, the Company anticipates that transferring to the RPM construct will provide greater flexibility to meet the reliability needs for customers and respond to unanticipated and sudden changes in customer demand. Further, the change to RPM will mitigate or eliminate several FRR-specific risks the Company and its customers now face as FRR participants. These incremental risks include, but are not limited to: 1) potential FRR plan penalties if the plan does not satisfy demand requirements; 2) avoiding the FRR capacity holdback limitation; 3) over procuring capacity due to the reserve margin differential between FRR and RPM during high capacity prices; 4) the FRR minimal zonal capacity requirement; and 5) risk of limited bilateral capacity to meet an FRR plan. As further explained in the Direct Testimony of John D. Swez, submitted in this proceeding, transitioning to the RPM mitigates or eliminates these risks.

¹⁴ PJM Realignment, Order pp. 14, 18.

20. The Company respectfully submits that the transfer to full RPM participation is in the public interest in that RPM best protects customers from the risk of a large energy intensive customer locating in the Company's service territory and requiring service prior to the Company building or acquiring generation. Further, the transition to RPM helps insulate the Company from the risk of an anemic bilateral capacity market due to announced retirements within the DEOK zone and throughout PJM that limits the Company's ability to procure additional or emergency capacity for its FRR plan. Additionally, PJM has anticipated changes to PJM's FRR construct that would negatively impact the Company's participation as an FRR entity in the future. Additionally, the move to RPM is anticipated to produce numerous benefits to customers and the Company, including the ability to fully monetize excess capacity that does not exist as an FRR entity resulting in greater off-system sales and revenues to customers, the ability to avoid FRR deficiency penalties, and potentially lower reserve requirements.

21. As supported in the testimony accompanying this Application, the Company's analysis shows that a move to RPM provides greater benefits and/or lower costs to customers in nearly every capacity position and price scenario analyzed than remaining an FRR entity. The most recent PJM BRA for the 2025/2026 delivery year cleared at a price that is nearly ten times higher than the last BRA, indicating that capacity is becoming more valuable in PJM and as the Company's analysis shows, provides greater benefit to customers than remaining in the FRR.¹⁵

22. Amending Rider PSM is also for a proper purpose and is in the public interest. Given the volatility and magnitude of costs and credits, the Company needs the

¹⁵ <https://pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2025-2026/2025-2026-base-residual-auction-report.ashx>

mechanisms and accounting authority put in place to appropriately and properly account for and net these costs and credits. Amending Rider PSM to include all of the capacity-related transactions from PJM and bilateral markets will ensure that customers are paying for and receiving the benefit of participation in the PJM RPM auction structure, including receiving the full value of generating resources used to serve customer demand. And since the Company's participation in PJM's RPM allows customers to receive a reliable supply of electricity by providing ready access to capacity and energy markets, the public interest is served.

V. REQUEST FOR RELIEF

WHEREFORE, Duke Energy Kentucky respectfully requests the Kentucky Public Service Commission to enter an order authorizing: 1) Duke Energy Kentucky to exit the FRR construct and to transition to full participation in the PJM RPM BRA/IA beginning with the 2027/2028 Delivery Year; 2) amendments to the Company's Rider PSM to account for PJM capacity-related BLI revenues and charges and capacity transactions in the bilateral markets to meet PJM's FERC-approved reliability requirements; 3) reconciliation of the net capacity-related revenues and charges with customers receiving 100 percent of the benefit or costs of capacity outside of the current sharing percentages; 4) any necessary accounting treatment; waivers, and approvals necessary; and 5) for expedited treatment and issue its decision no later than April 1, 2025 to effect transition as early as the 2027/2028 Delivery Year.

Respectfully submitted,

DUKE ENERGY KENTUCKY, INC.

/s/ Rocco O. D'Ascenzo

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CERTIFICATE OF SERVICE

This is to certify that the foregoing electronic filing is a true and accurate copy of the document being filed in paper medium; that the electronic filing was transmitted to the Commission on September 6th, 2024; and that there are currently no parties that the Commission has excused from participation by electronic means in this proceeding.

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/s/Rocco D'Ascenzo

Rocco D'Ascenzo

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Certificate of Existence

Authentication number: 318232

Visit <https://web.sos.ky.gov/ftshow/certvalidate.aspx> to authenticate this certificate.

I, Michael G. Adams, Secretary of State of the Commonwealth of Kentucky, do hereby certify that according to the records in the Office of the Secretary of State,

DUKE ENERGY KENTUCKY, INC.

DUKE ENERGY KENTUCKY, INC. is a corporation duly incorporated and existing under KRS Chapter 14A and KRS Chapter 271B, whose date of incorporation is March 20, 1901 and whose period of duration is perpetual.

I further certify that all fees and penalties owed to the Secretary of State have been paid; that Articles of Dissolution have not been filed; and that the most recent annual report required by KRS 14A.6-010 has been delivered to the Secretary of State.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Official Seal at Frankfort, Kentucky, this 28th day of August, 2024, in the 233rd year of the Commonwealth.



Michael G. Adams

Michael G. Adams
Secretary of State
Commonwealth of Kentucky
318232/0052929