

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE ANNUAL COST RECOVERY FILING)	Case No. 2024-00352
FOR DEMAND SIDE MANAGEMENT BY)	
DUKE ENERGY KENTUCKY, INC.)	

**FILING OF THE ANNUAL STATUS REPORT, ADJUSTMENT OF THE DSM
COST RECOVERY MECHANISM, AND AMENDED TARIFF SHEETS FOR GAS
RIDER DSMR (SHEET NO. 62) AND ELECTRIC RIDER DSMR (SHEET NO. 78)**

Now comes Duke Energy Kentucky, Inc. (Duke Energy Kentucky or the Company) with the consensus of the Residential Collaborative and the Commercial and Industrial Collaborative, and pursuant to prior Orders of the Kentucky Public Service Commission (Commission) relevant to Duke Energy Kentucky’s Demand Side Management (DSM) strategy,¹ and hereby files its Annual Status Report, Adjustment of the DSM Cost Recovery Mechanisms for both gas and electric service (DSM Riders), and Amended Tariff Sheets for Gas Rider DSMR and Electric Rider DSMR (Application).

1. Pursuant to 807 KAR 5:001, Section 14(2), Duke Energy Kentucky is a Kentucky corporation that was originally incorporated on March 20, 1901, is in good standing and, as a public utility as that term is defined in KRS 278.010(3), is subject to the

¹ See, November 4, 2004 Order in Case No. 2003-00367, February 14, 2005 Order in Case No. 2004-00389, April 4, 2006 Order in Case No. 2005-00402, May 15, 2007 Order in Case No. 2006-00426, May 14, 2008 Order in Case No. 2007-00369, May 12, 2009 Order in Case No. 2008-00473, March 22, 2010 Order in Case No. 2009-00444, June 7, 2011 Order in Case No. 2010-00445, April 13, 2012 Order in Case No. 2011-00448, June 29, 2012 Order in Case No. 2012-00085, April 11, 2013 Order in Case No. 2012-00495, March 28, 2014 in Case No. 2013-00395, May 7, 2015 in Case No. 2014-00388, April 4, 2016 in Case No 2015-00368, March 28, 2017 in Case No. 2016-00382, September 13, 2018 in Case No. 2017-00427, October 2, 2019 in Case No. 2018-00370, April 29, 2020 in Case No. 2019-00406, April 9, 2021 in Case No. 2020-00371, December 22, 2021 in Case No. 2021-00313, December 27, 2021 in Case No. 2021-00424, June 13, 2023 in Case No. 2022-00251, March 7, 2023 in Case No. 2022-00398, November 23, 2023 in Case No. 2023-00269, and January 11, 2024 in Case No. 2023-00354.

Commission’s jurisdiction. Duke Energy Kentucky is engaged in the business of furnishing natural gas and electric services to various municipalities and unincorporated areas in Boone, Bracken, Campbell, Gallatin, Grant, Kenton, and Pendleton Counties in the Commonwealth of Kentucky. In addition, the Company has attached, as Appendix A, a certified Certificate of Existence dated November 1, 2024.

2. Duke Energy Kentucky’s business address is 139 East Fourth Street, Cincinnati, Ohio 45202. The Company’s local office in Kentucky is Duke Energy Erlanger Ops Center, 1262 Cox Road, Erlanger, Kentucky 41018. Duke Energy Kentucky’s email address is KYfilings@duke-energy.com.

3. On October 14, 2024, the Residential Collaborative² and the Commercial & Industrial Collaborative³ met to review the Application. Unless otherwise stated, the Residential Collaborative and the Commercial & Industrial Collaborative are jointly referred to herein as “Collaborative.” The Collaborative has received the Company’s proposal and had the opportunity to provide comments.

4. In addition to filing the annual status report in this Application, Duke Energy Kentucky respectfully requests a modification of Duke Energy Kentucky’s DSM Riders to reflect the reconciliation of planned and actual expenditures, lost revenues, and shared savings.

5. Pursuant to the Commission’s Order dated September 13, 2018, in Case No. 2017-00427, the Company’s portfolio of programs was approved. The Company requested

² The Residential Collaborative members in attendance were Lawrence Cook (Office of the Kentucky Attorney General), Laura Pleiman (Boone County), Jock Pitts (People Working Cooperatively), and Trisha Haemmerle (Duke Energy).

³ The Commercial & Industrial Collaborative members in attendance were Lawrence Cook (Office of the Kentucky Attorney General) and Trisha Haemmerle (Duke Energy).

and received approval to continue the approved portfolio with the commitment to file the annual cost recovery DSM filing and the annual amendment filing.⁴ Since then, the Commission has continued to review and approve annual amendment and cost recovery filings each year on or about August 15 and November 15 respectively.⁵ Pursuant to the Commission's Order dated February 21, 2024 in Case No. 2022-00251, the due date of the annual DSM cost recovery filing was modified from November 15th, to November 1st.⁶ As a result, this Application, filed November 1, 2024, serves as the annual true-up of the fiscal year ending June 30, 2024, of programs.

Background

6. The Company's offering of DSM programs dates back nearly three decades.⁷ Throughout the years, the Company has offered many enhancements to its portfolio with the purpose of increasing participation and providing customers new and innovative opportunities to control their consumption and impact their utility bill. The portfolio of programs in place during the fiscal year ending June 30, 2024, and that is the subject of this Application was initially approved by the Commission's September 13, 2018, Order in Case No. 2017-00427, and modified in subsequent orders.

7. Like the Company's prior annual DSM filings, this Application specifically addresses the requirements in prior Commission Orders⁸ and is being made consistent with

⁴ See generally, *In the Matter of the Electronic Annual Cost Recovery Filing for Demand Side Management by Duke Energy Kentucky, Inc.*, Case No. 2017-00427, Order (September 13, 2018).

⁵ See *infra*, n. 7.

⁶ *In the Matter of the Electronic Application of Duke Energy Kentucky, Inc. to Amend its Demand Side Management Programs*, Case No. 2022-00251, Order, p. 6 (February 21, 2024).

⁷ *In the Matter of the Joint Application Pursuant to 1994 House Bill No. 501 For the Approval of Principles of Agreement, Demand Side Management, the Union Light Heat and Power Company, and for Authority for the Union Light Heat and Power Company to Implement Various Tariffs and Receive Incentives Associated the Demand Side Management Programs*, Case No. 1995-00312, Order (December 1, 1995).

⁸ November 20, 2003 Order in Case No. 2003-00367, February 14, 2005 Order in Case 2004-00389, April 4, 2006 Order in Case No. 2005-00402, May 15, 2007 Order in Case No. 2006-00426, May 14, 2008 Order in

the Commission’s Order dated February 21, 2024, in Case No. 2022-251 directing Duke Energy Kentucky to file annual DSM applications no later than November 1st.⁹ In the status and reconciliation portion of this report, expenses are reported for the fiscal year period July 1, 2023, through June 30, 2024.

8. In this Application, Duke Energy Kentucky also requests an Order approving the proposed adjustments to the DSM riders and the revised rate tariffs (Appendices D and E).

Definitions

For the purposes of this Application, the following terms will have the following meanings:

9. **“DSM Revenue Requirements”** shall mean the revenue requirements associated with all Program Costs, Administrative Costs, Lost Revenues (less fuel savings), and the Shareholder Incentive.

10. **“Program Costs”** shall mean the costs incurred for planning, developing, implementing, monitoring, and evaluating the DSM programs that have been reviewed with the Collaborative.

11. **“Administrative Costs”** shall mean the costs incurred by or on behalf of the collaborative process and that are approved by the Collaborative, including, but not limited

Case No. 2007-00369, March 22, 2010 Order in Case No. 2009-00444, June 7, 2011 Order in Case No. 2010-00445, April 13, 2012 Order in Case No. 2011-00448, April 11, 2013 Order in Case No. 2012-495, March 28, 2014 Order in Case No. 2013-00395, May 7, 2015 Order in Case No. 2014-00388, April 4, 2016 Order in Case No. 2015-00368, March 28, 2017 in Case No. 2016-00382, September 13, 2018 in Case No. 2017-00427, October 2, 2019 in Case No. 2018-00370, April 29, 2020 in Case No. 2019-00406, April 9, 2021 in Case No. 2020-00371, December 22, 2021 in Case No. 2021-00313, December 27, 2021 in Case No. 2021-00424, June 13, 2023 in Case No. 2022-00251, March 7, 2023 in Case No. 2022-00398, November 23, 2023 in Case No. 2023-00269, and January 11, 2024 in Case No. 2023-00354.

⁹ *In the Matter of Electronic Application of Duke Energy Kentucky, Inc. to Amend its Demand Side Management Programs*, Case No. 2022-00251, Order, p. 6 (February 21, 2024).

to, costs for consultants, employees, and administrative expenses.

12. **“Lost Revenues”** shall have the same meaning as “LR” as described in Rider DSM - Demand Side Management Cost Recovery Rider, Sheet No. 75 (Electric) and Rider DSM - Demand Side Management Cost Recovery Rider, Sheet No. 78 (Gas).

13. **“Shareholder Incentive”** shall have the same meaning as “PI” as described in Rider DSM - Demand Side Management Cost Recovery Rider, Sheet No. 75 (Electric) and Rider DSM - Demand Side Management Cost Recovery Rider, Sheet No. 78 (Gas).

14. **“DSM Cost Recovery Mechanism”** shall refer to Rider DSM - Demand Side Management Cost Recovery Rider, Sheet No. 75 (Electric) and Rider DSM - Demand Side Management Cost Recovery Rider, Sheet No. 78 (Gas).

Status of Prior Portfolio of DSM Programs

15. Through June 30, 2024, Duke Energy Kentucky offered the following programs, the costs of which are recoverable through the DSM Cost Recovery Rider mechanism approved by the Commission in prior proceedings:

- Program 1: Residential Smart Saver[®] Energy Efficient Residences Program;
- Program 2: Residential Smart Saver[®] Energy Efficient Products Program;¹⁰
- Program 3: Residential Energy Assessments Program (Residential Home Energy House Call);
- Program 4: Income Qualified Services Program;

¹⁰ The Smart Saver[®] Residential Energy Efficient Products Program and the Energy Efficient Residences Program are individual measures that are part of a single and larger program referred to and marketed as Residential Smart Saver[®]. For ease of administration and communication with customers the two measures have been divided into separate tariffs even though they are a single program.

- Program 5: Power Manager[®] Program;
- Program 6: Non-Residential Smart Saver[®] Program
- Program 7: PowerShare[®] Program;
- Program 8: Income Qualified Neighborhood Program;
- Program 9: Home Energy Report Program;
- Program 10: Business Energy Saver Program;
- Program 11: Non-Residential Pay for Performance;¹¹ and
- Program 12: Peak Time Rebate Pilot Program.

16. This section of the Application provides a brief description of each current program, a review of the status of each program, and information on any changes that may have been made to the programs. The following table provides a summary of the load impacts achieved and level of participation obtained during this filing period.

	1	Summary of Load Impacts July 2023 Through June 2024		
Residential Programs		Incremental Participation	kWh	kW
Income Qualified Neighborhood		762	557,394	55
Income Qualified Services		109	139,965	32
My Home Energy Report		71,223	13,487,188	3,949
Residential Energy Assessments		1,755	757,381	83
Residential Smart Saver [®]		19,663	1,000,832	157
Power Manager [®]	2	13,019	-	13,357
Peak Time Rebate Pilot Program		598	-	175
Total Residential		107,129	15,942,760	17,809
Non-Residential Programs		Incremental Participation	kWh	kW
Business Energy Saver		2,607,582	2,681,402	469
Smart Saver [®] Non-Residential		27,667	8,787,908	1,154
PowerShare [®]	3	8	-	8,880
Total Non-Residential		2,635,257	11,469,310	10,503
Total		2,742,386	27,412,070	28,312
<p>1 - Impacts are net of free riders, without losses and reflected at the customer meter point. 2 - Cumulative number of controlled devices installed. Impacts reflect average capability over the contract period. 3 - Impacts reflect average capability over the contract period.</p>				

¹¹ Marketed as Smart Saver[®] Performance

17. Results of the current cost-effectiveness test results for each of the programs are provided in Appendix B.

**Programs 1 and 2: Residential Smart Saver[®] Energy Efficient Residences
and Products Programs**

18. The purpose of the Residential Smart Saver[®] Energy Efficient Residences portion of the Residential Smart Saver[®] Program is to offer customers prescriptive incentives for a variety of energy conservation measures designed to target the largest energy consumption equipment and increase energy efficiency in their homes. The program utilizes a network of participating contractors to encourage the installation of high efficiency equipment and the implementation of energy efficient home improvements with eligible customers. Equipment and services to be incentivized include:

- Installation of high efficiency air conditioning (AC) and heat pump (HP) systems;
- Implementation of attic insulation and air sealing services;
- Implementation of duct sealing services; and
- Installation of efficient heat pump water heaters.

19. The Program includes a tier approach to the level of incentives available for HVAC system replacements based on the efficiency rating of the system, along with an optional additional incentive if a qualifying smart thermostat is included and installed with the replacement. A referral marketing component for eligible trade allies has also been added as a delivery channel to enhance customer experience as the customer is making the energy efficient purchase decision. The Program continues to experience a steady demand from customers participating in the incentives. During the period July 2023 through June 2024, the Program approved 353 individual rebate applications.

20. Duke Energy Kentucky currently engages a vendor to administer this

program. The program vendor provides services including application processing and fulfillment, data reporting, call center services, and IT support for program tools such as the trade ally portal which allows trade allies to register, check customer eligibility, and submit applications online. These Residential Smart \$aver® services are jointly implemented with the Duke Energy Indiana, Duke Energy Carolinas, and Duke Energy Progress territories to reduce administrative costs and leverage promotion. BES has experience in delivering similar utility energy efficiency programs.

21. Beginning in January 2023, all residential central air conditioners and air source heat pump systems have been required to meet new minimum energy efficiency standards of no less than 15 SEER in the southeast, which includes the state of Kentucky.

22. Based on the above-mentioned Federal standard changes, the Program needed to adjust eligibility criteria to remain cost effective. Eligible minimum SEER level have been adjusted to SEER 16 since January 1, 2023,¹² and the Program has been continuing to pay incentives based on the operating status of the equipment being replaced and the efficiency level of the new equipment as follows:

Replacement on Failure Incentive:

Replacement of measures which are not functioning and cannot be repaired are considered a Replacement On Failure (ROF). Incentives for ROF are determined by the Company in an amount not to exceed 50% of the installed cost difference between standard equipment or service and higher efficiency equipment or service. The Company may vary the incentive by type of equipment and differences in efficiency to induce customers to purchase greater levels of efficiency at the minimum necessary

¹² See *In the Matter of the Electronic Annual Cost Recovery Filing for Demand Side Management by Duke Kentucky, Inc.*, Case No. 2023-00354, Application, p. 8 (November 15, 2023).

incentive amount. The Company may offer multiple levels of incentives corresponding to varied efficiency levels of equipment or service.

Early Replacement Incentive:

Replacement of measures which are functioning or can be repaired will be considered an Early Replacement (ER). Incentives for ER are determined by the Company based on an amount commensurate with the projected energy savings. The Company may vary the incentive by type of equipment and differences in efficiency to induce customers to purchase greater levels of efficiency.

23. The purpose of the Residential Smart Saver[®] Energy Efficient Products portion of the Residential Smart Saver[®] Program is to provide high efficiency options through various channels, along with other high efficiency products in new or existing residences, including pool pumps, water measures for single family, and water measures for multifamily.

24. The Online Savings Store, initiated as an extension of the original platform launched for specialty lighting on April 26, 2013, continues to enable customers to purchase high efficiency products that will be shipped directly to their homes. While the program ceased offering lighting in July 2023, the program offers a variety of energy efficiency measures to include smart thermostats, water savings measures, and small to medium appliances. The incentive levels vary by product type and the customer pays the difference, including shipping. The program continues to explore other beneficial products and services for customers as well as price modeling to make it easy to save energy through engagement with the store.

Customer purchase limits are as follows:

- Smart thermostats, 2 total;

- Water measures, 3 total;
- Small appliance, dehumidifiers & air purifiers, limit 2 each total.

25. The Savings Store continues to be managed by a third-party vendor who is responsible for maintaining the Savings Store website, partnering with manufacturers on pricing, fulfilling all customer purchases, and supporting the program call center. The Saving Store landing page provides information about the store, energy efficient products, and special pricing and discounts. Support features include a toll-free number, email, Live Chat, and Frequently Asked Questions. Customers may choose to browse the site before checking eligibility for incentives. Shipping and order confirmations are included in the email confirmation sent directly to the customer. Most recently in Q4 of 2023 and through 2024, the implementor has partnered with the Duke Energy team to enable enrollment in demand response at point of sale allowing eligible customers to benefit from the \$75 rebate available.

26. Educational and product detail information are available on the Savings Store to help assist customers with their purchasing decisions. The information discusses application types and benefits of energy efficient products.

27. The Online Savings Store program carefully tracks towards budget by monitoring our marketing activities to customers. During Fiscal Year July 2023 through June 2024, the program delivered 195 LED Specialty bulbs, 412 smart thermostats and 38 trim kits, 88 air purifiers, and 9 water measures.

28. Looking ahead to 2025, the Online Savings Store is exploring new product options but also seeking ways to enable customers to enroll in service options such as thermostat installation to help increase education on how to use for efficiency and to increase In Service Rates (ISR).

29. The Multifamily Energy Efficiency Program is an extension of the Residential Smart Saver[®] lighting program and allowed Duke Energy Kentucky to use an alternative delivery channel which targets multifamily apartment properties. The measures were directly installed in permanent fixtures by the program vendor. The target audience for the program were property managers and owners who had properties served on an individually metered residential rate schedule. To receive new measures, apartments must have electric water heating.

30. While the program ceased offering lighting measures in 2023, the program continues to help property managers upgrade fixtures and save energy by offering water measures such as bath and kitchen faucet aerators, water saving showerheads, smart thermostats and pipe wrap. These measures assist with reducing maintenance costs while improving tenant satisfaction by lowering energy bills. The property can purchase discounted smart thermostats for their apartments and have them installed by the program implementor for \$100/thermostat.

31. The program implementer is responsible for all marketing and outreach for the program. This is primarily done through outbound calls and on-site visits to solicit initial interest in the program from property managers in the Company's service territory. Additionally, program information and supporting documents are available on the Duke Energy Kentucky web site for property managers to learn more about the program and request applications to participate in the program.

32. Looking ahead to 2025, the program has requested the addition of new measures to include T8 Tube Lighting, Weatherstripping for both doors and windows, Caulking for both doors and windows, Domestic Hot Water (DHW) turndown and Filter

Changes and Furnace Filter Whistles. This request is currently pending Commission review in Case No. 2024-00264.¹³

33. A total of 379 measures were installed from July 2023 - June 30, 2024. The program installed 144 kitchen and bath aerators, 78 standard showerheads, and 157 feet of insulating pipe wrap.

34. The Save Energy and Water Kit (SEWK) program is designed to increase the energy efficiency of residential customers by offering customers low flow water devices and water heater pipe insulation wrap to install within their homes. The SEWK offer is available through a business reply card (BRC) or through direct email solicitation, enabling customers to request a kit and have it shipped directly to their homes. A website has been established to provide customers with additional information about the program and instructional videos to assist in the installation of items from the do it yourself (DIY) kit. Additionally, the online platform allows customers to upgrade the standard showerhead to either a wide spray or hand-held model for a discounted price.

35. The program implementer changed in September 2021 and the program was temporarily shut down while the program transitioned to a new vendor. The new vendor restarted the program in February 2022. The relaunch of the program focused on offering kits to customer via email and BRC's. A new online platform became available in June 2023, allowing customers to upgrade their showerhead to a hand-held model for a discounted price. The wide spray showerhead is now the standard showerhead offered in the kits to allow for higher customer satisfaction and install service rates.

¹³ See *In the Matter of Electronic Application of Duke Energy Kentucky, Inc. to Amend its Demand Side Management Programs*, Case No. 2024-00264, Application, p. 6 (August 15, 2024).

36. To be eligible, customers must have an electric water heater, have not already participated in SEWK or another Duke Energy Kentucky program offering water saving devices, and live in a single-family, owner-occupied home. Eligible customers, who respond to the BRC or email offer, will receive a kit free of charge. There are two kit sizes to accommodate homes with one or more full bathrooms. The kit size available to the customer is predetermined based on the square footage of the home. Customers in homes less than or equal to 1,500 square feet receive a one (1) bath kit. Customers in homes greater than 1,500 square feet receive a two (2) bath kit. The kits contain varying quantities of showerheads, two bath aerators, one kitchen aerator and insulated pipe tape.

37. The SEWK program is an invitation only program where customers are prequalified and then directly solicited for participation. This allows the program to carefully track performance against budget and adjust marketing efforts as needed. From July 1, 2023, to June 30, 2024, the program shipped 1,742 kits containing 5,226 kitchen and bath aerators, 2,323 standard showerheads, 190 wand showerheads, and 10,452 feet of insulating pipe wrap, for a total of 18,191 measures.

38. Looking ahead to 2025, the program will offer new finishes of the existing measures and additional showerheads with different spray patterns to help increase customer satisfaction and ISR rates.

Program 3: Residential Energy Assessments Program

39. The primary goal for Home Energy House Call (HEHC) is to empower customers to better manage their energy usage and cost. Duke Energy Kentucky partners with several key vendors to administer the program in which an energy specialist completes a 60 to 90-minute walk through assessment of the home and analyzes energy

usage to identify energy savings opportunities. The Building Performance Institute (BPI) building certified energy specialist discusses behavioral and equipment modifications that can save energy and money with the customer. The program targets Duke Energy Kentucky residential customers that own a single-family residence that has electric water heater and/or electric heat, or central air. The energy specialist analyzes energy usage, checks air infiltration, examines insulation levels, checks appliances, and inspects the heating/cooling system(s). The report focuses on building envelope improvements as well as low-cost and no-cost improvements to save energy. At the time of the home audit, the customer receives a free efficiency kit containing a variety of energy saving measures including a low flow shower head, low flow faucet aerators, water heater pipe wrap and weather stripping. The auditors will install these measures, if approved by the customer, so the customer can begin saving immediately, and to help insure proper installation and use. Example recommendations might include the following:

- Turning off vampire load equipment when not in use;
- Turning off lights when not in the room;
- Using energy efficient lighting in light fixtures;
- Using a programmable/smart thermostat to better manage heating and cooling usage;
- Replacing older equipment with more energy efficient equipment;
and
- Adding insulation and sealing the home.

40. The program primarily targets through online channels, electronic mail, and direct mail to acquire the participation for this program.

41. The program offers additional measures that included a blower door test, handheld low-flow showerheads, smart thermostats, specialty globes and candelabras, and recessed LED bulbs. The program ended the fiscal year completing 677 assessments and installed 31 smart thermostats, 70 additional bathroom aerators, 3 specialty showerheads, 952 feet of pipe insulation and 1 blower door audit. Starting July 2023, the program will no longer be incentivizing lighting. However, customers will still be able to purchase lighting at discounted costs through program implementor.

42. In Case No. 2023-00269, the Company received approval to expand the offer to allow single family renters, condo/townhomes/manufactured homeowners, and renters the ability to choose a virtual, phone or web-based audit for their home.¹⁴ These expanded offerings were approved, and the Company began offering them to Kentucky customers on February 5, 2024. These customers must have electric service provided by Duke Energy Kentucky to participate in the program.

The additional types of energy assessment include:

1. Web-based – Customers complete an online questionnaire to evaluate their homes efficiency.
2. Phone Assisted – Customers collaborate with the vendor customer support specialist and complete an energy evaluation during a schedule phone appointment
3. Virtual – Customers collaborate with the vendor energy advisor, who performs computer assisted, onsite home evaluation.

43. The new virtual, phone and web-based audits will allow customers to learn

¹⁴ *In the Matter of Electronic Application of Duke Energy Kentucky, Inc. to Amend its Demand Side Management Programs*, Case No. 2023-00269, Order, pp. 4, 9 (November 20, 2023).

more about energy savings options and recommendations for their home and receive a free energy efficiency kit based on the path (channel) they choose. The kits will ship to the home after the audits are complete.

44. Virtual and phone audits kits will consist of water saving measures including a low-flow showerhead, kitchen and bath aerators, weather stripping, pipe wrap, and a furnace filter whistle. The web-based audit kit will consist of faucet bathroom aerators, weather stripping, pipe wrap, refrigerator thermometer and furnace filter whistle.

45. Customers will receive a detailed assessment report, based on visual and questionnaire responses, providing extra saving recommendations for how they can opt to take advantage of other products and services to improve their homes efficiency. Eligible customers may choose the path or channel that best fits their schedule and desire to learn more about their home's efficiency.

46. From the launch of the virtual assessments through the end of the fiscal year, the program performed 4 phone audits, 8 virtual audits and 9 web audits.

47. Program team is currently exploring adding additional measures to the program. These include expanded finishes (colors) for current water measures to meet customer needs, furnace filter whistles, smart power strips, and added air sealing measures. Program is also looking at providing these measures as needed to customers to increase in service rates and realize additional savings. In addition to adding measures, the Program is looking at enhancing the assessment software to provide more in-depth analysis of the home's energy usage and savings projections.

Program 4: Income Qualified Services Program

Weatherization

48. The Weatherization program portion of Income Qualified Services is designed to help income-qualified customers that are below 200 percent of the federal poverty level to reduce their energy consumption and lower their energy cost. The program works with local weatherization agencies using Federal DOE/LIHEAP funds as well as other community outreach initiatives for participation. The program provides the agencies incentives for installing energy efficient measures in qualified customers' homes. Agencies also educate customers on their energy usage and other opportunities that can help reduce energy consumption and lower energy costs. The program has provided weatherization services to the following number of customers:

Fiscal Year	Customers Served
1999 - 2000	251
2000 - 2001	283
2001 - 2002	203
2002 - 2003	252
2003 - 2004	252
2004 - 2005	130
2005 - 2006	232
2006 - 2007	252
2007 - 2008	265
2008 - 2009	222
2009 - 2010	199
2010 - 2011	234
2011 - 2012	220
2012 - 2013	228
2013 - 2014	143
2014 - 2015	203
2015 - 2016	162
2016 - 2017	166
2017 - 2018	127
2018 - 2019	120
2019 - 2020	99
2020 - 2021	81

2021 - 2022	127
2022 - 2023	145
2023 -2024	93

49. The program is structured so that homes needing the most work, and having the highest energy use per square foot, receive the most funding. The program accomplishes this by placing each home into one of two “Tiers.” For each home, the field auditor uses the National Energy Audit Tool (NEAT) to determine which specific measures are cost effective for that home.

The tier structure is defined as follows:

	Therm / square foot	kWh use/ square foot	Investment Allowed
Tier 1	0 < 1 therm / ft2	0 < 7 kWh / ft2	Up to \$600
Tier 2	1 + therms / ft2	7 + kWh / ft2	All SIR* \geq 1.5 up to \$4K

*SIR = Savings - Investment Ratio

Tier One Services

50. Tier 1 services are provided to customers through weatherization agencies. Customers are considered Tier 1 if they use less than 1 therm per square foot per year or less than 7-kilowatt hour (kWh) per square foot per year, based on a year’s usage of Company supplied fuels. Square footage of the dwelling is based on conditioned space only, whether occupied or unoccupied. It does not include unconditioned or semi-conditioned space (non-heated basements). The total program dollars allowed per home for Tier One services is \$600.00 per home. Tier One services are as follows:

- Furnace / Heating system Tune-up & Cleaning;
- Furnace repairs up to \$600;
- Venting check & repair;
- Water Heater Wrap and Pipe Wrap;

- Cleaning of refrigerator coils;
- Cleaning of dryer vents;
- Energy Efficient Light Bulbs;
- Low-flow shower heads and aerators;
- Weather-stripping doors & windows;
- Limited structural corrections that affect health, safety, and energy up to \$150; and,
- Energy Education.

Tier Two Services

51. Duke Energy Kentucky will provide Tier Two services to a customer if they use at least 1 therm or at least 7 kWh per square foot per year based on the annual usage of Duke Energy Kentucky supplied fuels.

Tier Two services are as follows:

- All Tier One services; plus
- Additional cost-effective measures (with $SIR \geq 1.5$) based upon the results of the NEAT audit. Through the NEAT audit, the agency can determine if energy saving measures pay for themselves over the life of the measure as determined by a standard heat loss/economic calculation (NEAT audit) utilizing the cost of gas and electric as provided by Duke Energy Kentucky. Such items can include but are not limited to attic insulation, wall insulation, crawl space insulation, floor insulation and sill box insulation. Safety measures applying to the installed technologies can be included within the scope of work considered in the

NEAT audit if the SIR is greater than 1.5 including the safety changes;
and

- Replacement of heating system if cannot be repaired.

Regardless of placement in a specific tier, Duke Energy Kentucky provides energy education to all customers in the program.

52. Refrigerator replacement is also a component of this program. To determine replacement, the program weatherization provider performs a two-hour meter test of the existing refrigerator unit. If it is a high-energy consuming refrigerator, as determined by this test, the unit is replaced. Replacing with a new Energy Star[®] qualified refrigerator, with an estimated annual usage of 400 kWh, results in an overall savings to the average customer typically more than 1,000 kWh per year.

Refrigerators tested and replaced:

Year	Refrigerators Tested	Refrigerators Replaced
2002 – 2003	116	47
2003 – 2004	163	73
2004 – 2005	115	39
2005 – 2006	116	52
2006 – 2007	136	72
2007 – 2008	173	85
2008 – 2009	153	66
2009 – 2010	167	92
2010 – 2011	112	76
2011 – 2012	107	64
2012 – 2013	206	69
2013 – 2014	112	37
2014 – 2015	42	24
2015 – 2016	60	22
2016 – 2017	92	54
2017 - 2018	48	18
2018 – 2019	43	12
2019 – 2020	66	15
2020 - 2021	19	15
2021 - 2022	32	17
2022 - 2023	35	18

2023 - 2024	23	16
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The existing refrigerator being replaced is removed from the home and recycled in an environmentally appropriate manner to assure that the units are not used as a second refrigerator in the home or do not end up in the secondary appliance market.

53. Proper safety protocols are being adhered to with PPE being worn to ensure everyone’s safety, if the customer requests.

Payment Plus

54. The Payment Plus portion of Low-Income Services program is designed to impact participants’ behavior (*e.g.*, encourages utility bill payment and reducing arrearages) and to generate energy conservation impacts.

The program is made up of three components:

- Energy Education & Budget Counseling – to help customers understand how to control their energy usage and how to manage their household bills, a combined education/counseling approach is used;
- Weatherization – to increase the energy efficiency in customers’ homes, participants are required to have their homes weatherized as part of the normal Residential Conservation and Energy Education (low-income weatherization) program unless weatherized in past program years; and,
- Bill Assistance – to provide an incentive for these customers to participate in the education and weatherization, and to help them get control of their bills. Payment assistance credits are provided to each customer once they complete each aspect of the program. The credits are: \$200 for participating in the EE counseling, \$150 for participating

in the budgeting counseling, and \$150 for participating in the Residential Conservation and Energy Education program (weatherization services). If all the requirements are completed, a household could receive up to a total of \$500 towards their arrearage. Some customers do not complete all three steps or may have already had weatherization services completed prior to the program.

55. This program is normally offered twice over six winter months per year (October-March). Since 2020, the program has been offered quarterly to accommodate smaller class sizes.

56. Duke Energy Kentucky utilizes a community action agency to recruit customers to participate in the Payment Plus program. The Payment Plus program is designed to help income-qualified customers that are below 200 percent of the federal poverty level to reduce their energy consumption and lower their energy cost. Using a list of potential customers provided by Duke Energy Kentucky, the agency sends a letter describing the program to eligible customers. Included in this letter are various dates, times, and locations of scheduled classes. The courses are designed to accommodate customers with varied schedules and widespread locations. The customer contacts the agency to register for a course. Make-up courses are also offered to those customers who may have missed their initial scheduled time.

57. For the filing period, 120 participants attended energy education counseling. Of those 120, 120 participants also attended budget counseling, and 23 participants' homes have been weatherized.

Program 5: Power Manager® Program

58. The purpose of the Power Manager® program is to reduce demand by controlling residential air conditioning usage during periods of peak demand, high wholesale price conditions and/or generation emergency conditions during the summer months. It is available to residential customers with central air conditioning. Duke Energy Kentucky attaches a load control device to the outdoor unit of a customer's air conditioner. This enables Duke Energy Kentucky to cycle the customer's air conditioner off and on under appropriate conditions.

59. Customers selecting the option that moderately cycles their air conditioner, receive a \$25 credit at installation. Customers selecting the longer cycling option, receive a \$35 credit at installation.

60. Customers also receive annual credits during the months of May - September depending on the program they signed-up for. Customers that signed-up for the moderate control option receives an annual event credit of \$2.40 per month for each year they are on the program and customers that signed-up for the longer control option receive an annual event credit of \$3.60 per month each year they are on the program.

61. Duke Energy Kentucky continues to use load control devices manufactured for new installations and replacement of existing load control devices. The load control devices have built-in safeguards to prevent the "short cycling" of the air-conditioning system. The air-conditioning system will always run the minimum amount of time required by the manufacturer. The cycling simply causes the air-conditioning system to run less, which is no different than what it does on milder days. Additionally, the indoor fan will continue to run and circulate air during the cycling event.

62. The Company continued its primary Power Manager[®] marketing during the past fiscal year through outbound telephone calling. Providing customers with an opportunity to ask questions before deciding to participate has proven to be a significant attribute in making this the most effective sales channel.

63. Ongoing Evaluation, Measurement, and Verification (EM&V) is conducted through a sample of Power Manager[®] customers, using AMI data to determine the kW impact during an event. Operability studies are also used to measure the performance of Power Manager[®] load control devices in Kentucky. In addition, Duke Energy Kentucky has reviewed the statistical sampling requirements of PJM Interconnection, LLC (PJM) for demand response resources of this type. The Duke Energy Kentucky studies comply with all PJM requirements.

64. There were 11 EM&V and 1 Economic Power Manager[®] events that took place from July 2023 through June 2024 event season. There was a PJM required 2-hour test on June 29, 2023.

Bring Your Own Thermostat

65. In the Commission's November 20, 2023, Order in Case No. 2023-269, the Company received approval to enhance the program by introducing Bring Your Own Thermostat (BYOT)¹⁵. BYOT is a residential Demand Response (DR) program leveraging customers "Smart" two-way communicating thermostats instead of traditional load control switches that are installed by the utility. It is intended for customers who have already purchased, installed, and registered a smart thermostat in their home, allowing the utility to avoid the hardware and installation costs associated with traditional direct load control

¹⁵ *In the Matter of Electronic Application of Duke Energy Kentucky, Inc. to Amend its Demand Side Management Programs*, Case No. 2023-00269, Order, pp. 5-6, 9 (November 20, 2023).

programs. The utility can verify how many thermostats are operable and online at any given time, and determine which thermostats are participating in DR events as opposed to opting out. Duke Energy has partnered with a third-party vendor who has contracts with multiple thermostat manufacturers to offer demand response through aggregation of the different thermostat models. After successfully enrolling, participants receive a one-time \$75 incentive. In addition, participants receive a \$25 incentive each year following the anniversary of their enrollment in the program. Rewards are limited to one per service address.

Marketing Plan

66. BYOT is marketed to customers through participating device manufacturers who offer utility branded marketing and enrollment services. One of the significant advantages of Smart Thermostats is two-way communication. Agreements with the aggregation vendor and their thermostat partners allow them to send marketing messages to device owners inviting them to participate in their utility's DR program. Marketing communication may include, but are not limited to, messages within the manufacturers smart phone application, co-branded email, and text messages. Interested customers are then directed to enroll electronically through the various marketing channels. In addition to the thermostat manufacturer communication, the company may use many other channels, such as the utility website and social media.

Programs 6: Non-Residential Smart Saver[®] Program

67. The Smart Saver[®] Non-residential Incentive Program provides incentives to commercial and industrial consumers for installation of high efficiency equipment in applications involving new construction, retrofit, and replacement of failed equipment.

Incentives are provided based on Duke Energy Kentucky's cost effectiveness modeling to assure cost effectiveness over the life of the measure.

68. Commercial and industrial consumers can have significant energy consumption but may lack knowledge and understanding of the benefits of high efficiency alternatives. The program provides financial incentives to help reduce the cost differential between standard and high efficiency equipment, offer a quicker return on investment, save money on customers' utility bills that can be reinvested in their business, and foster a cleaner environment. In addition, the program encourages dealers, manufacturers and distributors (or market providers) to stock and provide these high efficiency alternatives to meet increased demand for the products. The Program provides incentives through prescriptive measures, custom measures, assessment/technical assistance and energy-saving certifications.

69. Prescriptive Measures: The program promotes prescriptive incentives for the following technologies – lighting, HVAC, pumps, variable frequency drives, food services, and process equipment. The eligible measures, incentives, and requirements for both equipment and customer eligibility are listed in the applications posted on Duke Energy's website.

70. Custom Measures: The Smart Saver[®] Custom Program is designed for customers with electrical energy-saving projects involving more complicated, emerging, or alternative technologies or measures not covered by the Non-Residential Smart Saver[®] Prescriptive Program. The intent of the Program is to encourage the implementation of energy efficiency projects that would not otherwise be completed without the Company's technical or financial assistance. Unlike the Non-Residential Smart Saver Prescriptive

Program, the Program requires pre-approval prior to the project initiation. Starting in August 2023, Custom lighting projects with estimated annual energy savings under 700,000 kWh, can utilize an express option that bypasses the need for pre-approval. Custom Incentives may be applied for after the project has been completed. The option to receive pre-approval is still available. A vendor performs technical reviews of custom applications. All other Program implementation and analysis is performed by Duke Energy employees or direct contractors.

71. The program has developed multiple approaches to reaching the very broad and diverse audience of business customers. In 2023-2024, this consisted of incentive payment applications, with paper and online options, instant incentives offered through the Online Business Savings Store as well as incentives through a midstream channel of distributors. As of April 2024, incentives were also offered through an upstream channel of manufacturers. This will help to promote the purchase of energy-saving products at the point of sale for qualifying customers and measures.

72. The program works closely with Trade Allies (TA) to promote the program to our business customers at the critical point in time when customers are considering standard or high efficiency equipment options. The Smart Saver[®] trade ally outreach team provides training and technical support to the TA network. The outreach team also recruits new TAs to participate in the program. TA company names and contact information appears on the TA search tool located on the Smart Saver[®] website. This tool was designed to help customers who do not already work with a TA, to find someone in their location who can serve their needs. The Company continues to look for ways to engage the TAs in promotion of the program as well as more effective targeting of TAs based on market opportunities.

73. Duke Energy Kentucky continues to evaluate changes to existing measures, to take into consideration changes to market conditions and energy efficiency standards, and the addition of measures to offer customers additional options for energy savings. In April 2024, the Company added 16 new lighting measures and a Builder Operator Certificate measure. For 2024-2025, a total of 6 measure additions or measure modifications were identified for the Lighting technology category, 12 measures for the HVAC technology category, 1 measure for the Process technology category, 2 measures for the Foodservice technology category and 5 measures for the Pumps and Motors technology category.¹⁶ Any future measure changes will be presented to the Commission in accordance with the applicable review and approval processes and procedures.

74. For the 2023-2024 fiscal year, Smart Saver[®] incentive funds were readily available for most of the period due to lower participation during the fiscal year. Projects are able to utilize a program prequalification feature to reserve incentive funds. During the reporting period of July 2023 through June 2024, the Kentucky Smart Saver[®] Non-Residential program provided either Prescriptive or Custom incentives to 120 total customers.

75. The internal marketing channel is comprised of assigned Large Business Account Managers, Local Government and Community Relations Managers, Business Energy Advisors and Trade Ally Outreach Managers, who all identify potential opportunities as well as distribute program collateral and informational material to customers and TAs. In addition, the Economic and Business Development groups also

¹⁶ See *In the Matter of the Electronic Application of Duke Energy Kentucky, Inc. to Amend its Demand Side Management Programs*, Case No. 2023-00269, Application, p. 14 & Appendix I (August 15, 2023); *id.*, Order, pp. 6, 9 (November 20, 2023).

provide a channel to customers who are new to the service territory. Additionally, the program deployed a robust Account Based Marketing (ABM) strategy to provide levels of personalized engagement to clusters of similar type accounts. This is a highly customized approach that focuses on specific companies and their decision-makers. We are pursuing a data-driven approach to gathering actionable insights on harder-to-reach markets. Our initial focus is targeting the education, manufacturing, and retail segments. Upon refinement, we will develop a comprehensive campaign for greater awareness that will integrate additional programs and customer solutions.

Program 7: PowerShare® Program

76. PowerShare® is the brand name given to Duke Energy Kentucky's Peak Load Management Program (Rider PLM, Peak Load Management Program KY.P.S.C. Electric No. 2, Sheet No. 77). Rider PLM was approved pursuant as part of the settlement agreement in Case No. 2006-00172. In the Commission's Order in Case No. 2006-00426, approval was given to include the PowerShare® program within the DSM programs. The PLM program is voluntary and offers customers the opportunity to reduce their electric costs by managing their electric usage during the Company's peak load periods. Customers and the Company will enter into a service agreement under Rider PLM, specifying the terms and conditions under which the customer agrees to reduce usage. There are two product options offered for PowerShare® - CallOption® and QuoteOption®:

- CallOption®:
 - A customer served under a CallOption® product agrees, upon notification by the Company, to reduce its demand;
 - Each time the Company exercises its option under the agreement,

the Company will provide the customer a credit for the energy reduced;

- For the 2023/2024 program year, there was one type of event;
 - Emergency events are implemented due to reliability concerns.

Participants are required to curtail during emergency events.

- In addition to the energy credit, customers on the CallOption[®] will receive an option premium credit;
- For the 2023/2024 PowerShare[®] programs associated with the fiscal year of this filing, there were two enrollment choices for customers relative to CallOption. The first choice, “Summer Period”, required participants to be able to curtail during the months of June through October 2023 and May 2024, with a maximum event length of 12 hours and no maximum number of curtailment events. The second choice, “Annual”, requires participants to be able to curtail during the full contract term of June 2023 through May 2024, with a maximum event length of 12 hours during the months of June through October 2023 and May 2024, and with a maximum event length of 15 hours during the months of November 2023 through April 2024 and no maximum number of curtailment events. Resources with a limited number of curtailment events are no longer eligible for registration and therefore hold no value with PJM.
- Only customers able to provide a minimum of 100 kW load response qualify for CallOption[®].

- QuoteOption[®]:
 - Under the QuoteOption[®] products, the customer and the Company agree that when the average wholesale market price for energy during the notification period is greater than a pre-determined strike price, the Company may notify the customer of a QuoteOption[®] event and provide a price quote to the customer for each event hour;
 - The customer will decide whether to reduce demand during the event period. If they decide to do so, the customer will notify the Company and provide an estimate of the customer's projected load reduction;
 - Each time the Company exercises the option, the Company will provide the participating customer who reduces load an energy credit;
 - There is no option premium for the QuoteOption[®] product since customer load reductions are voluntary; and
 - Only customers able to provide a minimum of 100 kW load response qualify for QuoteOption[®].

PowerShare[®] 2023-2024 Summary

77. Duke Energy Kentucky's customer participation goal for 2023 was to retain all customers that currently participate and to promote customer migration to the CallOption[®] program. The table below displays monthly account participation levels for July 2023 through June 2024, as well as MWs enrolled in the program.

Kentucky PowerShare® Participation Update				
Month	CallOption®		QuoteOption®	
	Enrolled Customers*	Summer Capability**	Enrolled Customers*	Summer Capability**
Jul-23	8	8.956	0	0
Aug-23	8	8.956	0	0
Sep-23	8	8.956	0	0
Oct-23	8	8.956	0	0
Nov-23	8	8.956	0	0
Dec-23	8	8.956	0	0
Jan-24	8	8.956	0	0
Feb-24	8	8.956	0	0
Mar-24	8	8.956	0	0
Apr-24	8	8.956	0	0
May-24	8	8.956	0	0
Jun-24	9	9.697***	0	0
*Enrolled Customers represents the number of parent accounts participating. **Summer Capability is consistent with the associated program year. Numbers reported are adjusted for losses. ***Estimated Summer capability				

(Note that Duke Energy Kentucky has signed 9 contracts for the 2024/2025 PowerShare® CallOption® Program. Measured and verified MW values for the summer of 2023 will be available and presented in the update filing.)

78. During the July 2023 through June 2024 period, there were two PowerShare® CallOption® or QuoteOption® events. There were curtailment tests performed to meet PJM requirements. The table below summarizes event participation.

Duke Energy Kentucky - PowerShare CallOption and QuoteOption Economic, Emergency, and Test Events July 2023 - June 2024 Activity - Reduction Values in MWs							
Date	Event Hours (EDT)	Event Type	Event Participants	Participants Reducing Load Partially or Fully	Average Hourly Load Reduction Expected - At the Meter	Average Hourly Load Reduction - At the Meter	Average Hourly Load Reduction - At the Plant
6/29/2023	2 pm to 4 pm	PJM Test	8	8	5.297	11.436	11.723
8/4/2023	2 pm to 4 pm	PJM Re-Test	2	2	0.551	1.091	1.118

(Note that for the summer period of June 2023 through September 2023, zero PowerShare® events have been called. The annual, required, PJM two-hour curtailment test event was conducted on June 29, 2023, at 2 pm.)

Program 8: Income Qualified Neighborhood Program

79. The Duke Energy Kentucky Neighborhood Energy Saver (NES) Program takes a non-traditional approach to serve income-qualified areas of the Duke Energy Kentucky service territory through the direct installation of energy efficiency measures in customer homes. This customer-facing program allows for the direct engagement in a familiar setting to reduce energy consumption with the installation of energy efficient measures. In addition, Duke Energy Kentucky uses this opportunity to educate and work with customers to efficiently manage and lower their energy bills. Examples of direct installed measures include energy efficient light bulbs, water heater and pipe wrap, low flow shower heads/faucet aerators, window and door air sealing and a year supply of HVAC filter replacements.

80. As income qualified neighborhoods are identified for the program, if at least 50 percent of the households are at or below 200 percent of the federal poverty guidelines. Duke Energy Kentucky analyzes census and internal data to select and prioritize neighborhoods that have the greatest need and propensity to participate. While the goal is to

serve neighborhoods where most residents are income qualified, the program is available to all Duke Energy Kentucky customers within the selected boundary. This program is available to both homeowners and renters occupying single family and multi-family dwellings in the target neighborhoods that have electric service provided by Duke Energy Kentucky.

81. In the past, community-based kick-off events have been held in targeted neighborhoods. Kick-off events have featured local community leaders, community-based organization representatives, local weatherization program managers, the installation vendor, and the technical crew. The Duke Energy Kentucky program manager and vendor provide attendees detailed information about NES along with a tentative neighborhood schedule.

82. The purpose of the kick-off event has been to rally the neighborhood around energy efficiency and educate customers on actions they can take to help lower their energy bills and save energy. Additionally, attendees have had the opportunity to meet technical staff and view measures. In days, or a few weeks, shortly following the kick-off event, customers are contacted by the technical crew to receive the free in-home energy assessments (walk-through) and the appropriate energy saving measures are installed if the customer elects to have the work completed. Direct mail and call center support supplement community-based outreach efforts.

83. For fiscal year 2023-2024, with a participation goal of 600 homes, Duke Energy Kentucky completed 487 homes within the service territory. Duke Energy Kentucky continues to collaborate with organizations such as the Northern Kentucky Community Action Commission, People Working Cooperatively and other local agencies, businesses, and government-backed programs to rally around efforts of the NES program. Duke Energy Kentucky's NES program provides residents information about the service and helps leverage

additional services available in their communities. The program has been well-received, and neighbors regularly share the benefits of their experience with others.

84. Duke Energy Kentucky has expanded the NES program by adding NES 2.0.¹⁷ In addition to the current 16 measures offered to customers, Duke Energy will qualify customers of the neighborhood for NES 2.0 measures, which include attic insulation, air sealing, duct sealing, and smart thermostats to address customers high energy use. Eligibility of the revised measures (NES 2.0) will be made available to customers that the Company deems a high-energy user. For fiscal year 2023-2024, we have completed 15 attic insulation, 91 air sealing, and 98 duct sealing installations and 71 Smart Thermostats for customers with high energy use.

85. Duke Energy Kentucky continues to work with communities and determine which areas can benefit from participating in the program. Currently there is a minimum number of household structures necessary to define a neighborhood. A neighborhood size is approximately 500 – 1,500 households. However, Duke Energy Kentucky can and will adjust street boundaries to create a neighborhood that fits the poverty threshold if necessary.

Program 9: Home Energy Report Program

86. The Home Energy Report (HER) compares household electric usage to similar, neighboring homes, and provides recommendations and actionable tips to lower energy consumption. The report also informs a customer of the Company's other energy efficiency programs when applicable. These normative comparisons are intended to induce customers to adopt more efficient energy consumption behavior. HER is delivered in printed

¹⁷ *In the Matter of Electronic Application of Duke Energy Kentucky, Inc. to Amend its Demand Side Management Programs*, Case No. 2021-00313, Application, pp. 6-7 (August 16, 2021); *id.*, Order, p. 8 (December 22, 2021).

and email form. The reports are distributed up to 12 times per year (2 printed reports and 12 electronic reports if the customer provides their email address). Currently, to qualify to receive the report, customers must be living in a single metered, single-family home with 13 months usage history.

87. The HER program, originally an opt out program, was changed to an opt in program beginning in 2019-2020, the next fiscal term following the Commission's September 13, 2018, Order. The Company provides information on every report as to how a customer may update their information or request to stop receiving the reports. From July 1, 2022, to June 30, 2023, the HER program has had zero opted-in customers decide to opt-out of the program after receiving reports. As of June 30, 2023, there were 9,265 Kentucky HER customers receiving reports.

88. The HER program was approved to return to an opt-out program design beginning in 2024¹⁸ with an aim to add multifamily customers to the program for the first time and deliver usage insights and personalized tips to a larger audience and increase program cost effectiveness. The updated program design request includes an increase of up to 8 and 6 paper reports sent to each single-family and multifamily customer per year, respectively, if a customer has not opted out of paper reports. As of June 30, 2024, there are 59,488 single-family and 11,735 multifamily participants in the HER program.

89. The Company has designed an interactive portal and enabled email technology to further engage with customers with the intention of increasing the level of engagement with customers and hence their efficiency. This portal is available online and through mobile channels. Historically, single-family participants have a higher propensity

¹⁸ See *In the Matter of the Electronic Application of Duke Energy Kentucky, Inc. to Amend its Demand Side Management Programs*, Case No. 2023-00269, Order, pp. 4, 9 (November 20, 2023).

to engage with the interactive website and increase their energy-efficiency, as evident by prior HER EM&V evaluations. EM&V evaluations also show that Multifamily participants using the HER website do not increase their energy efficiency, statistically speaking, versus those Multifamily participants in the regular program receiving only email and/or paper reports. As of June 30, 2024, there were 1,948 Duke Energy Kentucky single-family HER customers enrolled in the interactive portal.

90. The Company also offers the HER program in the Duke Energy mobile app. Customers who have opted into the mobile program are now able to see their Home Energy Report monthly comparisons and usage disaggregation on the Duke Energy mobile app.

Program 10: Business Energy Saver Program¹⁹

91. The purpose of Duke Energy Kentucky's Business Energy Saver program (BES) is to reduce energy usage through the direct installation of energy efficiency measures within qualifying non-residential Duke Energy Kentucky customer facilities. BES consist of two Program options, Small Business Energy Saver (SBES) and SmartPath. The BES Program measures address major end-uses in lighting, refrigeration, process, and HVAC applications.

92. All aspects of the BES option are administered by a single Company-authorized vendor. The BES participants receive a free, no-obligation energy assessment of their facility followed by a recommendation of energy efficiency measures to be installed in their facility along with the projected energy savings, costs of all materials and installation, and up-front incentive amount from Duke Energy Kentucky. Upon receiving

¹⁹ Small Business Energy Saver and SmartPath are individual sets of measures that are part of a single and larger program referred to as Business Energy Saver beginning July 1, 2023.

the results of the energy assessment, if the customer decides to move forward with the proposed energy efficiency project, the customer makes the final determination of which measures will be installed. The energy efficiency measure installation is then scheduled at a convenient time for the customer and the measures are installed by electrical subcontractors of the Duke Energy Kentucky-authorized vendor.

93. The BES option is designed as a pay-for-performance offering, meaning that the Duke Energy Kentucky-authorized vendor administering the BES option is compensated for kWh energy savings produced through the installation of energy efficiency measures.

94. The BES option is available to existing Duke Energy Kentucky non-residential customer accounts with an actual average annual electric demand of 180 kW or less.

95. The SmartPath option is available to all eligible non-residential customer accounts. SmartPath is built upon the traditional Small Business Energy Saver option by minimizing financial barriers to customer participation by allowing customers to finance and implement energy efficiency upgrades at little to no upfront costs. The program is implemented by a qualified Trade Ally network who complete energy assessments, develops proposals, and implements the turnkey projects on the SmartPath option's behalf. SmartPath offers customers financing through a partnership with the National Energy Improvement Fund (NEIF). All financing is between the customer and NEIF and is offered by the Trade Allies.

96. For the July 2023 to June 2024 period, 35 BES projects were completed in Duke Energy Kentucky, which was below the projected volume, and those 35 projects

resulted in savings of over 2,681,402 kWh or 70% of the filed plan.

97. While LED lighting measures, not impacted by the federal standard changes, are expected to remain the primary driver of kWh savings in BES for the foreseeable future, the Company has been actively working with the vendor and Trade Allies to implement initiatives focused on increasing refrigeration, process, and HVAC measure adoption.

98. Duke Energy Kentucky will continue to evaluate the opportunity to add incentivized measures suitable for the business market to the approved program which fit the direct install program model. The Company would ultimately like to ensure that all business customers are given the opportunity to maximize their energy savings by being offered a comprehensive energy efficiency project through the BES Program wherever possible.

Program 11. Smart Saver[®] Performance

99. Duke Energy Kentucky received approval for Smart Saver[®] Non-Residential Performance Incentive Program in Case No 2016-00289. The purpose of this program is to encourage the installation of high efficiency equipment in new and existing non-residential establishments. The program will provide incentive payments to offset a portion of the higher cost of energy efficient installations that are not offered under either the Smart Saver[®] Non-Residential programs. The types of measures covered by the program include retro-commissioning and projects with some combination of unknown building conditions or system constraints, coupled with uncertain operating, occupancy, or production schedules. The specific type of measures is included in the contract with the Customer.

100. The Company will continue to market the program in the 2024-2025 period due to low participation in the other Non-Residential programs.

Program 12. Peak Time Rebate (PTR) Pilot Program

101. The PTR pilot program offers participating customers the opportunity to lower their electric bill by reducing their electric usage during Company-designated peak load periods known as Critical Peak Events (CPE). The Company has branded the program to customers under the name Peak Time Credits and describes CPEs to participants as Peak Day events.

102. The PTR pilot program launched on July 27, 2020, with the original 2-year pilot group, here referenced as Group 1. These initial participants have completed the initial 2-year pilot period and an additional 3rd year and are now participating in year 4. The Company had requested to discontinue Group 1 in Case No. 2022-00251. In accordance with this request, no budget dollars were requested for the PTR pilot program for July 2023 through June 2024. For purposes of counting the number of events each year for Group 1, the Company designates July 27, 2020, through July 31, 2021, as the first year of the pilot. The second year of the pilot is August 1, 2021, through July 31, 2022. The third year of the pilot is August 1, 2022, through July 31, 2023. The fourth year of the pilot is August 1, 2023, through July 31, 2024. The Company enrolled a total of 899 participants in Group 1. As of June 30, 2024, 598 participants remain active in Group 1. Almost all attrition resulted from customers moving out of the enrolled premises.

103. Table 1 below displays the dates CPEs were implemented during year 4 of the pilot for Group 1. An update for this group is provided below. The EM&V report for Group 1 was submitted to the Commission in Case No. 2022-00251.

Table 1: CPE Dates Since August 1, 2023, for Group 1

CPE Date
8/23/2023
8/24/2023
8/25/2023
1/17/2024
6/17/2024
6/20/2024
6/21/2024

Starting in May 2022, the Company launched a PTR pilot extension approved by the Commission to test the incentive amount offered to participants to reduce load during CPEs. This research extension evaluated the difference in load impacts between a credit of \$0.60 / kWh reduced, Group 2, and a credit of \$1.20 / kWh reduced, Group 3. The EM&V report on the pilot extension was filed August 15, 2023, in Case No. 2023-00269. Using identical methods for acquiring customers, 667 customers enrolled in the \$1.20 / kWh reduced offer, Group 3. In comparison, 679 customers enrolled in the \$0.60 / kWh reduced offer, Group 2. The incentive amount did not appear to drastically impact the number of customers interested in enrolling in the pilot and participating throughout the summer.

104. In addition, the EM&V report filed in August 2023 included results from a post-CPE participant survey. The focus of the survey was to collect participant survey responses for comparison between the two incentive research groups. EM&V results were filed with the Commission in the Company’s August 2023 DSM modifications filing and indicated that although the participants at the higher incentive rate were more satisfied, there was no statistically significant difference in the level of load reduction between the two levels of incentive.

105. As the Commission required continuation of the pilot program, a corresponding budget of \$216,000 was granted to begin on July 1, 2023, and extended until June 30, 2024. On February 21, 2024, the Commission issued an Order finding that certain modifications should be made to the PTR Pilot program (February Order).²⁰ The February Order listed eleven modifications and authorized the Company to adjust the initial budget for any specific programmatic or research elements.²¹ The Commission added clarification to the February Order on rehearing. In its next Application, in Case No. 2024-00264, to amend its DSM programs, the Company addressed the eleven items pertaining to the PTR pilot program in the Commission's orders in Case No. 2022-00251. Due to the expected increased costs to expand and modify the program (e.g., technology development costs, marketing costs, incentive costs) the Company estimates a program cost budget of \$454,045 for the 2024-25 fiscal year, which is an increase from the budget of \$215,998 in the previous year's filing.²²

Evaluation, Measurement, and Verification

106. The EM&V schedule for each program for program years 2024 – 2026 is available in Appendix F.

Calculation of the 2023 DSM Cost Recovery Mechanism, Rider DSMR

107. The reconciliation of the cost recovery mechanism (Rider DSMR) involves a comparison of projected versus actual program expenses, lost revenues, and shared savings, as well as inclusion of the prior year's reconciliation. The actual cost of residential

²⁰ *In the Matter of the Electronic Application of Duke Energy Kentucky, Inc. to Amend its Demand Side Management Programs*, Case No. 2022-00251, Order (Feb. 21, 2024).

²¹ February Order, pp. 4-6, 7.

²² *In the Matter of the Annual Cost Recovery Filing for Demand Side Management by Duke Energy Kentucky, Inc.*, Case No. 2023-00354, Application, Appendix C, p. 2 (Nov. 15, 2023).

and non-residential program expenditures, lost revenues, and shared savings for this reporting period was \$6.41 million. The projected level of program expenditures was \$8.69 million.²³

108. Lost revenues are computed using the applicable marginal block rate net of fuel costs and other variable costs times the estimated kWh savings for a three-year period from installation of the DSM measure. The estimate of kWh savings is based upon the results from any recently completed impact evaluation studies and actual customer participation. Lost revenues accumulate over a three-year period from the installation of each measure unless a general rate case has occurred.

109. With respect to shared savings, Duke Energy Kentucky utilized the shared incentive of 10 percent of the total net benefits as calculated under the Utility Cost Test. The net benefits are calculated by taking the total of the net present value of avoided energy, capacity, T&D and gas production costs and subtracting all non-EM&V program costs. The shared savings is then calculated by multiplying this difference by 10 percent thereby allowing customers to maintain 90 percent of the net benefits realized through the Company's portfolio of programs.

2023 DSM Riders

110. Duke Energy Kentucky submits the proposed adjustments to its Rider DSMR for both electric and gas programs (Appendices D and E, respectively). The two Rider DSMRs are intended to recover projected July 1, 2025 – June 30, 2026²⁴ (fiscal year 2025) program costs, lost revenues, and shared savings and to reconcile the actual DSM

²³ See Appendix C, tab "Page 1", B42-D42 and E42-G42.

²⁴ The projected July 1, 2025 – June 30, 2026, program expenditures used in this filing will be trued-up as part of the 2025 annual status report and will be described as 2025 throughout the document.

revenue requirement, as previously defined, to the revenue recovered under the riders for the period July 1, 2023, through June 30, 2024. The spreadsheet model contained in Appendix C has been used by the Company for several years in its Rider DSMR update filings.

111. Appendix C, page 1 of 7, tabulates the reconciliation of the DSM revenue requirement associated with the prior reconciliation, Duke Energy Kentucky's program costs, lost revenues, and shared savings between July 1, 2023, and June 30, 2024, and the revenues collected through the DSMR Riders over the same period. The true-up adjustment is based upon the difference between the actual DSM revenue requirement and the revenues collected during the period July 1, 2023, through June 30, 2024.

112. The DSM revenue requirement for the period July 1, 2023, through June 30, 2024, consists of: (1) program expenditures, lost revenues, and shared savings; and (2) amounts approved for recovery in the previous reconciliation filing.

113. Appendix C, page 2 of 7, contains the forecasted DSM revenue requirement for the period July 1, 2025, through June 30, 2026, consists of: (1) program expenditures, lost revenues, and shared saving. Shared savings are increasing primarily due to the Company's periodic update of avoided Transmission and Distribution (T&D) costs, which reflects higher T&D investments with the modernization of the grid, included in the calculation of the net benefits under the UCT. Avoided Energy and Capacity costs were also updated, to align with the 2024 Integrated Resource Planning (IRP).

114. Appendix C, page 6 of 7, contains the calculation of the 2023 – 2024 residential cost allocation factors for gas and electric, as approved in Case No. 2014-00388. These factors are the Electric Percent of Total Percent of Sales, and the Gas Percent of Total

Percent of Sales, and are calculated by program. The calculation includes the residential kWh and ccf sales for July 2023 – June 2024, along with the kWh and ccf savings achieved for July 2023 – June 2024. The factors are used in Appendix C, page 1 of 7, to calculate columns 5 and 6.

115. Appendix C, page 7 of 7, contains the calculation of the 2025–2026 residential cost allocation factors for gas and electric, as approved in Case No. 2014-00388. These factors are the Electric Percent of Total Percent of Sales, and the Gas Percent of Total Percent of Sales, and are calculated by program. The calculation includes the projected Rate RS kWh and ccf sales found in Appendix C, page 4 of 7, along with the projected kWh and ccf savings for July 2025 – June 2026. The factors are used in Appendix C, page 2 of 7, Residential Program Summary, columns G and H (Allocations of Costs).

116. Appendix C, page 5 of 7 contains the calculation of the 2024 Residential DSMR Riders. The calculation includes the reconciliation adjustments calculated in Appendix C, page 1 of 7 and the Residential DSM revenue requirement for 2024. The Projected Residential DSM revenue requirement for 2023 includes the costs associated with the Residential DSM programs: Home Energy Report, Income Qualified Neighborhood, Income Qualified Services, Residential Energy Assessments, Residential Smart Saver[®], Power Manager[®], and any applicable net lost revenues and shared savings (Appendix C, pages 2 and 3 of 7). Total revenue requirements are incorporated along with the projected electric and gas volumes (Appendix C, page 4 of 7) in the calculation of the Residential DSM Rider.

117. Appendix C, page 5 of 7 also contains the calculation of the 2024 Commercial and Industrial DSM Rider. The calculation includes the reconciliation adjustments calculated

in Appendix C, page 1 of 7 and the DSM revenue requirement for 2023. The Commercial & Industrial DSM revenue requirement for 2025 includes the costs associated with the Commercial and Industrial DSM programs: Smart Saver[®] Non-Residential, Business Energy Saver, Smart Saver[®] Non-Residential Performance Incentive Program, and PowerShare[®] the associated net lost revenues and shared savings (Appendix C, pages 2 and 3 of 7). The 2024 Commercial and Industrial DSMR Rider is calculated in two parts. One part (Part A) is based upon the revenue requirements for Smart Saver[®] Non-Residential, Business Energy Saver, Power Manager[®] for Business and PowerShare[®]. This part is only recovered from all non-residential rate classes except rate TT. The other part (Part B) is based upon the revenue requirements for the PowerShare[®] program and is recovered from all non-residential rate classes including rate TT.

118. Total revenue requirements are incorporated along with the projected electric volumes (Appendix C, page 4 of 7) in the calculation of the Commercial and Industrial DSM Rider.

119. The Company's proposed DSMR Riders, shown as Appendices D and E, replace the current DSMR Riders. The electric DSMR rider, proposed to be effective with the first billing cycle in the month following Commission approval, is applicable to service provided under Duke Energy Kentucky's electric service tariffs as follows:

- Residential Electric Service provided under:
 - Rate RS, Residential Service, Sheet No. 30.
- Non-Residential Electric Service provided under:
 - Rate DS, Service at Secondary Distribution Voltage, Sheet No. 40;

- Rate DT, Time-of-Day Rate for Service at Distribution Voltage, Sheet No. 41;
- Rate EH, Optional Rate for Electric Space Heating, Sheet No. 42;
- Rate SP, Seasonal Sports, Sheet No. 43;
- Rate GS-FL, Optional Unmetered General Service Rate for Small Fixed Loads, Sheet No. 44;
- Rate DP, Service at Primary Distribution Voltage, Sheet No. 45;
- Rate RTP, Real Time Pricing Program, Sheet No. 99; and,
- Rate TT, Service at Transmission Voltage, Sheet No. 51.

The gas DSM rider is applicable to service provided under the following residential gas service tariff:

- Rate RS, Residential Service, Sheet No. 30.

Calculation of the Residential Charge

120. The proposed residential charge per kWh for 2024 was calculated by dividing the sum of: (1) the reconciliation amount calculated in Appendix C, page 1 of 7; and (2) the DSM revenue requirement associated with the DSM programs projected for 2025, by the projected sales for calendar year 2025. DSM program costs for 2025 include the total implementation costs plus program rebates, lost revenues, and shared savings. The calculations in support of the residential recovery mechanism are provided in Appendix C, page 5 of 7. Based on the updated rider amounts, the estimated annual cost for the average

residential customer is a charge of approximately \$26.75 for electric, and \$0.80 for gas.²⁵

Calculation of the Non-Residential Charge

121. The proposed non-residential charge per kWh for 2024 was calculated in two parts. The first part (Part A), applicable to all non-residential rate classes except Rate TT, is calculated by dividing the sum of: (1) the reconciliation amount calculated in Appendix C, page 1 of 7; and (2) the DSM revenue requirement associated with the Smart Saver[®] Non-Residential, and Business Energy Saver, programs projected for 2025, by the respective projected sales for calendar year 2025. The second part (Part B), applicable to all non-residential rate classes including Rate TT, is calculated by dividing the DSM revenue requirement associated with the PowerShare[®] program projected for 2025, by total non-residential projected sales for calendar year 2025. DSM program cost for 2025 includes the total implementation costs plus program rebates, lost revenues, and shared savings.

122. The rider applicable to all non-residential rate classes except Rate TT is the sum of Part A and Part B. The rider applicable to all non-residential rate classes including Rate TT is only Part B.

Allocation of the DSM Revenue Requirement

123. As required by KRS 278.285(3), the DSM Cost Recovery Mechanism attributes the costs to be recovered to the respective class that benefits from the programs. The costs for the Power Manager program are fully allocated to the residential electric class, since this is the class benefiting from the implementation of the program. As required, qualifying industrial customers are permitted to “opt-out” of participation in, and payment

²⁵ The cost for average customer was calculated by using the 2024 forecasted sales of Appendix C page 4 divided by the number of residential electric or gas customers multiplied by the cost per kWh or cost per CCF respectively of Appendix C page 5. The costs are estimates and will vary by customer based on usage.

for, Smart Saver[®] Non-Residential and Business Energy Saver. All of Duke Energy Kentucky's Rate TT customers met the "opt-out" requirements prior to the implementation of the DSM riders in May 1996 and are not subject to this portion of the DSM Cost Recovery Mechanism (*i.e.*, Rider DSMR). However, all non-residential customers, including Rate TT customers, will be charged for the PowerShare[®] program.

WHEREFORE, Duke Energy Kentucky respectfully requests that the Commission review and approve this Application and Duke Energy Kentucky gives notice that the new rates will take effect 30 days from the date of this Application.

Respectfully submitted,

/s/Larisa M. Vaysman

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Counsel for Duke Energy Kentucky, Inc.

CERTIFICATE OF SERVICE

This is to certify that the foregoing electronic filing is a true and accurate copy of the document in paper medium; that the electronic filing was transmitted to the Commission on November 1, 2024; that there are currently no parties that the Commission has excused from participation by electronic means in this proceeding; and that submitting the original filing to the Commission in paper medium is no longer required as it has been granted a permanent deviation.²⁶

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/s/Larisa M. Vaysman
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²⁶*In the Matter of Electronic Emergency Docket Related to the Novel Coronavirus COVID-19*, Order, Case No. 2020-00085 (Ky. P.S.C. July 22, 2021).

Commonwealth of Kentucky
Michael G. Adams, Secretary of State

Michael G. Adams
Secretary of State
P. O. Box 718
Frankfort, KY 40602-0718
(502) 564-3490
<http://www.sos.ky.gov>

Certificate of Existence

Authentication number: 322143

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 1st day of November, 2024, in the 233rd year of the Commonwealth.



Michael G. Adams

Michael G. Adams
Secretary of State
Commonwealth of Kentucky
322143/0052929

Appendix B 2023-2024
Cost Effectiveness Test Results

Program Name	UCT	TRC	RIM	PCT
Residential Programs				
Income Qualified Neighborhood	0.55	0.55	0.34	2.78
Income Qualified Services	0.36	0.36	0.27	1.75
Home Energy Report	2.96	2.96	0.87	NA
Residential Energy Assessments	1.43	1.38	0.53	40.32
Residential Smart Saver®	1.44	1.25	0.59	3.87
Power Manager	2.57	3.36	2.57	NA
Peak Time Rebate Pilot Program	0.27	0.28	0.27	NA
Total	1.49	1.56	0.88	4.54
Non-Residential Programs				
Business Energy Saver	1.86	1.29	0.67	3.07
Smart Saver® Non-Residential	7.04	1.50	0.81	2.78
PowerShare®	1.89	3.88	1.89	NA
Total	3.66	1.62	0.86	2.93
Overall Portfolio Total	2.52	1.60	0.86	3.17

Kentucky DSM Rider
Comparison of Revenue Requirement to Rider Recovery
2023-2024 Status Update

Residential Programs	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Projected Program Costs 7/2023 to 6/2024 (A)	Projected Lost Revenues 7/2023 to 6/2024 (A)	Projected Shared Savings 7/2023 to 6/2024 (A)	Program Expenditures 7/2023 to 6/2024 (B)	Program Expenditures (C) Gas	Program Expenditures (C) Electric	Lost Revenues 7/2023 to 6/2024 (B)	Shared Savings 7/2023 to 6/2024 (B)	2023 Reconciliation		Rider Collection (E) Gas	Rider Collection (E) Electric	(Over)/Under Collection Gas (F)	(Over)/Under Collection Electric (G)
Income Qualified Neighborhood	\$ 512,928	\$ -	\$ (27,182)	\$ 484,377	\$ -	\$ 484,377	\$ 9,143	\$ (21,565)						
Income Qualified Services	\$ 940,323	\$ -	\$ (55,087)	\$ 500,362	\$ 238,922	\$ 261,440	\$ 7,930	\$ (20,612)						
Home Energy Report	\$ 275,858	\$ -	\$ 34,165	\$ 93,770	\$ -	\$ 93,770	\$ 32,699	\$ 15,479						
Residential Energy Assessments	\$ 286,985	\$ -	\$ 17,859	\$ 322,548	\$ -	\$ 322,548	\$ 25,702	\$ 13,768						
Residential Smart Saver®	\$ 520,248	\$ -	\$ 39,668	\$ 530,726	\$ -	\$ 530,726	\$ 82,719	\$ 19,069						
Power Manager®	\$ 1,104,092	\$ -	\$ 101,191	\$ 843,133	\$ -	\$ 843,133	\$ -	\$ 125,853						
Peak Time Rebate Pilot Program	\$ 216,000	\$ -	\$ -	\$ 105,254	\$ -	\$ 105,254	\$ -	\$ -						
Revenues collected														
Total	\$ 3,856,433	\$ -	\$ 110,615	\$ 2,880,170	\$ 238,922	\$ 2,641,248	\$ 158,192	\$ 131,992	\$ (898,895)	\$ (3,439,347)	\$ (417,814)	\$ 3,688,487	\$ (242,159)	\$ (4,196,402)

(A) Amounts identified in report filed in Case No. 2023-00269

(B) Actual program expenditures, lost revenues (for this period and from prior period DSM measure installations), and shared savings for the period July 1, 2023 through June 30, 2024

(C) Allocation of program expenditures to gas and electric in accordance with the Commission's Order in Case No. 2014-00354

(D) Recovery allowed in accordance with the Commission's Order in Case No. 2023-00354

(E) Revenues collected through the DSM Rider between July 1, 2023 and June 30, 2024

(F) Column (5) + Column (9) - Column(11)

(G) Column (6) + Column (7) + Column (8) + Column (10) - Column(12)

Commercial Programs	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Projected Program Costs 7/2023 to 6/2024 (A)	Projected Lost Revenues 7/2023 to 6/2024 (A)	Projected Shared Savings 7/2023 to 6/2024 (A)	Program Expenditures 7/2023 to 6/2024 (B)	Lost Revenues 7/2023 to 6/2024 (B)	Shared Savings 7/2023 to 6/2024 (B)	2023 Reconciliation (C)	Rider Collection (D)	(Over)/Under Collection (E)
Business Energy Saver	\$ 879,517	\$ -	\$ 126,001	\$ 784,158	\$ 122,891	\$ 67,268			
Smart Saver® Non-Residential	\$ 2,090,665	\$ -	\$ 473,988	\$ 888,499	\$ 106,720	\$ 480,267			
Total	\$ 2,970,183	\$ -	\$ 599,988	\$ 1,672,658	\$ 229,611	\$ 547,535	\$ 2,752,187	\$ 5,295,887	\$ (93,896)
PowerShare®	\$ 1,063,284	\$ -	\$ 93,220	\$ 726,232	\$ -	\$ 64,776	\$ 460,639	\$ 1,135,775	\$ 115,873
Total All Programs	\$ 7,889,900	\$ -	\$ 803,823	\$ 5,279,059	\$ 387,803	\$ 744,303			

(A) Amounts identified in report filed in Case No. 2023-00269

(B) Actual program expenditures, lost revenues (for this period and from prior period DSM measure installations), and shared savings for the period July 1, 2023 through June 30, 2024

(C) Recovery allowed in accordance with the Commission's Order in Case No. 2023-00354

(D) Revenues collected through the DSM Rider between July 1, 2023 and June 30, 2024

(E) Column (4) + Column (5) + Column (6) + Column (7) - Column(8)

Residential Program Summary (A)

	Residential Program Summary (A)				Allocation of Costs (B)			Budget (Costs, Lost Revenues, & Shared Savings)		
	<u>Costs</u>	<u>Lost Revenues</u>	<u>Shared Savings</u>	<u>Total</u>	<u>Electric</u>	<u>Gas</u>	<u>Electric Costs</u>	<u>Electric</u>	<u>Gas Costs</u>	
Income Qualified Neighborhood	\$ 543,458	\$ 77,938	\$ 30,662	\$ 652,058	100.0%	0.0%	\$ 543,458	\$ 652,058	\$ -	
Income Qualified Services	\$ 790,933	\$ 20,793	\$ (8,216)	\$ 803,510	57.9%	42.1%	\$ 458,011	\$ 470,589	\$ 332,922	
Home Energy Report	\$ 427,951	\$ 890,811	\$ 395,075	\$ 1,713,837	100.0%	0.0%	\$ 427,951	\$ 1,713,837	\$ -	
Residential Energy Assessments	\$ 565,123	\$ 123,313	\$ 123,819	\$ 812,254	100.0%	0.0%	\$ 565,123	\$ 812,254	\$ -	
Residential Smart \$aver®	\$ 740,748	\$ 190,147	\$ 203,498	\$ 1,134,393	100.0%	0.0%	\$ 740,748	\$ 1,134,393	\$ -	
Power Manager®	\$ 1,915,273	\$ -	\$ 965,978	\$ 2,881,250	100.0%		\$ 1,915,273	\$ 2,881,250	\$ -	
Peak Time Rebate Pilot Program	\$ 454,045	\$ -	\$ -	\$ 454,045	100.0%		\$ 454,045	\$ 454,045	\$ -	
Total Costs, Net Lost Revenues, Shared Savings	\$ 5,437,530	\$ 1,303,003	\$ 1,710,815	\$ 8,451,348			\$ 5,104,609	\$ 8,118,426	\$ 332,922	

NonResidential Program Summary (A)

	NonResidential Program Summary (A)				Allocation of Costs (B)			Budget (Costs, Lost Revenues, & Shared Savings)		
	<u>Costs</u>	<u>Lost Revenues</u>	<u>Shared Savings</u>	<u>Total</u>	<u>Electric</u>	<u>Gas</u>	<u>Electric Costs</u>	<u>Electric</u>	<u>Gas</u>	
Business Energy Saver (C)	\$ 1,147,569	\$ 336,859	\$ 965,555	\$ 2,449,982	100.0%	0.0%	\$ 1,147,569	\$ 2,449,982	NA	
Smart \$aver® Non-Residential	\$ 2,202,969	\$ 576,842	\$ 980,198	\$ 3,760,008	100.0%	0.0%	\$ 2,202,969	\$ 3,760,008	NA	
PowerShare®	\$ 775,232	\$ -	\$ 743,459	\$ 1,518,691	100.0%	0.0%	\$ 775,232	\$ 1,518,691	NA	
Total Costs, Net Lost Revenues, Shared Savings	\$ 4,125,770	\$ 913,701	\$ 2,689,211	\$ 7,728,681			\$ 4,125,770	\$ 7,728,681	NA	
Total Program	\$ 9,563,300	\$ 2,216,703	\$ 4,400,026	\$ 16,180,030						

(A) Costs, Lost Revenues (for this period and from prior period DSM measure installations), and Shared Savings for Year 11 of portfolio.

(B) Allocation of program expenditures to gas and electric in accordance with the Commission's Order in Case No. 2014-00388.

(C) Small Business Energy Saver and SmartPath are individual sets of measures that are part of a single and larger program referred to as Business Energy Saver beginning July 1, 2023.

Duke Energy Kentucky
Demand Side Management Cost Recovery Rider (DSMR)
Summary of Calculations for Programs

July 2025 to June 2026

	Program Costs (A)
<u>Electric Rider DSM</u>	
Residential Rate RS	\$ 8,118,426
Distribution Level Rates Part A DS, DP, DT, GS-FL, EH & SP	\$ 6,209,990
Transmission Level Rates & Distribution Level Rates Part B	\$ 1,518,691
<u>Gas Rider DSM</u>	
Residential Rate RS	\$ 332,922

(A) See Appendix B, page 2 of 7

Duke Energy Kentucky
Demand Side Management Cost Recovery Rider (DSMR)
Summary of Billing Determinants

Year July 2025 - June 2026

Projected Annual Electric Sales kWh

Rate RS 1,528,978,659

Rates DS, DP, DT,
GS-FL, EH, & SP 2,234,118,997

Rates DS, DP, DT,
GS-FL, EH, SP, & TT 2,435,477,997

Projected Annual Gas Sales CCF

Rate RS 62,283,513

Duke Energy Kentucky
Demand Side Management Cost Recovery Rider (DSMR)
Summary of Calculations

July 2023 to June 2024

Rate Schedule Riders	True-Up Amount (A)	Expected Program Costs (B)	Total DSM Revenue Requirements	Estimated Billing Determinants (C)	DSM Cost Recovery Rider (DSMR)
<u>Electric Rider DSM</u> Residential Rate RS	\$ (4,420,838)	\$ 8,118,426	\$ 3,697,588	1,528,978,659 kWh	\$ 0.002418 \$/kWh
Distribution Level Rates Part A DS, DP, DT, GS-FL, EH & SP	\$ (98,918)	\$ 6,209,990	\$ 6,111,072	2,234,118,997 kWh	\$ 0.002735 \$/kWh
Transmission Level Rates & Distribution Level Rates Part B TT	\$ 122,070	\$ 1,518,691	\$ 1,640,761	2,435,477,997 kWh	\$ 0.000674 \$/kWh
Distribution Level Rates Total DS, DP, DT, GS-FL, EH & SP					\$ 0.003409 \$/kWh
<u>Gas Rider DSM</u> Residential Rate RS	\$ (255,111)	\$ 332,922	\$ 77,811	62,283,513 CCF	\$ 0.001249 \$/CCF
Total Rider Recovery			\$ 11,527,232		

(A) (Over)/Under of Appendix B page 1 multiplied by the average three-month commercial paper rate for 2024 to include interest on over or under-recovery in accordance with the Commission's order in Case No. 95-312. Value is:
 (B) Appendix B, page 2.
 (C) Appendix B, page 4.

Allocation Factors based on July 2023-
June 2024

Summary of Load Impacts July 2023 Through June 2024 (1)

Residential Programs	kWh	<u>% of Total Res</u>	ccf	<u>% of Total Res</u>	<u>Elec % of Total % of</u>	<u>Gas % of Total % of</u>
		<u>Sales</u>		<u>Sales</u>	<u>Sales</u>	<u>Sales</u>
Income Qualified Neighborhood	557,394	0.0385%	-	0.0000%	100%	0%
Income Qualified Services	139,965	0.0097%	4,669	0.0088%	52.25%	47.75%
Home Energy Report	13,487,188	0.9313%	-	0.0000%	100%	0%
Residential Energy Assessments	757,381	0.0523%	-	0.0000%	100%	0%
Residential Smart \$aver®	1,000,832	0.0691%	-	0.0000%	100%	0%
Power Manager®	-	0.0000%	-	0.0000%	100%	0%
Peak Time Rebate Pilot Program	-	0.0000%	-	0.0000%	100%	0%
Total Residential	15,942,760	1.1009%	4,669	0.0088%		
Total Residential (Rate RS) Sales For July 2023 Through June 2024	1,448,219,877	100%	52,858,356	100%		

(1) Load Impacts Net of Free Riders at Meter

Summary of Load Impacts July 2025 Through June 2026 (1)

Allocation Factors Projected

Residential Programs	kWh	% of Total Res	ccf	% of Total Res	Elec % of Total % of	Gas % of Total % of
		Sales		Sales	Sales	Sales
Income Qualified Neighborhood	652,056	0.0426%	-	0.0000%	100%	0%
Income Qualified Services	194,705	0.0127%	5,765	0.0093%	57.9%	42.1%
Home Energy Report	13,448,569	0.8796%	-	0.0000%	100%	0%
Residential Energy Assessments	1,028,107	0.0672%	-	0.0000%	100%	0%
Residential Smart \$aver®	1,506,409	0.0985%	-	0.0000%	100%	0%
Power Manager®	-	0.0000%	-	0.0000%	0%	0%
Total Residential	16,829,847	1.1007%	5,765	0.0093%		
Total Residential (Rate RS) Sales Projected	1,528,978,659	100%	62,283,513	100%		

(1)Load Impacts Net of Free Riders at Meter

78
Duke Energy Kentucky
1262 Cox Road
No. 78
Erlanger, KY 41018

KY.P.S.C. Electric No. 2
Thirty-~~Eighth~~-~~Ninth~~ Revised Sheet No.

Cancels and Supersedes
Thirty-~~Seventh~~-~~Eighth~~ Revised Sheet

Page 1 of 1

RIDER DSMR

DEMAND SIDE MANAGEMENT RATE

The Demand Side Management Rate (DSMR) shall be determined in accordance with the provisions of Rider DSM, Demand Side Management Cost Recovery Rider, Sheet No. 75 of this Tariff.

The DSMR to be applied to residential customer bills is \$0.~~001352~~-~~002418~~ per kilowatt-hour. (R)

A Home Energy Assistance Program (HEA) charge of \$0.30 will be applied monthly to residential customer bills.

The DSMR to be applied to non-residential distribution service customer bills is \$0.~~003503~~-~~003409~~ per kilowatt-hour. (R)

The DSMR to be applied for transmission service customer bills is \$0.~~000514~~-~~000674~~ per kilowatt-hour. (I)

Issued by authority of an Order by the Kentucky Public Service
Commission dated ~~January 11, 2024~~ in Case No. ~~20232024-0035400352xxx~~.

Issued: ~~January 18~~November 1, 2024

Effective: ~~January 15~~December 1, 2024

Issued by Amy B. Spiller, President /s/ Amy B. Spiller

Duke Energy Kentucky
1262 Cox Road
Erlanger, KY 41018

KY.P.S.C. Electric No. 2
Thirty-Ninth Revised Sheet No. 78
Cancels and Supersedes
Thirty-Eighth Revised Sheet No. 78
Page 1 of 1

RIDER DSMR

DEMAND SIDE MANAGEMENT RATE

The Demand Side Management Rate (DSMR) shall be determined in accordance with the provisions of Rider DSM, Demand Side Management Cost Recovery Rider, Sheet No. 75 of this Tariff.

The DSMR to be applied to residential customer bills is \$0.002418 per kilowatt-hour. (I)

A Home Energy Assistance Program (HEA) charge of \$0.30 will be applied monthly to residential customer bills.

The DSMR to be applied to non-residential distribution service customer bills is \$0.003409 per kilowatt-hour. (R)

The DSMR to be applied for transmission service customer bills is \$0.000674 per kilowatt-hour. (I)

Issued by authority of an Order by the Kentucky Public Service
Commission dated ____ in Case No. 2024-00352.

Issued: November 1, 2024

Effective: December 1, 2024

Issued by Amy B. Spiller, President /s/ Amy B. Spiller

KY.P.S.C. Gas No. 2

Thirty-~~Seventh~~-~~Eighth~~ Revised Sheet No. 62

Cancels and Supersedes

Thirty-~~Sixth~~-~~Seventh~~ Revised Sheet No. 62

Page 1 of 1

Duke Energy Kentucky
1262 Cox Road
Erlanger, Kentucky 41018

RIDER DSMR**DEMAND SIDE MANAGEMENT RATE**

The Demand Side Management Rate (DSMR) shall be determined in accordance with the provisions of Rider DSM, Demand Side Management Cost Recovery Rider, Sheet No. 61 of this Tariff.

The DSMR to be applied to residential customer bills is \$~~(0.010030)~~0.001249 per hundred cubic feet. (R.I)

A Home Energy Assistance Program (HEA) charge of \$0.30 will be applied monthly to residential customer bills.

The DSMR to be applied to non-residential service customer bills is \$0.00 per hundred cubic feet.

Issued by authority of an Order by the Kentucky Public Service

Commission dated ~~December 21, 2023~~ in Case No. ~~20234-0035400352xxx~~.

Issued: ~~January 8~~November 1, 2024

Effective: ~~January~~December 101, 2024

Issued by Amy B. Spiller, President /s/ Amy B. Spiller

Duke Energy Kentucky
1262 Cox Road
Erlanger, Kentucky 41018

KY.P.S.C. Gas No. 2
Thirty-Eighth Revised Sheet No. 62
Cancels and Supersedes
Thirty-Seventh Revised Sheet No. 62
Page 1 of 1

RIDER DSMR

DEMAND SIDE MANAGEMENT RATE

The Demand Side Management Rate (DSMR) shall be determined in accordance with the provisions of Rider DSM, Demand Side Management Cost Recovery Rider, Sheet No. 61 of this Tariff.

The DSMR to be applied to residential customer bills is \$0.001249 per hundred cubic feet.

(I)

A Home Energy Assistance Program (HEA) charge of \$0.30 will be applied monthly to residential customer bills.

The DSMR to be applied to non-residential service customer bills is \$0.00 per hundred cubic feet.

Issued by authority of an Order by the Kentucky Public Service
Commission dated _____ in Case No. 2024-00352.

Issued: November 1, 2024

Effective: December 1, 2024

Issued by Amy B. Spiller, President /s/ Amy B. Spiller

Status Update for Duke Energy Kentucky Energy Efficiency and Demand Response Programs; 2024-2026

Planned: Evaluation, Measurement and Verification Activities and Evaluation Reports

Residential Customer Programs	Program/Measure	Last Evaluation completion	Next Evaluation ==>	Q1 2024	Q2 2024	Q3 2024	Q4 2024	Q1 2025	Q2 2025	Q3 2025	Q4 2025	Q1 2026	Q2 2026	Q3 2026	Q4 2026
Low Income Neighborhood	Neighborhood	12/20/2022											M&V	M&V	M&V
Low Income Services	Refrigerator Replace	7/31/2013	TBD												
	Weatherization/Payment Plus	7/31/2013													
	Pay For Performance	N/A													
My Home Energy Report	MyHER	2/12/2014		M&V	M&V	Report								M&V	M&V
Residential Energy Assessments	HEHC	8/7/2020							M&V	M&V	M&V	M&V	Report*		
Residential Smart Saver®	HVAC	9/26/2023										M&V	M&V	M&V	M&V
	Specialty Bulbs/Online Savings Store	10/6/2022												M&V	M&V
	Water Measures	7/19/2024		M&V	M&V	Report									
	Multi-Family	1/30/2024		Report											
Power Manager		8/31/2020		M&V	M&V	Report									
Peak Time Rebate Pilot	Peak Time Rebate	5/18/2023													M&V
Non-Residential Customer Programs	Program/Measure	Last Evaluation completion	Next Evaluation ==>	Q1 2024	Q2 2024	Q3 2024	Q4 2024	Q1 2025	Q2 2025	Q3 2025	Q4 2025	Q1 2026	Q2 2026	Q3 2026	Q4 2026
Small Business Energy Saver		11/10/2022												M&V	M&V
Smart Saver® Non-Res, Custom		1/18/2022										M&V	M&V	M&V	Report
Smart Saver® Non-Res, Prescriptive		7/24/2019		M&V	M&V	M&V	Report								
PowerShare		2/14/2017				M&V	M&V	Report							

1 Future Evaluation Report dates are projections only. Actual report dates will vary depending on program participation, time to achieve a significant sample and the time needed to collect adequate data.

* Postponed timing due to pandemic program suspension; program participation levels

LEGEND	
M&V	Data collection (surveys, interviews, onsite visits, billing data) and analysis
Report	Evaluation Report