

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF DUKE ENERGY)	CASE NO.
KENTUCKY, INC. TO AMEND ITS DEMAND SIDE)	2024-00264
MANAGEMENT PROGRAMS)	

ORDER

On August 15, 2024, pursuant to KRS 278.285, and the final Order in Case No. 2012-00495,¹ Duke Energy Kentucky, Inc. (Duke Kentucky), filed a request for approval to modify its Demand-Side Management (DSM) programs and adjust its Demand-Side Management Rider (DSMR) for electric customers only. By Order dated September 6, 2024, the Commission suspended Duke Kentucky’s revised tariffs through February 15, 2025. There are no intervenors in this proceeding. Duke Kentucky responded to one round of discovery from Commission Staff. The matter now stands submitted for a decision.

LEGAL STANDARD

KRS 278.285(1) authorizes the Commission to review and approve the reasonableness of DSM programs proposed by any utility under its jurisdiction. The statute lists multiple factors the Commission can consider when determining the reasonableness of the DSM programs. The listed factors in KRS 278.285(1) are:

- (a) The specific changes in customers’ consumption patterns which a utility is attempting to influence;

¹ Case No. 2012-00495, *Application of Duke Energy Kentucky, Inc. for the Annual Cost Recovery Filing for Demand Side Management* (Ky. PSC Apr. 11, 2013), Order at 15-16.

(b) The cost and benefit analysis and other justification for specific demand-side management programs and measures included in a utility's proposed plan;

(c) A utility's proposal to recover in rates the full costs of demand-side management programs, any net revenues lost due to reduced sales resulting from demand-side management programs, and incentives designed to provide positive financial rewards to a utility to encourage implementation of cost effective demand-side management programs;

(d) Whether a utility's proposed demand-side management programs are consistent with its most recent long-range integrated resource plan;

(e) Whether the plan results in any unreasonable prejudice or disadvantage to any class of customers;

(f) The extent to which customer representatives and the Office of the Attorney General have been involved in developing the plan, including program design, cost recovery mechanisms, and financial incentives, and if involved, the amount of support for the plan by each participant, provided however, that unanimity among the participants developing the plan shall not be required for the commission to approve the plan;

(g) The extent to which the plan provides programs which are available, affordable, and useful to all customers; and

(h) Next-generation residential utility meters that can provide residents with amount of current utility usage, its cost, and can be capable of being read by the utility either remotely or from the exterior of the home.

KRS 278.285(1) also states the factors listed are not exhaustive, and the Commission can consider anything that will help determine if the programs are reasonable.

PROPOSED DSM MODIFICATIONS

Duke Kentucky's current DSM programs were originally approved in Case No. 2012-00085² and amended in subsequent annual DSM filings. Duke Kentucky's current DSM portfolio, as approved in Case No. 2023-00269³, is as follows:

1. Income Qualified Services Program;
2. Residential Energy Assessments Program;
3. Residential Smart Saver Efficient Residences Program;
4. Residential Smart Saver Energy Efficient Products Program;
5. Non-Residential Smart Saver Program;
6. Power Manager Program;
7. PowerShare;
8. Income Qualified Neighborhood Energy Saver Program;
9. Home Energy Report;
10. Non-Residential Business Energy Saver Program;
11. Non-Residential Pay for Performance; and
12. Peak Time Rebate Pilot Program.

Duke Kentucky's proposed modifications to its DSM programs include expanding the scope and budgets of the Residential Smart Saver Program, Non-Residential Smart Saver Program, Peak Time Rebate Pilot Program, Business Energy Saver Program, and PowerShare Program.

² Case No. 2012-00085, *Application of Duke Energy Kentucky, Inc. for an Energy Efficiency Cost Recovery Mechanism and for Approval of Additional Programs for Inclusion in its Existing Portfolio* (Ky. PSC Jun. 29, 2018), Order.

³ Case No. 2023-00269, *Electronic Application of Duke Energy Kentucky, Inc. to Amend its Demand Side Management Programs* (Ky. PSC Nov. 20, 2023).

Duke Kentucky is proposing to expand the offerings and increase the budget for the multifamily portion of the Residential Smart Saver Program. The proposed additions to the multifamily portion are weatherization (doors and windows); caulking (doors and windows); filter change and furnace filter whistle; DHW turndown; and T8 tube light (4 feet).⁴ Duke Kentucky explained that expanding the program offerings would allow it to maximize energy saving impacts associated with the program, enable customers to become more energy efficient, and serve more properties.⁵

Duke Kentucky also proposed expanding the measures to the Non-Residential Smart Saver Program. This program incentivizes commercial and industrial customers to install high-efficiency equipment to ensure cost-effectiveness over the lifetime of the measure. The following technologies are promoted—lighting, HVAC, pumps, variable frequency drives, food services, and process equipment. Duke Kentucky undertakes an annual review of technologies and efficiency levels to determine if additional measures should be pursued.⁶ For 2024-2025, a total of six additional measures were identified for the lighting technology category, twelve measures for the HVAC technology category, one measure for the process technology category, two measures for the foodservice technology category, and five measures for the pumps and motors technology category.⁷

Additionally, Duke Kentucky is proposing modifications to the Peak Time Rebate Pilot Program (PTR) and an increase in the program's budget. In the Commission's

⁴ Application at 6.

⁵ Application at 6.

⁶ Application at 7.

⁷ Application at 7 and Appendix D.

February Order in Case No. 2022-00251, the Commission set the following requirements for the program:⁸

a) The PTR program should remain as a pilot program for a minimum of two years from the date of entry of this Order.

b) The PTR program should remain as an opt-in program without a participation cap.

c) Duke Energy Kentucky should develop a process for assessing a participant's reliance on electricity, considering factors including but not limited to gas or electric heat, gas, or electric water heater, enabling technology like a smart thermostat or smart fridge, electric or gas vehicle, computers and other electronics, and other applicable home appliances.

d) Duke Energy Kentucky should offer participating customers a tiered incentive based on its electric reliance assessment model (e.g., \$0.60 kWh, \$0.90 kWh, and \$1.20 kWh).

e) Duke Energy Kentucky should expand its PTR marketing campaign to include initiatives such as direct mail, television advertisement, mass media outlets, website enrollment, etc.

f) Duke Energy Kentucky should provide customer education on cost-effective ways to save energy at the time of enrollment when a Peak Time Event (PTE) is initiated and include an easily accessible PTR link on its website to highlight these energy saving opportunities.

⁸ Case No. 2022-00251, *Electronic Application of Duke Energy Kentucky, Inc. to Amend its Demand Side Management Programs* (Ky. PSC Feb. 21, 2024), Order.

g) Eligibility criteria should remain the same, in that customers cannot be enrolled in another DR program and have a past due balance on their account.

h) The amount of PTEs that Duke Kentucky utilizes for the PTR program should remain the same.

i) Duke Energy Kentucky should allow its customers to decide how to receive event communications at the time of registering for the program. Communication options should include, but not limited to, text, email or automated calling system.

j) Duke Energy Kentucky should file an Evaluation, Measurement and Verification (EM&V) report with the Commission once the two-year pilot program is completed.

k) After every 1,000 additional customers Duke Energy Kentucky enrolls in the updated PTR Pilot program, Duke Energy Kentucky should be allowed to earn a 5-basis point incentive to its PTR Pilot program DSM return on equity (ROE) for the duration of the PTR Pilot program period. Duke Energy Kentucky should provide the Commission, during its annual filing, with the number of customers currently enrolled in the PTR program and the current PTR program ROE incentive that the Company is calculating with its recovery mechanism.

With regard to items (a), (b), (g), (h), and (j), Duke Kentucky proposes to implement these as stated in the February Order.⁹ However, Duke Kentucky proposes to implement items (c), (d), (e), (f), (i), and (k) with slight modifications.¹⁰

⁹ Application at 10.

¹⁰ Application at 10.

Pertaining to Item (c), Duke Kentucky is proposing that a brief survey be given to customers during the initial enrollment process.¹¹ The survey would include questions such as whether the customer's home has electric or gas heat, gas or electric water heater, or if the customer owns certain technology such as a smart thermostat or smart appliance.¹²

Pertaining to item (d), Duke Kentucky is proposing to increase the incentive tiers based on customer feedback and a benchmarking review conducted by ESource.¹³ The proposed tiers will range from \$1.00 per kWh to \$1.50 per kWh. The base incentive tier would be a credit of \$1.00 per kWh reduced, followed by a \$1.25 per kWh credit for increased energy reduction, and a max of \$1.50 per kWh credit for additional increase energy reduction.¹⁴ Duke Kentucky explained that the tiers will continue to be modified as Duke Kentucky gathers information for its electric reliance assessment model.¹⁵

Pertaining to item (e), Duke Kentucky is proposing to expand its marketing efforts to include email, direct mail, web enrollment, call center promotion, etc.¹⁶ Duke Kentucky is not, however, proposing to use television advertisement and mass media, as those methods are less targeted to eligible customers.¹⁷

¹¹ Application at 10.

¹² Application at 10.

¹³ Application at 11.

¹⁴ Application at 11.

¹⁵ Application at 11.

¹⁶ Application at 12.

¹⁷ Application at 12.

Pertaining to item (f), Duke Kentucky is proposing to develop a landing page for the PTR Pilot Program. This page will provide information on energy saving opportunities during peak events.¹⁸

Pertaining to item (i), Duke Kentucky is proposing that at the time of registering for the program, customers will have the opportunity to select their preferred communication method. The proposed methods will include text message, automated calling, and email.¹⁹

Pertaining to item (k), Duke Kentucky is proposing that judgment be deferred to the Commission in regard to possible financial incentive for Duke Kentucky to recover costs incurred by this program. Duke Kentucky stated that item (k) is not yet applicable due to Duke Kentucky not currently having any capital cost recovery components in its DSM portfolio or any rate base associated with any of the programs.²⁰

Duke Kentucky is requesting additional budget for the Business Energy Saver Program. Duke Kentucky explained that additional budget is necessary due to anticipated increase in participation in the SmartPath component of the program.²¹ SmartPath's purpose is to build upon the Business Energy Saver Program by minimizing financial barriers through the allowance of financing and implementing energy efficient upgrades at little to no upfront costs.²²

¹⁸ Application at 12.

¹⁹ Application at 12.

²⁰ Application at 12–13.

²¹ Application at 14.

²² Application at 14.

Lastly, Duke Kentucky is requesting additional budget for the PowerShare Program. Duke Kentucky stated that the additional budget is necessary to conduct an EM&V evaluation to assess two events associated with Winter Storm Elliott.²³

COST-EFFECTIVENESS

Duke Kentucky provided, in Appendix A of its application, the forecasted cost-effectiveness results performed on its individual residential and non-residential DSM programs for which it is proposing modifications. The following table shows the result of the cost-effectiveness test as provided by Duke Kentucky:²⁴

Program Name	UCT	TRC	RIM	PCT
Residential Smart Saver	1.38	1.20	0.54	5.13
Peak Time Rebate Pilot Program	0.15	0.15	0.15	n/a
Business Energy Saver	2.61	1.72	0.75	3.51
PowerShare	2.07	5.21	2.07	n/a

As illustrated above, the total resource cost (TRC) results for the PTR Pilot Program indicated the program to not be cost effective while the other programs are shown to be cost effective.

²³ Application at 14–15.

²⁴ Application, Appendix A.

COST AND COST ALLOCATION

Duke Kentucky is proposing to make increase adjustments to its Demand-Side Management Cost Recovery Rider (DSMR). Duke Kentucky is proposing to increase the budget for the following programs:²⁵

Program Name	Total
Residential Smart Saver	\$759,370
Peak Time Rebate Pilot Program	\$428,999
Business Energy Saver	\$1,374,712
PowerShare	\$879,172

Duke Kentucky's DSM revenue requirement, including projected August 15, 2024, program costs, lost revenues, and shared savings is approximately \$11.394 million. This level of expenditure, along with under-recoveries and over-recoveries from the prior period, results in a total DSM revenue requirement of approximately \$10.221 million, of which \$10.834 million is allocated to electric operations and (\$0.613) million is allocated to gas operations. The Commission previously approved a total DSM revenue requirement of approximately \$9.566 million, of which \$10.179 million is allocated to electric operations and (\$0.613) million to gas operations in Case No. 2023-00354.²⁶ The \$10.834 million net amount allocated to electric operations consists of a (\$0.236) million over-recovery from the prior period and \$11.07 million of expected DSM program costs.

²⁵ Application, Appendix B at 2.

²⁶ Case No. 2023-00354, *Electronic Annual Cost Recovery Filing for Demand Side Management by Duke Kentucky, Inc.* (Ky. PSC Dec. 21, 2023), Order.

DISCUSSION AND FINDINGS

Based upon the case record and being otherwise sufficiently advised, the Commission has reviewed the proposed modifications to Duke Kentucky's programs and finds that the modifications are reasonable and that the factors listed in KRS 278.285(1) are supported. Additionally, the DSM rates for electric service as set forth in the Appendix to this Order are reasonable and should be approved. However, the Commission cautions Duke Kentucky against expanding its DSM programs excessively where it is consistently over-recovering revenues and, therefore, having to true-up substantial over-recoveries.²⁷ The Commission expects Duke Kentucky to practice more prudence when budgeting its expected program costs so that it limits any potential for excessive true-up amounts.

Additionally, the Commission notes that due to Duke Kentucky not currently having any capital cost-recovery components in its DSM portfolio, any judgment regarding item (k) of the PTR Pilot Program should be addressed in Duke Kentucky's general base rate case filing in Case No. 2024-00354, where the Commission can further evaluate Duke Kentucky's overall cost-recovery mechanism.

Furthermore, the Commission has traditionally evaluated DSM effectiveness by primarily focusing on the TRC results. However, the Commission notes that, considering Duke Kentucky's PTR Pilot Program was recently modified by the Commission in Case

²⁷ Duke Kentucky had a \$(4,901,069) over-recovery in Case No. 2023-00354 and has \$(3,585,519) over recovery in this case.

No. 2022-00251²⁸ and is being further modified in this case, it will continue monitoring the cost-effectiveness of the program in Duke Kentucky's annual filing.

IT IS THEREFORE ORDERED that:

1. The DSM rates set forth in the Appendix to this Order are approved as fair, just and reasonable rates for Duke Kentucky, and these rates are approved for service rendered on and after the date of service of this Order.

2. Judgment regarding item (k) in Duke Kentucky's Peak Time Rebate Pilot Program has been deferred to Case No. 2024-00354.

3. Duke Kentucky shall comply with the requirements of the findings set forth herein.

4. Within 20 days of the date of service of this Order, Duke Kentucky shall file with this Commission, using the Commission's electronic Tariff Filing System, revised tariff sheets setting out the rates approved herein and reflecting that they were approved pursuant to this Order.

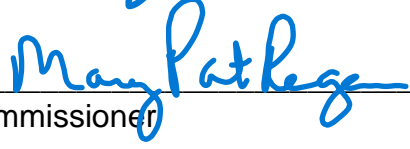
5. This case is closed and removed from the Commission's docket.

²⁸ Case No. 2022-00251, *Electronic Application of Duke Energy Kentucky, Inc. to Amend its Demand Side Management Programs* (Ky. PSC Feb. 21, 2024), Order.

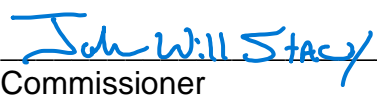
PUBLIC SERVICE COMMISSION



Chairman



Commissioner



Commissioner

ATTEST:



Executive Director

ENTERED
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KENTUCKY PUBLIC
SERVICE COMMISSION

APPENDIX

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2024-00264 DATED DEC 30 2024

The following rates and charges are prescribed for the customers in the area served by Duke Energy Kentucky, Inc. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under the authority of this Commission prior to the effective date of this Order.

Duke Energy Kentucky, Inc. – Electric and Gas Customers

Rate Schedule Riders DSM Cost Recovery Rider (DSMR)

Electric Rider DSM

Residential Rate RS	\$0.001505 per kWh
Non-Residential Distribution Rate	\$0.003685 per kWh
Transmission Service	\$0.000545 per kWh

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