

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC ANNUAL COST RECOVERY)	CASE NO.
FILING FOR DEMAND SIDE MANAGEMENT BY)	2021-00424
DUKE ENERGY KENTUCKY, INC.)	

ORDER

On November 15, 2021, Duke Energy Kentucky, Inc. (Duke Kentucky) electronically filed its Annual Status Report, Adjustment of the Demand Side Management (DSM) Cost Recovery Mechanism, and Amended Tariff Sheets for Gas Rider DSMR and Electric Rider DSMR (Application). According to the Application, Duke Kentucky met with the Residential Collaborative¹ and the Commercial and Industrial Collaborative,² and with the exception the Office of the Kentucky Attorney General (Attorney General), the members in attendance agreed with the Application. In the Application, Duke Kentucky requested an Order by December 31, 2021.

On November 30, 2021, the Commission entered an Order suspending the effective date of the proposed tariffs for five months, up to and including May 14, 2022. Duke Kentucky responded to one round of discovery. There are no intervenors. On December 17, 2021, Duke Kentucky filed a statement requesting that this case be submitted. The case now stands submitted for a decision based on the evidentiary record.

¹ The Residential Collaborative members in attendance were Angela Goad (Attorney General), Jock Pitts (People Working Cooperatively), and Trisha Haemmerle (Duke Kentucky).

² The Commercial and Industrial Collaborative members in attendance were Angela Goad (Attorney General) and Trisha Haemmerle (Duke Kentucky).

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;
- (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, the Commission can consider anything that will help determine if the programs are reasonable.

DUKE KENTUCKY DSM PROGRAM PORTFOLIO³

The portfolio of programs offered by Duke Kentucky during the fiscal year ending June 30, 2021, were approved by the Commission's Order in Case No. 2020-00266.⁴ Duke Kentucky's DSM portfolio, for which the costs are recoverable through the DSM Cost Recovery Rider mechanism, includes the following programs through June 30, 2021.⁵

1. Residential Smart Saver Energy Efficient Residences Program;
2. Residential Smart Saver Energy Efficient Products Program;
3. Residential Energy Assessments Program (Residential Home Energy House Call);
4. Low Income Service Program;
5. Residential Direct Load Control – Power Manager Program;
6. Smart Saver Prescriptive Program;
7. Smart Saver Custom Program;
8. Peak Load Manager (Rider PML) – PowerShare Program;
9. Low Income Neighborhood Program;
10. My Home Energy Report Program;

³ Application, paragraph 15.

⁴ Case No. 2020-00266 *Electronic Application of Duke Energy Kentucky, Inc. to Amend Its Demand Side Management Programs* (Ky. PSC Feb. 4, 2021).

⁵ This Application serves as the annual true-up of the fiscal year ended June 30, 2021, and therefore covers the portfolio of programs in effect July 1, 2020, through June 30, 2021.

11. Small Business Energy Saver Program;
12. Non-Residential Pay for Performance; and
13. Peak Time Rebate (PTR) Pilot Program;

The Application contained brief descriptions of each program, a review of the status of each program, and information on any changes made to the programs. Between the 2019-2020 program year and the 2020-2021 program year, the load impacts were significantly lower. Duke Kentucky indicated the reason for the lower load impacts was that for much of the July 2020–June 2021 timeframe, most programs were impacted by the COVID-19 pandemic and the resulting shut downs and safety concerns of customers and program staff.⁶ For example, the Multifamily Energy Efficiency Program was suspended in mid-March 2020 and was not relaunched until September 2021.⁷

Key modifications for the 2022-2023 programs noted in the Application include consolidating the Smart Saver Prescriptive and Custom Programs so that the program funding can be shared between the two and renaming the shared program as the Non-Residential Smart Saver Program.⁸ Duke Kentucky also requested to expand the Low Income Neighborhood Program, commonly referred to as the Neighborhood Energy Saver (NES) Program and add NES 2.0. NES 2.0 increases the current measures offered to customers to include insulation, air sealing, duct sealing, and smart thermostats and

⁶ Duke Kentucky's Response to Staff's First Request for Information (Staff's First Request) (filed Dec. 13, 2021), Item 2.

⁷ Duke Kentucky's Response to Staff's First Request, Item 3.

⁸ Application, paragraph 72. This modification was also requested and approved in Case No. 2021-00313, *Electronic Application of Duke Energy Kentucky, Inc. to Amend Its Demand Side Management Programs*, (Ky. PSC Dec. 22, 2021).

will be offered to high-energy users.⁹ Another modification is the discontinuance of the Smart Saver Performance Program. Duke Kentucky noted that due to high participation in the non-residential Prescriptive and Custom Programs, Duke Kentucky did not market the Smart Saver Performance Incentive Program and, as a result, there was no participation.¹⁰

Finally, Duke Kentucky requested to expand the PTR pilot program to research the impact of an increase to the credit received when a customer reduces their usage due to a critical peak event (CPE) during the summer of June through September 2022. As proposed, this study will include two new control groups, one at the current rate of \$0.60 per kilowatt-hour (kWh) reduced and the other at a credit that is twice as much, or \$1.20 per kWh reduced. Duke Kentucky maintained that this proposal is based upon the Commission's urging in the final Order of Case No. 2019-00277, in which the Commission further advised Duke Kentucky to study the incentive, or rebate, in order to ensure that the "carrot" is high enough to encourage behavioral changes that are impactful."¹¹ Duke Kentucky does not believe that the current study participants can be used for a comparison, as participant load reductions can differ between the first year and subsequent years of enrollment in behavior-based demand response programs.¹² Hence, Duke Kentucky maintained it would not be appropriate to compare first year load reductions of new participants with customers who have been enrolled on the program

⁹ Application, paragraph 82. This modification was also requested and approved in Case No. 2021-00313, *Duke Energy Kentucky, Inc.* (Ky. PSC Dec. 22, 2021).

¹⁰ Application, paragraph 97.

¹¹ Case No. 2019-00277 *Electronic Application of Duke Energy Kentucky, Inc. to Amend Its Demand Side Management Programs* (Ky. PSC Apr. 27, 2020) at 15.

¹² Duke Kentucky's Response to Staff's First Request, Item 9.

for previous CPEs. Duke Kentucky will attempt to enroll 900 participants for each new control group and use the same methods as applied with the current pilot group.¹³ The budget impact is an increase from \$197,549 to \$216,257 and is broken down as follows:¹⁴

Program	Cost
EM&V	\$84,995
Incentives	\$18,320
Administration and Implementation	\$112,942
Total	\$216,257

Duke Kentucky indicated that the increase in cost is directly related to the proposed additional research and anticipates a final report on the pilot on or before April 30, 2023.

COST-EFFECTIVENESS

Duke Kentucky provided in Appendix A of its Application the results of cost-effectiveness tests performed on its individual residential and non-residential DSM programs. Regarding the Residential Programs, the results indicated that the total resource cost (TRC) for the residential low-income programs, the Residential Smart Saver Program and the Peak Time Rebate Pilot Program were less than 1.0, indicating that the programs are not cost effective. For program inclusion, Duke Kentucky also evaluates cost-effectiveness based upon the Utility Total Cost (UTC).¹⁵ The UTC results indicated that the Residential Smart Saver is cost-effective. For the Non-Residential Programs, the Smart Saver Custom Program TRC and UCT scores both indicate that the program is not cost-effective.

¹³ Application, paragraph 107.

¹⁴ Duke Kentucky's Response to Staff's First Request, Item 10.

¹⁵ See Case No. 2017-00427, *Electronic Annual Cost Recovery Filing for Demand Side Management by Duke Energy Kentucky, Inc.*, (Ky. PSC Sept. 13, 2018) final Order at 10.

COSTS AND COST ALLOCATION¹⁶

Duke Kentucky's DSM revenue requirement, including projected July 1, 2022–June 30, 2023 program costs, lost revenues, and financial incentives is \$8.407 million. This level of expenditure, along with under- and over-recoveries from the prior period, results in a total DSM revenue requirement of \$9.625 million, of which \$8.678 million is allocated to electric operations and \$0.947 million is allocated to gas operations. The \$8.678 million net amount allocated to electric operations consists of a \$0.459 million under-recovery from the prior period and \$8.219 million of expected DSM program costs.

The \$0.947 million net amount allocated to gas operations consists of a \$0.759 million over-recovery from the prior period and \$0.188 million of expected DSM program costs.

DISCUSSION

The Commission has reviewed Duke Kentucky's DSM Program and finds that the program is reasonable and that the factors listed in KRS 278.285(1) are supported and the DSM rates for electric and gas service as set forth in the Appendix to this Order are reasonable and should be approved. The Commission has traditionally evaluated DSM effectiveness by focusing on the TRC results. Although the TRC score for the Residential Smart Saver Program indicates that the program is not cost-effective, the UTC score shows that it is cost-effective. The Commission finds that the Residential Smart Saver Program should continue, but reiterates that Duke Kentucky should scrutinize the results of the cost-effectiveness tests of each individual program measure and exclude individual

¹⁶ Application, Appendix B at 5.

program measures that are not cost-effective.¹⁷ As for the proposed modifications for the Low Income Neighborhood Program, the total program TRC and UTC scores and the individual NES 2.0 program additions are not cost-effective.¹⁸ However, such results are not uncommon for low income programs and the Commission finds that such DSM program assist low income customers in lowering their energy bill and finds the proposed modifications to be reasonable. The Commission also finds that combining the Smart Saver Prescriptive & Customs programs and the termination of the Smart Saver Non-Residential Performance Incentive Program is more efficient and, therefore, is reasonable. Regarding the Peak Time Rebate Pilot Program expansion, although the program is not cost-effective, the Commission believes that the program is still in its infancy so true benefits have yet to materialize. The Commission finds the proposed expansion to study the impact of increased incentives on customer response to CPEs to be supportive of the Commission's directives in Case No. 2019-00277 and approves the modification as well as the continuation of this pilot.

The Commission finds that Duke Kentucky has adequately kept the Commission informed of the progress and status of its DSM programs by timely filing summary status reports on its programs. The Commission additionally finds that In addition to summary status reports currently filed, Duke Kentucky should continue to file with the Commission notices for (1) any DSM program once it reaches 95 percent of its budget during a fiscal year; and (2) any DSM program Duke Kentucky projects will exceed its budget by 25 percent. Any notice filed for a budget overrun should include an explanation regarding

¹⁷ Case No. 2020-00371, *Electronic Annual Cost Recovery Filing for Demand Side Management by Duke Energy Kentucky, Inc.* (Ky. PSC Apr. 9, 2021), final Order at 4.

¹⁸ Duke Kentucky's Response to Staff's First Request, Item 7.

the cause of the budget overrun. Finally, Duke Kentucky should continue the practice of not including DSM or energy-efficiency-related costs in base rates.

IT IS THEREFORE ORDERED that:

1. Duke Kentucky's proposed DSM programs and associated costs are approved effective the first billing cycle of the month following the issuance of this Order.

2. The DSM rates in the Appendix to this Order are approved.

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

4. In its next filing for Commission approval of its DSM programs, Duke Kentucky shall provide analyses of the impact of DSM charges on its electric and gas customers' bills, and detailed evaluations of the cost-effectiveness of its existing programs and any proposed programs in light of the attendant cost burdens to the residential and commercial classes.

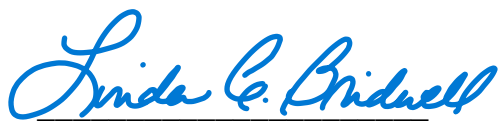
5. Within 20 days of the date of this Order, Duke Kentucky shall file with this Commission, using the Commission's electronic Tariff Filing System, revised tariff sheets setting out the rates approved herein and reflecting that they were approved pursuant to this Order.

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

By the Commission



ATTEST:



Executive Director

APPENDIX

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2021-00424 DATED DEC 27 2021

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

<u>Rate Schedule Riders</u>	<u>DSM Cost Recovery Rider (DSMR)</u>
<u>Electric Rider DSM</u>	
Residential Rate	\$0.006975 per kWh
Non-Residential Rate	\$(0.000718) per kWh
<u>Gas Rider DSM</u>	
Residential Rate RS	\$0.14803 per Ccf

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