

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

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| ELECTRONIC APPLICATION OF DUKE ENERGY   | ) | CASE NO.   |
| KENTUCKY, INC. TO AMEND ITS DEMAND SIDE | ) | 2022-00251 |
| MANAGEMENT PROGRAMS                     | ) |            |

ORDER

On August 15, 2022, pursuant to KRS 278.285, and the final Order in Case No. 2012-00495,<sup>1</sup> Duke Energy Kentucky, Inc. (Duke Kentucky) filed an application requesting approval to modify its Demand-Side Management (DSM) programs. Within its application, Duke Kentucky also provided an update regarding the Seasonal Energy Efficiency Ratio (SEER) baseline increases for certain HVAC measures within the Residential Smart Saver® Energy Efficiency (EE) Residential program.

The Attorney General of the Commonwealth of Kentucky, by and through the Office of Rate Intervention (Attorney General), requested and was subsequently granted intervention on August 31, 2022. The Attorney General requested on December 14, 2022, that the matter be submitted for decision on the record as it stands. Duke Kentucky filed a request for a hearing on December 14, 2022, and the Commission granted the request on January 26, 2023.

Duke Kentucky responded to three rounds of discovery from Commission Staff, two rounds of discovery from the Attorney General, and filed rebuttal testimony. The

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<sup>1</sup> 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).

Attorney General filed testimony and responded to one round of discovery from Duke Kentucky.

A hearing on this matter was held on March 28, 2023. Following the hearing, the Commission issued a post-hearing procedural schedule on March 31, 2023, where Duke Kentucky responded to one round of post-hearing discovery from each Commission Staff and the Attorney General, and filed a post-hearing brief and a reply brief. The Attorney General responded to one round of discovery from Duke Kentucky and filed a response brief to Duke Kentucky's initial brief. The Commission issued an Order on June 13, 2023, denying Duke Kentucky's request to terminate the Peak Time Rebate (PTR) Pilot Program (PTR Pilot) and found that the case was to remain open to allow the Commission time to establish parameters for the PTR Pilot program going forward. 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;
- (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.

### DISCUSSION AND FINDINGS

The Commission acknowledges that it has traditionally evaluated DSM effectiveness by focusing on the total resource cost (TRC) results. A TRC score of less than one indicates that the cost of the program outweighs the benefits. The PTR Pilot program currently has a TRC of 0.15 and is not considered to be cost-effective.<sup>2</sup> However, the Commission, as discussed in the June 13, 2023 Order, has interest in a

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<sup>2</sup> Application, Appendix A.

PTR program and based on the evidence in this matter, believes that a well-crafted PTR program would be more cost effective than the current pilot, possibly exceeding a TRC in excess of 1.0.

In furtherance of its objective to ensure the cost-effective programs for the benefit of consumers, the Commission, based upon the evidence of record, finds that the following modifications should be made to the PTR Pilot Program:

1. The PTR program should remain as a pilot program for a minimum of two years from the date of entry of this Order. A short program offering makes it less likely customers participate or keep participating.

2. The PTR program should remain as an opt-in program without a participation cap. Many of the costs to run the program are fixed, and do not vary based on number of participants. As such, adding participants without materially increasing costs should increase the cost-effectiveness of the PTR program.

3. Duke 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. These variables are primary considerations in the ability of participating customers to materially affect their electric demand and drive system savings.

4. Duke 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). These incentives will allow for a more in-depth result for customer responses to lower usage and an average load impact per tiered incentive.

5. Duke Kentucky should expand its PTR marketing campaign to include initiatives such as direct mail, television advertisement, mass media outlets, website enrollment, etc. Duke Kentucky limited its marketing efforts to email so that it could limit costs,<sup>3</sup> and therefore customer knowledge about the program was limited. There is potential that the program could have achieved a higher participation count had more customers been informed.

6. Duke 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. By informing and educating customers of cost-effective energy savings methods, there would be a direct impact to the responses of participants, average load impact, and customer usage.

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

8. The amount of PTEs that Duke Kentucky offers for the PTR program should remain the same. Eight summer, two winter, and two flexible PTEs was shown to have a positive impact with customer responses and was a reasonable amount of events to not overwhelm customers.<sup>4</sup>

9. Duke Kentucky should allow its customers to decide how to receive event communications at the time of registering for the program. Communication options

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<sup>3</sup> Application, Appendix E at 10.

<sup>4</sup> See Application, Appendix E at 12 and Table 2-3. Duke Kentucky provided the seasons event summary which illustrated the event participants and how many received credits.

should include, but not limited to, text, email, or automated calling system. By expanding customer notification at the time of registering, customers will have the ability to receive peak time events in a more preferred method which would allow them to participate or respond in ample time to PTEs.

10. Duke Kentucky should file an EM&V report with the Commission once the two-year pilot program is completed. This allows the Commission to review and evaluate the results and cost-effectiveness from the modifications listed above.

11. After every 1,000 additional customers Duke Kentucky enrolls in the updated PTR Pilot program, Duke 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 Kentucky should provide with the Commission during its annual filing, the number of customers currently enrolled in the PTR program and the current PTR program ROE incentive that Duke Kentucky is calculating with its recovery mechanism. KRS 278.285(c) includes language that allows for incentives designed to provide positive financial rewards to a utility to encourage implantation of cost-effective DSM.<sup>5</sup> The Commission has provided positive financial incentives to encourage such investments in previous cases for other utilities and will continue to do so in this case.<sup>6</sup>

Additionally, the Commission finds that Duke Kentucky will file all future DSM annual filings on November 1 instead of November 15.

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<sup>5</sup> While the PTR program is not currently cost-effective, there is potential for the program to be cost-effective and have a higher response with customers.

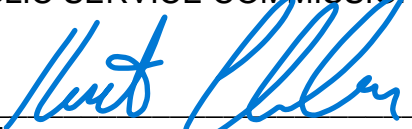
<sup>6</sup> See Case No. 2017-00441, *Electronic Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for Review, Modification, and Continuation of Certain Existing Demand-Side Management and Energy Efficiency Programs* (Ky. PSC Oct. 5, 2018), Order at 34.


IT IS THEREFORE ORDERED that:

1. Duke Kentucky shall comply with the requirements of the findings found herein.
2. Duke Kentucky is authorized to adjust the initial budget for any specific programmatic or research elements.
3. Duke Kentucky shall file its annual DSM application by November 1.
4. This case is closed and removed from the Commission's docket.

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PUBLIC SERVICE COMMISSION

  
Chairman

  
Vice Chairman

  
Commissioner

ENTERED  
FEB 21 2024 rcs  
KENTUCKY PUBLIC  
SERVICE COMMISSION

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