

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF DUKE)	CASE NO.
ENERGY KENTUCKY, INC. TO AMEND ITS)	2020-00266
DEMAND SIDE MANAGEMENT PROGRAMS)	

ORDER

On August 17, 2020, pursuant to 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 approval of revised tariffs to recover costs associated with its DSM programs, including net lost revenues and program-related incentives. Also included in the application were evaluations of the Smart Saver Custom, Multifamily, Prescriptive, and Save Energy and Water Programs. By Order entered on September 3, 2020, the Commission suspended Duke Kentucky's revised tariff for five months from the proposed effective date of September 15, 2020, through February 15, 2021. The Attorney General of the Commonwealth of Kentucky, by and through the Office of Rate Intervention (Attorney General), requested and was granted intervention on September 3, 2020. On December 14, 2020, Duke Kentucky and the Attorney General filed a joint motion requesting the matter be submitted for a decision based upon the written record. Duke Kentucky responded to three rounds of discovery from Commission Staff and two rounds from the Attorney General. The matter now stands submitted for a decision.

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).

DUKE KENTUCKY'S DSM PROGRAM PORTFOLIO

Duke Kentucky's current DSM programs were originally approved in Case No. 2012-00085² and amended in subsequent annual DSM filings. The current suite of programs, as approved in Case No. 2019-00406,³ include the following:⁴

1. Low Income Services Program
2. Residential Energy Assessments Program
3. Residential Smart Saver Efficiency Residences Program
4. Residential Smart Saver Energy Efficiency Products Program
5. Smart Saver Prescriptive Program
6. Smart Saver Custom Program
7. Power Manager Program
8. PowerShare
9. Low Income Neighborhood
10. My Home Energy Report
11. Non-Residential Small Business Energy Saver Program
12. Non-Residential Pay for Performance
13. Peak Time Rebate Pilot Program⁵

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).

³ Case No. 2019-00406, *Electronic Annual Cost Recovery Filing for Demand Side Management by Duke Energy Kentucky, Inc.* (Ky. PSC Apr. 29, 2020).

⁴ For a complete description and update of these programs, see Duke Kentucky's application in Case No. 2019-00406.

⁵ Approved in Case No. 2019-00277, *Electronic Application of Duke Energy Kentucky, Inc. to Amend Its Demand Side Management Programs* (Ky. PSC Apr. 27, 2020).

PROPOSED CHANGES TO EXISTING PROGRAMS AND TARIFFS

Home Energy House Call of the Residential Energy Assessment Program

Also known as the Residential Energy Assessment Program, the Home Energy House Call Program's primary goal is for customers to better manage their energy usage and cost. Duke Kentucky partners with vendors who send an energy specialist to the customer's home to complete an assessment of the home and analyze energy usage to identify energy savings opportunities. At the time of the home audit, the customer receives a free efficiency kit containing energy saving measures, such as energy efficient lighting, a low flow faucet aerator, outlet/switch gaskets, and weather stripping. If the customer wishes, the auditor will install these measures. Duke Kentucky is requesting to expand customer offerings to include upgradeable measure options at a discounted price directly from the auditor at the time of the home energy audit. Such measures include an additional assessment kit with a LED blower door, handheld low-flow showerheads, smart thermostats, specialty globes and candelabras, and recessed LED bulbs.

Smart Saver Prescriptive Program

The Smart Saver Prescriptive Program provides incentives to commercial and industrial consumers for the installation of high efficiency equipment. This installation can involve new construction, retrofit, or replacement of failed equipment. Duke Kentucky annually reviews technologies and efficiency levels to evaluate and provide a broad suite of products. Duke Kentucky requests to increase the budget for this non-residential program stating that standards continually change and new, more efficient technologies continue to emerge, so demand has increased.⁶ Additionally, as a result of COVID-19,

⁶ Application, paragraph 8.

the budget is underspent and Duke Kentucky anticipates increased customer demand and interest in energy efficiency as operations return to pre-COVID-19 levels.⁷ Therefore, Duke Kentucky is requesting to carry-over the unspent budget of \$1,396,010 to the July 2020–June 2021 budget of \$548,785. Duke Kentucky claims that this carry-over will provide funding to meet anticipated demand and to lower the volatility of the DSM charge.⁸ Duke Kentucky states that the additional money will primarily be spent on projects that have already been requested and have a reservation or have been placed on the waitlist.⁹

Peak Time Rebate Pilot Program

Designed for residential customers and branded under the name Peak Time Credits, the Peak Time Rebate pilot program (PTR Pilot) is a two-year incentive based demand response (DR) program that was committed to by Duke Kentucky in Case No. 2016-00152.¹⁰ Estimated to be 1,000 participants, Duke Kentucky states the program offers customers the opportunity to lower their electric bill by reducing electric usage during Critical Peak Events. At the end of the two-year pilot, Duke Kentucky proposes to have an independent evaluation, measurement, and verification (EM&V) vendor report on the results of the pilot program. The pilot will continue past the two years until the

⁷ *Id.*

⁸ Duke Kentucky's Response to and the Attorney General's First Request for Information (filed Oct. 12, 2020), Item 1.

⁹ Duke Kentucky's Response to Staff's First Request for Information (filed Oct. 12, 2020), Item 4.

¹⁰ Case No. 2016-00152, *Application of Duke Energy Kentucky, Inc. for (1) a Certificate of Public Convenience and Necessity Authorizing the Construction of an Advanced Metering Infrastructure; (2) Request for Accounting Treatments; and (3) all Other Necessary Waivers, Approvals, and Relief* (Ky. PSC May 25, 2017).

resulting EM&V report is complete and Duke Kentucky files a request with the Commission to either terminate or continue the program with or without modifications.

Due to a delay in the program development and work constraints driven by COVID-19, spending on the program was only \$36,811 as compared to the \$207,000 budget.¹¹ Duke Kentucky is requesting that the balance be shifted and added to the budgeted amounts for the July 2020 through June 2021 period. The increased funds represent money that would have been spent, however due to the delays in the implementation of the program, the program implementation timing is being shifted.

DISCUSSION

The following table shows the results of the cost-effectiveness tests as provided by Duke Kentucky:¹²

<u>DSM Portfolio Program</u>	<u>UTC</u>	<u>TRC</u>	<u>RIM</u>	<u>Participant Test</u>
<u>Residential Customer Programs</u>				
Residential Energy Assessments	1.72	1.64	0.69	18.50
Peak Time Rebate Pilot	0.19	0.20	0.19	N/A
<u>Non-Residential Customer Programs</u>				
Smart Saver Prescriptive	1.80	3.11	0.80	5.77

The Commission 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. For the Residential Energy Assessment, the only program with nonbudgetary modifications, the TRC score is greater than one in total; however, the individual measure addition or modification is not necessarily cost effective.

¹¹ Application, paragraph 9.

¹² Application, Exhibit A.

Regarding the Residential Smart Saver Program, except for the two Smart Thermostat options where both TRC scores are 0.97, all other proposed product additions are cost-effective.¹³ As mentioned in the final Order in Case No. 2016-00289, the Commission noted its concern about the increasing number of utility DSM programs and that Duke Kentucky should scrutinize the results of each measure's cost-effectiveness test.¹⁴ However, because the Smart Thermostat option scores are marginally close to being cost-effective, the Commission finds the addition of all proposed modifications to the program measures to be reasonable.

The Commission denies the request to carry-over the unspent July 2019–June 2020 budget to the July 2020–June 2021 budget for the Smart Saver Prescriptive program. The economy is still feeling the effects of COVID–19 and there is no guarantee those on the wait list will still be able to receive the smart saver measure; therefore, the Commission finds that Duke Kentucky should return the unspent funds through the DSM true up of the July 2019–June 2020 fiscal year. For the PTR Pilot, the increased funds represent money that would have been spent to fulfill the program initiatives; however, due to the delay in the implementation of the program and then COVID–19, only the program implementation timing is being adjusted. The Commission finds this budgetary increase to be reasonable as this request is part of the AMI installation settlement approved in Case No. 2019-00277 and represents a calendar shift of the same amount of funds that need to be spent for the program.¹⁵

¹³ Duke Kentucky's Response to Staff's First Request for Information (filed Oct. 12, 2020), Item 2.

¹⁴ Case No. 2016-00289, *Electronic Application of Duke Energy Kentucky, Inc. to Amend Its Demand Side Management Programs* (Ky. PSC Jan 24, 2017), Finding 6.

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

COSTS AND COST ALLOCATION

Duke Kentucky's DSM revenue requirement, including the revised projected July 1, 2020, through June 30, 2021 program costs, lost revenues and financial incentives is \$6.824 million. This level of expenditure, along with under-and over recoveries from the prior period, results in a total revenue requirement of \$1.887 million, of which (\$0.023) is allocated to electric operations and \$1.910 million is allocated to gas operations. The (\$0.023) million net allocated to electric operations consists of \$6.727 million over-recovery from the prior period and \$6.704 million of expected DSM program costs. For the gas operations, the \$1.910 million net amount allocated consists of \$1.789 million under-recovery from the prior period and \$0.121 million of expected DSM program costs.¹⁶

IT IS THEREFORE ORDERED that:

1. Duke Kentucky's DSM programs and associated costs as originally filed and as modified in the findings above are approved on and after the date of this Order.
2. Duke Kentucky's proposed tariff Sheets for Electric DSMR and Gas Rider DSMR are denied.
3. The rates set forth in Appendix B to the Order are approved effective with the first billing cycle of the month following the issuance of this Order.
4. Duke Kentucky shall continue to file a DSM application annually by August 15 containing an analysis of the impact of DSM charges on its electric and gas customers' bills, detailed evaluations of the cost-effectiveness of its existing programs,

¹⁶ See Appendix A.

and any proposed revisions to programs in light of the attendant cost burdens to the residential and commercial classes.

5. Within 20 days of the date of entry of this Order, Duke Kentucky shall file with the Commission, using the Commission's electronic Tariff Filing System, revised electric and gas tariff sheets setting forth 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.

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By the Commission



ATTEST:

A handwritten signature in blue ink, appearing to read "Linda C. Bidwell". The signature is written in a cursive style and is positioned above a horizontal line.

Executive Director

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2020-00266 DATED FEB 04 2021

Kentucky DSM Rider

2020-2021 Projected Program Costs, Lost Revenues, and Shared Savings

Residential Program Summary (A)

	Residential Program Summary (A)				Allocation of Costs (B)			Budget (Costs, Lost Revenues, & Shared Savings)		
	Costs	Lost Revenues	Shared Savings	Total	Electric	Gas	Electric Costs	Electric	Gas Costs	
Low Income Neighborhood	\$ 306,300	\$ 3,758	\$ (10,254)	\$ 299,805	100.0%	0.0%	\$ 306,300	\$ 299,805	\$ -	
Low Income Services	\$ 450,263	\$ 1,662	\$ (18,999)	\$ 432,926	73.2%	26.8%	\$ 329,629	\$ 312,292	\$ 120,634	
My Home Energy Report	\$ 171,457	\$ 91	\$ 6,071	\$ 177,619	100.0%	0.0%	\$ 171,457	\$ 177,619	\$ -	
Residential Energy Assessments(D)	\$ 272,353	\$ 8,060	\$ 19,308	\$ 299,720	100.0%	0.0%	\$ 272,353	\$ 299,720	\$ -	
Residential Smart Saver®	\$ 905,354	\$ 10,949	\$ 62,074	\$ 978,377	100.0%	0.0%	\$ 905,354	\$ 978,377	\$ -	
Power Manager®	\$ 585,261	\$ -	\$ 131,900	\$ 717,161	100.0%	0.0%	\$ 585,261	\$ 717,161	\$ -	
Peak Time Rebate Pilot Program(D)	\$ 377,189	\$ -	\$ -	\$ 377,189	100.0%	0.0%	\$ 377,189	\$ 377,189	\$ -	
Total Costs, Net Lost Revenues, Shared Savings	\$ 3,068,178	\$ 24,520	\$ 190,100	\$ 3,282,798			\$ 2,947,544	\$ 3,162,164	\$ 120,634	

NonResidential Program Summary (A)

	NonResidential Program Summary (A)				Allocation of Costs (B)			Budget (Costs, Lost Revenues, & Shared Savings)		
	Costs	Lost Revenues	Shared Savings	Total	Electric	Gas	Electric Costs	Electric	Gas	
Small Business Energy Saver	\$ 763,524	\$ 4,825	\$ 123,224	\$ 891,572	100.0%	0.0%	\$ 763,524	\$ 891,572	NA	
Smart Saver® Custom	\$ 707,158	\$ 8,176	\$ 241,184	\$ 956,518	100.0%	0.0%	\$ 707,158	\$ 956,518	NA	
Smart Saver® Prescriptive (C), (D)	\$ 548,785	\$ 6,818	\$ 85,745	\$ 641,348	100.0%	0.0%	\$ 548,785	\$ 641,348	NA	
PowerShare®	\$ 904,512	\$ -	\$ 147,510	\$ 1,052,022	100.0%	0.0%	\$ 904,512	\$ 1,052,022	NA	
Total Costs, Net Lost Revenues, Shared Savings	\$ 2,923,979	\$ 19,819	\$ 597,663	\$ 3,541,461			\$ 2,923,979	\$ 3,541,461	NA	
Total Program	\$ 5,992,157	\$ 44,339	\$ 787,763	\$ 6,824,259						

(A) Costs, Lost Revenues (for this period and from prior period DSM measure installations), and Shared Savings for Year 8 of portfolio.

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

(C) Smart Saver® Prescriptive consists of the following technologies: Energy Efficient Food Service Projects, HVAC, Lighting, IT, Pumps and Motors, and Process Equipment.

(D) Yellow highlighted rows include modifications to programs as described in application.

Kentucky DSM Rider

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

July 2018 to June 2019

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	\$ (7,387,398)	\$ 3,162,164	\$ (4,225,234)	1,475,582,438 kWh	\$ (0.002863) \$/kWh
Distribution Level Rates Part A DS, DP, DT, GS-FL, EH & SP	\$ 349,026	\$ 2,489,439	\$ 2,838,464	2,305,428,301 kWh	\$ 0.001231 \$/kWh
Transmission Level Rates & Distribution Level Rates Part B TT	\$ 311,735	\$ 1,052,022	\$ 1,363,758	2,541,311,301 kWh	\$ 0.000537 \$/kWh
Distribution Level Rates Total DS, DP, DT, GS-FL, EH & SP					\$ 0.001768 \$/kWh
<u>Gas Rider DSM</u> Residential Rate RS	\$ 1,789,157	\$ 120,634	\$ 1,909,790	62,137,848 CCF	\$ 0.030735 \$/CCF
Total Rider Recovery			\$ 1,886,779		

(A) (Over)/Under of Appendix B page 1 multiplied by the average three-month commercial paper rate for 2018 to include interest on over or under-recovery in accordance with the Commission's order in Case No. 95-312. Value is: 1.024200
 (B) Appendix B, page 2.
 (C) Appendix B, page 4.

APPENDIX B

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2020-00266 DATED FEB 04 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	(\$0.002863) per kWh
Non-Residential Rate	\$0.001768 per kWh
<u>Gas Rider DSM</u>	
Residential Rate RS	\$0.30735 per Ccf