

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)	2019-00277
MANAGEMENT PROGRAMS)	

ORDER

On August 15, 2019, 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, including approval for a Peak Time Rebate (PTR) Pilot Program, and approval of revised tariffs to recover costs associated with its DSM programs including program costs, lost revenues, and shared savings. By Order entered on September 9, 2019, the Commission suspended Duke Kentucky's revised tariff for five months from the proposed effective date of October 1, 2019, through April 1, 2020. The Attorney General of the Commonwealth by and through the Office of Rate Intervention (Attorney General) requested and was granted intervention on October 9, 2019.

On January 31, 2020, Duke Kentucky and the Attorney General filed a joint motion requesting the Commission extend the date for the parties to file a request for a hearing or request that the matter be submitted for a decision on the record. Pursuant to the procedural schedule, the parties were to file said request on January 31, 2020. Duke Kentucky and the Attorney General requested an additional 30 days, or until March 2, 2020, in order to explore the possibility of reaching a settlement of all issues prior to

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).

deciding whether to request a hearing or the matter be submitted for a decision on the written record. On February 10, 2020, the Commission entered an Order granting the joint motion to extend the date to file a request for a hearing or a decision on the written record, but due to the short time between the proposed extension and suspension date, the Commission noted that such a period would not allow the Commission to either conduct a robust review of a potential settlement or hold a hearing, and timely issue a final order. The Commission, however, found it reasonable to extend the procedural date on the condition that Duke Kentucky commit to extending the effective date of the DSM tariff by 30 days from April 2, 2020, to May 2, 2020. On February 11, 2020, Duke Kentucky responded that it found the extension to be reasonable and agreed to extend the effective date of its DSM tariff by 30 days. The Commission followed up with an Order on February 14, 2020, granting the joint motion to amend the procedural schedule.

On March 6, 2020, Duke Kentucky filed the Joint Stipulation and Recommendation (Joint Stipulation) and on March 9, 2020, filed testimony supporting the filed settlement. Duke Kentucky responded to three rounds of discovery from Commission Staff and two rounds from the Attorney General. The Attorney General also filed direct testimony and responded to one round of discovery from Commission Staff and Duke Kentucky. The matter now stands submitted for a decision.

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. 2017-00427³ 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

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. 2017-00427, *Electronic Annual Cost Recovery Filing for Demand Side Management by Duke Energy Kentucky, Inc.* (Ky. PSC Sep. 13, 2018).

⁴ For a complete description and update of these programs, see Duke Kentucky's application in Case No. 2017-00427.

PROPOSED CHANGES TO EXISTING PROGRAMS AND TARIFFS

Smart Saver Residential Program

The Smart Saver Residential Program offers customers incentives for the installation of energy conservation measures designed to increase energy efficiency in homes. Along with incentives for the installation of highly efficient appliances, the program also provides high efficiency lighting through various channels. One such channel, the Online Saving Store, provides eligible customers the ability to purchase specialty bulbs and have them shipped directly to their home. Currently, a variety of LEDs are offered, each with differing incentive levels. Duke Kentucky requests to expand the product offerings to include Energy Star Smart Wi-Fi Thermostats, Energy Star Advanced power strips, water conservation products, Energy Star Air Purifiers, Energy Star Dehumidifiers, and LED lighting fixtures.

My Home Energy Report

My Home Energy Report (MyHER) compares household electric usage to similar, neighboring homes, provides recommendations and tips to lower energy consumptions, and informs a customer of other energy efficiency programs. This program was originally an opt-out program, but in Case No, 2017-00427, Duke Kentucky was ordered to change the program to an opt-in beginning in the fiscal year 2019-2020. In response to the opt-in change, Duke Kentucky requests to expand the scope of the MyHER program by offering the MyHER through the Duke Energy Mobile App (App).⁵ Duke Kentucky states that the App will allow for an additional low-cost marketing channel for customers to opt into the program.

⁵ Duke Kentucky's response to Staff's First Request for Information (Staff's First Request), Item 3.

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, and replacement of failed equipment. Duke Kentucky annually reviews technologies and efficiency levels in order to evaluate and provide a broad suite of products. Duke Kentucky requests approval to add to and modify the suite of existing products. These additions or measure modifications are in the categories of food and technology; heating, ventilation, and air conditioning (HVAC); information technology; process equipment; pumps and drives; and lighting.⁶

PROPOSED PEAK TIME REBATE PILOT PROGRAM

Designed for residential customers, the Peak Time Rebate pilot program (PTR Pilot) is an incentive-based demand response (DR) program that Duke Kentucky agreed to implement in a stipulation and settlement agreement with the Attorney General in Case No. 2016-00152.⁷ In this proceeding, Duke Kentucky requests approval to initiate the PTR Pilot with an estimated 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 (CPE). If approved, 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

⁶ A complete list is included in Appendix D of the Application.

⁷ 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).

until the 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.

For the PTR Pilot, Duke Kentucky may call a CPE at its discretion, during any calendar month, Monday through Friday. If called, each CPE will last four hours, will begin at 3 p.m. during the months of May through October, and will begin at 6 a.m. during the months of November through April.⁸ CPEs will not occur on the weekends or holidays. The PTR Pilot does not have a maximum number of CPEs, but estimates a range of 16 to 25 CPEs per year will be targeted.⁹

Baseline usage estimates will be determined from the participant's usage history and for any net reduction in usage as compared to the participant's baseline usage that occurs during the CPE, each participant will receive \$0.33 cents/kWh credit.¹⁰ Participants must provide and maintain an electronic method to receive CPE notifications,¹¹ and it will be the participant's responsibility to monitor and control energy usage before, during, and after a CPE. If no reduction occurs, the participant will not receive a credit, but will not be penalized. Consumption is still subject to Rate RS charges and, if for some reason the smart meter does not provide any data, an estimate will be used as a proxy. All credits earned will be applied to the participant's bill no later than the second billing month following the CPE(s) and listed as a single billing line item.¹²

⁸ Application, paragraph 12.

⁹ Duke Kentucky's Response to the Attorney General's First Request for Information (Attorney General's First Request), Items 9a and 9h.

¹⁰ Application, paragraph 13.

¹¹ Duke Kentucky's Response to the Attorney General's First Request, Item 9f.

¹² *Id.*, Item 10g.

Duke Kentucky states that they will do their best to notify a CPE by 8 p.m. on the day prior but reserves the right to notify any time up to one hour prior.

Participants will agree to participate in the pilot for two years, and may continue longer at their option. However, Duke Kentucky reserves the right to terminate participation. Duke Kentucky will solicit participants who are active customers on Rate RS and are not participating in Power Manager or net metering, do not have a deferred payment plan or medical alert designation, and have not opted out of Duke Kentucky's smart meter functionality. Duke Kentucky believes that the PTR Pilot will broaden available DR options for residential customers and effectively deliver a peak load management option. Duke Kentucky requested funding for the program through Rider DSMR.¹³

The Attorney General's witness, Paul J. Alvarez, asserts that the PTR Pilot can be substantially improved so that results support a broader rollout of a future peak time rebate program for all Duke Kentucky customers with smart meters. Alvarez also supports a default application where the rebate opportunity is applied to every customer on a residential rate with smart meter, without the need to take any special enrollment action.¹⁴ Alvarez notes that in the settlement agreement in Case No. 2016-00152, the Attorney General specifically desired a program designed to maximize the smart meter benefits customers receive and establish ground work for best practices for other Kentucky utilities to pattern when deploying smart meters.¹⁵ Further, the Attorney

¹³ Duke Kentucky's Response to Staff's First Request, Item 8.

¹⁴ Direct Testimony of Paul J. Alvarez, at 7.

¹⁵ *Id.* at 10.

General has significant interest in the PTR Pilot program design because it can support Duke Kentucky's status as a supplier of Fixed Resource Requirements in the PJM capacity market and can alleviate the need for Duke Kentucky to procure costly additional capacity.¹⁶ Alvarez states that an effective peak time rebate program can help to avoid new plant investment and that Duke Kentucky's customers are best served by a well-designed pilot.¹⁷

Alvarez argues that, as proposed, the PTR Pilot will not deliver the information necessary for the Commission to make an informed decision in the future regarding peak time rebate programs.¹⁸ He maintains that the pilot design needs to mimic a broader rollout and be designed to answer specific questions needed for future peak time rebate programs. For example, Alvarez states that the sample size must be large enough so that the results are statistically valid and the overall design should encourage customer participation and response. Alvarez also notes that the proposed rebate of \$0.33 per kWh is too low and the delayed incentive of two billing cycles goes against prompt feedback. Alvarez contends that Duke Kentucky takes a narrow stance towards learning objectives or questions the PTR Pilot will answer.¹⁹ He explains that Duke Kentucky only lists six questions as learning objectives, provides no details on how it will secure answers, nor has yet to design marketing materials or participant survey instruments.

¹⁶ *Id.* at 10–11.

¹⁷ *Id.* at 11.

¹⁸ *Id.* at 12.

¹⁹ *Id.* at 13.

Alvarez proposes several modifications and lists information he maintains is needed to ensure pilot outcomes are useful for future decisions regarding peak time rebate programs. Such modifications include a definitive list of questions and an adequate sample size that produces statistically significant results. Alvarez recommends that the rebate be large enough to initiate a reaction and suggests one that is between \$1.00 and \$1.33.²⁰ Alvarez questions Duke Kentucky's proposed notice time, which can be as short as one hour, as participants may not have the opportunity to shift loads due to time constraints and recommends that CPEs be called by 9 p.m. the prior evening.²¹ He argues that Duke Kentucky's proposed billing rebate of two billing months does not provide conservation signals. In addition, Alvarez contends that the billing single line item does not provide enough level of detail for participants to see what CPE the bill credit is applied. He further suggests limiting the number of CPEs to six per season. Finally, he recommends that PJM events not be the driver of the DR program, but the program should be customer oriented and geared towards future peak time rebate programs.

JOINT STIPULATION

The Joint Stipulation reflects the proposed agreement of Duke Kentucky and the Attorney General to resolve all issues associated with the pending application. A summary of key provisions contained in the Joint Stipulation is as follows:²²

²⁰ *Id.* at 19.

²¹ *Id.* at 21.

²² See Appendix A for the complete Joint Stipulation.

DSM Amendment Application: Duke Kentucky's proposed amendments to the scope and program budget for the Smart Saver Residential Program, MyHER Program, and Smart Saver Prescriptive Program should be approved as filed.

PTR Pilot: Duke Kentucky's PTR Pilot and tariff Rider PTR should be approved as a voluntary program as filed with costs recovered through Rider DSM subject to the following amendments:

1. The PTR Pilot will target to enroll the lesser of 1,000 customers or the number of participants the EM&V vendor recommends, and the two-year term will commence when the target enrollment is reached.

2. Customers will receive a bill credit of \$0.60 per kWh of load reduction.

3. The PTR Pilot will consist of one treatment group as proposed in the Application.

4. Duke Kentucky will evaluate the possibility of converting the PTR Pilot to a Price Responsive Demand (PRD) Program²³ at the end of the pilot and provide such evaluation to the Commission within 180 days of the conclusion of the pilot.

- Duke Kentucky will select a temperature-humidity index trigger point designed to produce an average of ten summer CPEs.

- At the end of the two-year period, Duke Kentucky will evaluate whether the program could be submitted to PJM as a Peak Shaving Adjustment program.

- Duke Kentucky will try to include the year 1 results of the pilot program into the PJM load forecast. In addition, if Duke Kentucky is able to implement

²³ A PRD program satisfies PJM's criteria for DR.

the PTR pilot in time for summer 2020 and, if accepted by PJM, Duke Kentucky will attempt to have PJM include such results in the PJM's final load forecast for the 2021/2022 delivery year.

- Duke Kentucky will continue to work with the Attorney General and the Residential DSM Collaborative to develop a PRD program.
- Duke Kentucky agrees to incorporate specific questions recommended by Mr. Alvarez as part of the PTR Pilot evaluation.
- Duke Kentucky agrees to provide the earned credit amount in an email or text message within five business days during the term of the pilot.
- Duke Kentucky will provide reminder notices to participants by 1 p.m. for all summer CPEs except the CPEs providing notice the same day.
- There will be eight summer, two winter, and two flexible CPEs. Winter CPEs should not exceed one per day. The summer CPEs should be triggered by a temperature humidity index, which will be selected by Duke Kentucky and is designed to produce on average ten CPEs.
- Duke Kentucky agrees to consider PJM PRD Requirements as a Secondary Objective.

DISCUSSION

The Commission's statutory obligation when reviewing a rate application is to determine whether the proposed rates are "fair, just, and reasonable."²⁴ Even though Duke Kentucky and the Attorney General have filed a Joint Stipulation that purports to resolve all of the issues in the pending application, the Commission cannot defer to the

²⁴ KRS 278.030, KRS 278.040

parties as to what constitutes fair, just, and reasonable rates. The Commission must review the record in its entirety, including the Joint Stipulation, and apply its expertise to make an independent decision as to the level of rates, including terms and conditions of service, that should be approved. To satisfy its statutory obligation, in this case, the Commission has performed its traditional analysis of all filed documents.

Based upon its review of the Joint Stipulation, the attachments thereto, and the case record including intervenor testimony, the Commission finds that, with the modifications discussed below, the Joint Stipulation is reasonable and in the public interest. The Commission finds that the Joint Stipulation was the product of arm's-length negotiations among knowledgeable, capable parties, and should be approved with the modifications delineated below. Such approval is based solely on the reasonableness of the modified Joint Stipulation as a whole and does not constitute a precedent on any individual issue.

The following table shows the results of the cost-effectiveness tests as provided by Duke Kentucky:²⁵

<u>DSM Portfolio Program</u>	<u>UTC</u>	<u>TRC</u>	<u>RIM</u>	<u>Participant Test</u>
<u>Residential Customer Programs</u>				
Residential Smart Saver	2.40	1.34	0.74	3.35
My Home Energy Report	1.86	1.86	0.79	N/A
Peak Time Rebate Pilot	0.19	0.20	0.19	N/A
<u>Non-Residential Customer Programs</u>				
Smart Saver Prescriptive	4.23	1.93	1.05	3.28

²⁵ Application, Exhibit A.

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 three programs for which Duke Kentucky proposed modifications, the TRC scores are greater than one in totality, however the individual measure of their modification is not necessarily cost-effective. In addition, as illustrated above, the TRC score for the PTR Pilot indicates that it is currently not cost-effective.

Regarding the Residential Smart Saver Program, except for the Smart Strip products which has a TRC score of 0.25, all other proposed product additions are cost effective.²⁶ For the Non-Residential Smart Saver Prescriptive Program, there are 229 proposed measure modifications and additions.²⁷ Like the Residential Smart Saver Program, overall the proposed program expansion is cost effective; however, each individual addition or modification may not be. For example, of the 38 additions or measure modifications identified for the Food Service Technology category, 15 are not cost-effective.²⁸ In the final Order in Case No. 2016-00289, the Commission addressed its concern about the increasing number of utility DSM programs and cautioned that Duke Kentucky should scrutinize the results of each measure's cost-effectiveness test.²⁹ In Case No, 2017-00427, the Commission stated that the cost-effectiveness of Duke Kentucky's DSM programs would be closely reviewed in the 2019 DSM filing. Hence, the

²⁶ Duke Kentucky's Response to Staff's First Request, Item 2.

²⁷ Application, paragraph 9.

²⁸ Duke Kentucky's Response to Staff's Third Request, Item 4.

²⁹ Case No. 2016-00289, *Electronic Application of Duke Energy Kentucky, Inc. to Amend Its Demand Side Management Programs* (Ky. PSC Jan 24, 2017), finding paragraph 6.

Commission finds that the individual modifications that are not cost-effective, as demonstrated by a TRC score of less than one, are unreasonable and should not be approved. The Commission further finds that the proposed modifications that are cost-effective, as demonstrated by a TRC score greater than one, are reasonable and thus should be approved.

For the MyHER Program, with the proposed expansion into the App, participants will see usage comparisons, usage breakdowns, and energy efficiency tips. Duke Kentucky states that the App will offer an additional low-cost marketing channel for program enrollment for customers who are not participating in the MyHER but using the App for other reasons.³⁰ Duke Kentucky also states that only the App development costs associated with DSM features flow through the DSM surcharge, and not through base rates.³¹ The Commission finds these modifications reasonable because of the lower marketing costs associated with the App and once developed, the marginal costs of additional participants is minimal through an App.

The Commission finds the Joint Settlement, in regards to the PTR Pilot, reasonable without any further modifications, and notes that, as a pilot, this has the potential to be very beneficial to Duke Kentucky and its customers. The Commission is persuaded by Mr. Alvarez's testimony that such a program can become part of standard residential rates as a default option in the future, which can allow for peak shaving and lower costs. Such an opportunity not only provides a low-cost avenue for capacity needs, but affords customers an increased ability to control a portion of their energy bill. Using AMI metering

³⁰ Duke Kentucky's Response to Staff's First Request, Item 3.

³¹ *Id.*

for more than just billing purposes is something that not only Duke Kentucky, but all utilities should consider to maximize the benefits of smart meters. With AMI meters, programs such as Time of Use rates and prepay programs can be easily added as a rate options. Such rate options contribute to lower peak demand and help avoid costly capital investments or free up power to be sold on the market for additional revenue. The Commission encourages Duke Kentucky to learn from this pilot and modify the program so to maximize the benefit. The Commission further urges Duke Kentucky to study the incentive, or rebate, to ensure that the “carrot” is high enough to encourage behavioral changes that are impactful. The Commission supports the possibility of converting the PTR Pilot to a PRD program for PJM, but emphasizes that the focus should be on benefiting Duke Kentucky’s customers first. Finally, the Commission reminds Duke Kentucky of how the record in Case No. 2017-00427 showed that reducing Duke Kentucky’s load requirements through DSM programs was a less costly alternative than either purchasing capacity or installing additional capacity and to keep that mindset in the implementation and evaluation of the PTR Pilot Program.

COSTS AND COST ALLOCATION

Duke Kentucky’s proposed DSMR Riders, as filed in the Application, only included the over-recovery from the prior period for the gas portion. In Case No. 2018-00370,³² Duke Kentucky submitted a similar cost allocation regarding the gas costs because the only opportunity for gas customer participation in future DSM programs following the final Order in Case No. 2017-00427 is in low-income qualified programs, thus limiting expenses. In that case, the Commission found that Duke Kentucky’s proposal did not

³² Case No. 2018-00370, *Electronic Annual Cost Recovery Filing for Demand Side Management by Duke Energy Kentucky, Inc.* (filed Nov. 15, 2018).

support cost causation and that the DSM gas costs should continue to be allocated to gas customers. The Commission finds that in the instant case, such allocations should also apply.

Duke Kentucky's DSM revenue requirement, including the projected July 1, 2019 through June 30, 2020 program costs, lost revenues and financial incentives is \$10.425 million. This level of expenditure, along with under- and over-recoveries from the prior period, results in a total revenue requirement of \$10.732 million of which \$11.388 is allocated to electric operations and (\$0.657) is allocated to gas operations. The \$11.388 million net allocated to electric operations consists of \$1.376 million under-recovery from the prior period and \$10.012 million of expected DSM program costs. For the gas operations, the (\$0.657) million net amount allocated consists of \$1.070 million over-recovery from the prior period and \$0.413 million of expected DSM program costs.³³ The residential customer charge for the Home Energy Assistance charge will remain at \$0.10 per meter, totaling \$141,925 and \$109,500 for the residential electric and gas customers, respectively.³⁴

IT IS THEREFORE ORDERED that:

1. The Joint Stipulation, attached hereto as Appendix A is approved with the modifications discussed herein.

³³ Duke Kentucky's Response to Staff's First Request, Item 11.

³⁴ Duke Kentucky's Home Energy Assistance surcharge amount is under review in Case No. 2019-00366, *Electronic Investigation of Home Energy Assistance Programs Offered by Investor-Owned Utilities Pursuant to KRS 278.285(4)*.

2. Duke Kentucky's DSM programs and associated costs as originally filed and as modified in the findings above to revise the costs allocated to gas customers are approved on and after the date of this Order.

3. Duke Kentucky's proposed Tariff Sheets for Electric DSMR and Gas Rider DSMR are denied.

4. Duke Kentucky's proposed PTR Pilot Program tariff as filed with the Joint Stipulation is approved.

5. 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.

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

7. 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.

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

By the Commission



ATTEST:



Acting General Counsel

Case No. 2019-00277

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2019-00277 DATED APR 27 2020

ELEVEN PAGES TO FOLLOW

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF DUKE)
ENERGY KENTUCKY, INC. TO) Case No. 2019-00277
AMEND ITS DEMAND SIDE)
MANAGEMENT PROGRAMS)

JOINT STIPULATION AND RECOMMENDATION

On August 15, 2019, Duke Energy Kentucky, Inc. (“Duke Energy Kentucky” or the “Company”) filed its application with the Kentucky Public Service Commission (“Commission”), pursuant to KRS 278.285, and other applicable law for an amendment of its Demand Side Management (DSM) programs in the above-captioned proceeding (“Application”). Among other things, the Application sought approval of amendments to the scope and program budgets for three existing programs: 1) Smart Saver Residential Program; 2) My Home Energy Report; and 3) an update to its Smart Saver Prescriptive program, and approval of a new Peak Time Rebate Pilot Program (PTR). The PTR pilot was introduced pursuant to a previously Commission-approved settlement with the Attorney General of the Commonwealth of Kentucky (“Attorney General”), in Case No 2016-00152. On September 30, 2019, the Attorney General the only other party in the case, filed his motion to intervene, which was granted by the Commission.

Duke Energy Kentucky and the Attorney General (collectively as the “Parties”) have filed testimony supporting their respective positions relating to Duke Energy Kentucky’s Application. The Parties and the Commission Staff have engaged in

substantial discovery of the Parties' respective positions by issuing numerous information requests to which the Parties have responded.

The Parties, representing diverse viewpoints, have reached a complete settlement of all the issues raised in this proceeding and have executed this Joint Stipulation and Recommendation ("Stipulation") for purposes of documenting and submitting their agreement to the Commission for consideration and approval. It is the intent and purpose of the Parties to express their agreement on a mutually satisfactory resolution of all issues in the instant proceeding.

The Parties understand that this Stipulation is not binding upon the Commission, but believe it is entitled to careful consideration by the Commission. The Parties agree that this Stipulation, viewed in its entirety, constitutes a reasonable resolution of all issues in this proceeding.

The Parties request that the Commission issue an Order approving this Stipulation in its entirety pursuant to KRS 278.285, including the DSM program changes, PTR pilot as amended, and respective tariffs as described herein. The request is based upon the belief that the Parties' participation in settlement negotiations and the materials on file with the Commission adequately support this Stipulation. Adoption of this Stipulation will eliminate the need for the Commission and the Parties to expend significant resources in litigation of this proceeding and will eliminate the possibility of, and any need for, rehearing or appeals of the Commission's final Order herein.

NOW, THEREFORE, for and in consideration of the mutual premises set forth above and the terms and conditions set forth herein, the Parties agree that the

Company's Application should be approved as filed, except as modified or specified below:

1. **DSM AMENDMENT APPLICATION.** The Parties agree that Duke Energy Kentucky's proposed amendments to the scope and program budgets for its three DSM portfolio programs: 1) Smart Saver Residential Program; 2) My Home Energy Report; and 3) Smart Saver Prescriptive program, should be approved as filed.

2. **PTR PILOT.** The Parties agree that the Company's PTR Pilot and tariff Rider PTR should be approved as a voluntary program as filed in the Company's Application, with costs recovered through the Company's Rider DSM, subject to the following amendments:

- a. The pilot will be targeted to enroll the lesser of 1,000 customers as agreed upon in Case No. 2016-00152 or the number of participants Nexant¹ recommends as part of their Power Analysis under paragraph g below. Duke Energy Kentucky will be permitted to slightly exceed this enrollment limit (up to 100 additional customers), if needed. The two-year term of the pilot will commence upon enrollment of the lesser of reaching 1,000 participants or the number of participants Nexant recommends as part of their Power Analysis under paragraph g below.
- b. Customers participating in the program will be eligible to receive a bill credit of \$0.60 per kWh of load reduction.
- c. The PTR Pilot will consist of one treatment group as proposed in the Company's Application.

¹ Nexant is the vendor selected to evaluate the effectiveness of the PTR Pilot.

- d. While the PTR pilot will not satisfy the PJM's criteria for Price Responsive Demand (PRD) programs, the Company will evaluate the possibility of converting the PTR pilot to a PRD program at the end of the pilot. Such evaluation to be included in the pilot analysis that will be provided to the Commission within 180 days of the conclusion of the pilot.
- i. For the pilot, Duke Energy Kentucky will select a temperature-humidity index (THI) trigger point designed to produce on average ten (10) summer critical peak events (CPEs).
 - ii. At the end of the two-year period, as part of the pilot evaluation and consideration of whether or not to continue the program, the Company will evaluate whether the program could be submitted to PJM as a Peak Shaving Adjustment (PSA) program and what modifications may be necessary, or whether the data supports the conversion of the program to a PRD program in PJM.
 - iii. Duke Energy Kentucky agrees to use its best efforts to include the year 1 results of the pilot program into the PJM load forecast. Depending upon timing of approval of the pilot, if the Company is able to implement the PTR pilot in time for summer 2020, Duke Energy Kentucky will attempt to have PJM include such results in PJM's final load forecast for the 2021/2022 delivery year, assuming PJM accepts it.

- e. Duke Energy Kentucky commits to continue to work with the Attorney General and the Company's Residential DSM Collaborative to develop a Price-Responsive Demand (PRD) program.²
- f. Duke Energy Kentucky agrees to incorporate the following questions recommended by Mr. Alvarez as part of the PTR pilot evaluation:
 - i. What is the average kWh reduction (and estimated kW reduction) per participant, per event, broken down by summer events and winter events?
 - ii. On average, how many/what percentage of eligible participants earned a rebate, broken down by summer events and winter events?
 - iii. Among participants who earned a rebate, what was the average rebate per participant per summer event? Per winter event?
 - iv. What are the most common actions participants are taking to reduce usage during: 1) summer events; and 2) winter events?
 - v. What are the most common reasons participants are giving for not reducing usage during summer events? During winter events?
 - vi. How satisfied are participants with the peak-time rebate program?

² The Residential Collaborative members include the following: Office of the Kentucky Attorney General, Jock Pitts and Nina Creech (People Working Cooperatively), Kurt Krahn (Northern Kentucky Community Action Commission), Laura Pleiman (Boone County), Peter Nienaber (Northern Kentucky Legal Aid), Rick Bender and Kenya Stump (Kentucky Energy and Environment Cabinet), and Tim Duff and Trisha Haemmerle (Duke Energy).

- vii. What are the participants most frequently identified program improvement recommendations?
- g. The Company will follow the sample size (number of participants) recommendation resulting from the Power Analysis and experimental design performed by Nexant for the single treatment group and reduce the number of participants as indicated by the Nexant Power analysis to estimate the load reduction provided during summer and winter CPEs not to exceed the participation limit specified above.
- h. The Company agrees to limit the number of summer CPEs with shorter than day-ahead notice during the first year of the pilot to one CPE with the potential for one additional summer CPE during the second year of the pilot.
- i. The Company agrees to provide a credit amount to the participating customers earning credits in an email or text message within five business days during the term of the pilot. Any incremental costs of providing this service, as well as other changes made here resulting in cost increases, will be recoverable as part of the program costs through Rider DSM.
- j. The Company agrees to provide reminder notices to customers by 1:00 p.m. for all summer CPEs except the CPEs providing notice the same day. Any incremental costs of providing this service will be recoverable as part of the program costs through Rider DSM.

- k. The Parties agree that there should be eight summer, two winter, and two flexible CPEs. Winter CPEs should not exceed one per day. The summer CPEs should be triggered by a THI, which also would help pave the way toward the PTR becoming a PSA program.
- l. Summer and winter impacts should be evaluated separately from the short-notice CPE so as not to unduly reduce Pilot value in calculating day-ahead notice impact.
- m. The Company agrees to consider PJM Price Responsive Demand Requirements as a Secondary Objective.

3. **Filing of Stipulation.** Following the execution of this Stipulation, the Parties shall cause the Stipulation to be filed with the Commission with a request to the Commission for consideration and approval of this Stipulation so that Duke Energy Kentucky may begin billing under the approved adjusted rates for service rendered on and after Approval.

4. **Commission Approval.** The Parties to this Stipulation shall act in good faith and use their best efforts to recommend to the Commission that this Stipulation be accepted and approved without need for evidentiary hearing. Each Party hereto waives all cross-examination of the witnesses of the other Party hereto except in support of the Stipulation or unless the Commission fails to adopt this Stipulation in its entirety. Each Party further stipulates and recommends that the Application, testimony, pleadings and responses to data requests filed in this proceeding be admitted into the record. The Parties further agree and intend to support the reasonableness of this Stipulation before the Commission, and to cause their counsel to do the same in this proceeding and in any

appeal from the Commission's adoption and/or enforcement of this Stipulation. If the Commission issues an order adopting this Stipulation in its entirety, each of the Parties hereto agrees that it shall file neither an application for rehearing with the Commission, nor an appeal to the Franklin County Circuit Court with respect to such order.

5. **Effect of Non-Approval.** If the Commission does not accept and approve this Stipulation in its entirety or imposes any additional conditions or requirements upon the signatory Parties, then: (a) either Party may elect, in writing docketed in this proceeding, within ten days of such Commission Order, that this Stipulation shall be void and withdrawn by the Parties hereto from further consideration by the Commission and neither Party shall be bound by any of the provisions herein; and (b) each Party shall have the right, within 20 days of the Commission's order, to file an petition for rehearing, including a notice of termination of and withdrawal from the Stipulation; and, (c) in the event of such termination and withdrawal of the Stipulation, neither the terms of this Stipulation nor any matters raised during the settlement negotiations shall be binding on either of the signatory Parties to this Stipulation or be construed against either of the signatory Parties. Should the Stipulation be voided or vacated for any reason after the Commission has approved the Stipulation and thereafter any implementation of the terms of the Stipulation has been made, then the Parties shall be returned to the *status quo* existing at the time immediately prior to the execution of this Stipulation.

6. **Commission Jurisdiction.** This Stipulation shall in no way be deemed to divest the Commission of jurisdiction under Chapter 278 of the Kentucky Revised Statutes.

7. **Successors and Assigns.** This Stipulation shall inure to the benefit of and be binding upon the Parties hereto, their successors and assigns.

8. **Complete Agreement.** This Stipulation constitutes the complete agreement and understanding among the Parties hereto, and any and all oral statements, representations or agreements made prior hereto or contained contemporaneously herewith shall be null and void and shall be deemed to have been merged into this Stipulation.

9. **Implementation of Stipulation.** For the purpose of this Stipulation only, the terms are based upon the independent analysis of the Parties to reflect a just and reasonable resolution of the issues herein and are the product of compromise and negotiation. Notwithstanding anything contained in the Stipulation, the Parties recognize and agree that the effects, if any, of any future events upon the operating income of Duke Energy Kentucky are unknown and this Stipulation shall be implemented as written.

10. **Admissibility and Non-Precedential Effect.** Neither the Stipulation nor any of the terms set forth herein shall be admissible in any court or Commission except insofar as such court or Commission is addressing litigation arising out of the implementation of the terms herein or the approval of this Stipulation or a Party's compliance with this Stipulation. This Stipulation shall not have any precedential value in this or any other jurisdiction.

11. **No Admissions.** Making and entering into this Stipulation shall not be deemed in any respect to constitute an admission by either Party that any computation, formula, allegation, assertion or contention made by any Party in these proceedings is true or valid. Nothing in this Stipulation shall be used or construed for any purpose to

imply, suggest or otherwise indicate that the results produced through the compromise reflected herein represent fully the objectives of a Party.

12. **Authorizations.** The signatories hereto warrant that they have informed, advised, and consulted with the respective Parties hereto regarding the contents of this Stipulation, and based upon the foregoing, are authorized to execute this Stipulation on behalf of the Parties hereto.

13. **Commission Approval.** This Stipulation is subject to the acceptance of and approval by the Commission.


14. **Interpretation of Stipulation.** This Stipulation is a product of negotiation among all Parties hereto, and no provision of this Stipulation shall be strictly construed in favor of or against any Party.

15. **Counterparts.** This Stipulation may be executed in multiple counterparts.

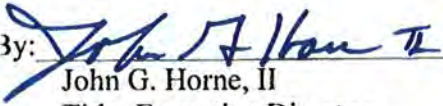
16. **Future Proceedings.** Nothing in this Stipulation shall preclude, prevent or prejudice any Party hereto from raising any argument/issue or challenging any adjustment in any future rate case proceeding of Duke Energy Kentucky.

IN WITNESS WHEREOF, this Stipulation has been agreed to effective this 5th day of March 2020. By affixing their signatures below, the undersigned Parties respectfully request the Commission to issue its Order approving and adopting this Stipulation the Parties hereto have hereunto affixed their signatures.

DUKE ENERGY KENTUCKY, INC

By: 
Amy B. Spiller
Title: President

ATTORNEY GENERAL OF THE
COMMONWEALTH OF KENTUCKY

By: 
John G. Horne, II
Title: Executive Director,
Office of Rate Intervention

APPENDIX B

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2019-00277 DATED APR 27 2020

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 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 RS	(\$0.000371) per kWh
Distribution Level Rates Part A DS, DP, DT, GS-FL, EH & SP	\$0.004408 per kWh
Transmission Level Rates & Distribution Level Rates Part B TT	\$0.000637 per kWh
Distribution Level Rates Total DS, DP, DT, GS-FL, EH & SP	\$0.005045 per kWh
<u>Gas Rider DSM</u>	
Residential Rate RS	(\$0.011350) per Ccf

*Debbie Gates
Duke Energy Kentucky, Inc.
139 East Fourth Street
Cincinnati, OH 45201

*Duke Energy Kentucky, Inc.
139 East Fourth Street
Cincinnati, OH 45202

*Larry Cook
Assistant Attorney General
Office of the Attorney General Office of Rate
700 Capitol Avenue
Suite 20
Frankfort, KENTUCKY 40601-8204

*J. Michael West
Office of the Attorney General Office of Rate
700 Capitol Avenue
Suite 20
Frankfort, KENTUCKY 40601-8204

*Minna Sunderman
Duke Energy Kentucky, Inc.
139 East Fourth Street
Cincinnati, OH 45201

*Rocco O D'Ascenzo
Duke Energy Kentucky, Inc.
139 East Fourth Street
Cincinnati, OH 45201