

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

|   |            |
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| APPLICATION OF DUKE ENERGY KENTUCKY, )  |            |
| INC. FOR (1) A CERTIFICATE OF PUBLIC )  |            |
| CONVENIENCE AND NECESSITY AUTHORIZING ) | CASE NO.   |
| THE CONSTRUCTION OF AN ADVANCED )       | 2016-00152 |
| METERING INFRASTRUCTURE; (2) REQUEST )  |            |
| FOR ACCOUNTING TREATMENT; AND (3) ALL ) |            |
| OTHER NECESSARY WAIVERS, APPROVALS, )   |            |
| AND RELIEF )                            |            |

ORDER

On April 25, 2016, Duke Energy Kentucky, Inc. ("Duke Kentucky") filed an application requesting a Certificate of Public Convenience and Necessity ("CPCN") to replace and upgrade its current electric and gas metering infrastructure to a digital Advanced Metering Infrastructure ("AMI") for its electric and combination customers, and an Automated Meter Reading ("AMR") infrastructure for its gas-only customers, collectively ("AMI Project"). Duke Kentucky also sought approval of new depreciation rates for the new metering equipment, and to establish a regulatory asset for the retirement of its existing electric metering equipment, associated inventory, and inventory of existing gas modules. Last, Duke Kentucky also requested deviations from Commission regulations 807 KAR 5:006, Section 7(5)(b), and 807 KAR 5:006, Section 14, as they relate to Duke Kentucky's proposed AMI Project.

The Attorney General ("AG"), by and through his Office of Rate Intervention, sought and was granted leave to intervene on May 17, 2016, and is the only intervenor

in this proceeding. Duke Kentucky responded to two rounds of requests for information from both Commission Staff and the AG, and the AG filed testimony and responded to one round of requests for information from Commission Staff and Duke Kentucky. Duke Kentucky filed rebuttal testimony on October 13, 2016, and a hearing was held in this matter on December 8, 2016. Duke Kentucky provided responses to a post-hearing request for information on December 22, 2016. Prior to the hearing, on December 6, 2016, Duke Kentucky and the AG filed a Stipulation and Recommendation (“Stipulation”) intended to address all the issues raised in this proceeding.

#### BACKGROUND

Duke Kentucky proposes to install approximately 143,000 electric AMI meters, approximately 82,500 gas AMI modules for its combination customers, and approximately 20,500 gas AMR modules for its gas-only customers, at an estimated cost of \$49 million.<sup>1</sup> Duke Kentucky describes several issues with its current metering system which consists mainly of electromechanical meters. Duke Kentucky also has a small number of early generation smart meters that were deployed as part of a pilot Power Line Carrier (“PLC”) system.<sup>2</sup> However, due to the limited bandwidth on the PLC system, Duke Kentucky’s existing smart meters are unable to obtain daily electric usage data.<sup>3</sup> Duke Kentucky also discovered that its PLC meter system had limited ability to retrieve meter readings during circuit re-routing events such as substation maintenance,

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<sup>1</sup> Application, ¶ 14 and ¶ 18.

<sup>2</sup> *Id.* at ¶ 6.

<sup>3</sup> *Id.* at ¶ 7.

outages, or seasonal switching situations, which often results in lost data, which would then require manual or estimated meter reads.<sup>4</sup> Duke Kentucky's PLC system also lacks the ability to perform remote connections and disconnections.<sup>5</sup>

Duke Kentucky states that it has approximately 65,000 meters located inside the customers' premises, and nearly 50,000 of those meters are electromechanical meters requiring a meter reader to enter the premises to obtain a manual reading.<sup>6</sup> Duke Kentucky states that the proposed AMI Project will alleviate the issues mentioned above and will also make more detailed usage information available to its customers. In addition, Duke Kentucky has been developing a suite of additional customer services that it would like to provide to its customers once the AMI Project is complete. Such services would allow customers to choose their bill due date, enroll in prepay metering, and provide outage notifications.<sup>7</sup> Duke Kentucky asserts that with the new metering system, customers will benefit by having greater and more detailed access to their usage information.<sup>8</sup> In addition, customers needing to start or stop service will no longer be required to schedule an appointment, and customers who are disconnected for non-payment will be able to have their service turned on nearly instantaneously, rather than having to wait for a Duke Kentucky technician.<sup>9</sup> Duke Kentucky states that

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<sup>4</sup> *Id.* at ¶ 7.

<sup>5</sup> *Id.*

<sup>6</sup> Direct Testimony of James P. Henning ("Henning Testimony") at 10–11.

<sup>7</sup> *Id.* at 13–14.

<sup>8</sup> Direct Testimony of Donald L. Schneider Jr. ("Schneider Testimony") at 12.

<sup>9</sup> *Id.*

the new metering system will also serve to reduce its outage restoration time as Duke Kentucky can “ping” individual meters after an outage event to determine if any have not had service reconnected.<sup>10</sup> Duke Kentucky contends that customers will also eventually experience savings through Duke Kentucky’s rates due to fewer daily and monthly truck rolls to perform disconnects and reconnects, and reduced meter reading expenses.<sup>11</sup> Duke Kentucky has selected Itron to provide its new metering system.

### STIPULATION

The Stipulation filed on December 6, 2016, reflects the agreement of Duke Kentucky and the AG on all issues raised during this proceeding. The major provisions of the Stipulation are as follows:

- Approval of Application. The parties agree that Duke Kentucky’s application be approved as filed and described in its application and testimony, except as modified by the stipulation.
- Regulatory Asset. The parties agree that Duke Kentucky should be authorized to establish a regulatory asset for the actual costs of the balance of the undepreciated value of the existing metering infrastructure upon retirement, including related inventory, as a result of the AMI Project. In its next base rate case, Duke Kentucky will propose an amortization period of 15 years for this regulatory asset, without carrying charges, for inclusion in the revenue requirement in Duke Kentucky’s

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<sup>10</sup> *Id.* at 12–13.

<sup>11</sup> *Id.* at 12.

electric base rates. Duke Kentucky reserves the right to request carrying costs if the Commission approves an amortization period that is greater than 15 years.

- Cost Over-Runs. Duke Kentucky anticipates filing a base electric rate case no later than December 31, 2019. Although Duke Kentucky does not anticipate any cost over-runs during the deployment of the AMI Project, in the event such cost over-runs occur at the time Duke Kentucky seeks recovery in that future rate case, Duke Kentucky commits that it will specifically identify any such cost over-runs on an itemized basis that is consistent with the itemization contained in the Direct Testimony of Donald S. Schneider, Jr., Confidential Attachment DLS-4 ("DLS-4") in this proceeding.

- Operational Benefits. In its next base electric rate case, Duke Kentucky agrees to make appropriate adjustments to its test period to reflect the actual costs and associated savings related to the AMI Project, including: 1) the projected deployment costs or actual costs if deployment is completed; 2) ongoing costs of operations; 3) an adjustment to reflect the non-fuel-related portion of the Benefit Type: Increased Revenues reflected in DLS-4; 4) an adjustment to reflect the Operational Savings to date if a historical test year, and, if a forecasted test year, the forecasted Operational Savings that would be obtained during that test year;<sup>12</sup> and 5) a pro-forma adjustment to account for the projected ongoing Operational Savings as reflected in DLS-4, adjusted

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<sup>12</sup> The specific Operational Savings categories to be included in the adjustment are set forth in footnote 2 of the Stipulation.

to factor in any Operational Savings degradation that may accrue due to the establishment of an electric AMI opt-out tariff.<sup>13</sup>

- Natural Gas. Duke Kentucky does not currently have a natural gas rate case planned during the period when the AMI Project is being deployed. In order to provide an opportunity for its natural gas customers to timely receive the anticipated levels of Operational Savings attributed to the natural gas portion of the AMI Project and for Duke Kentucky to timely recover its deployment costs, the parties agree that Duke Kentucky will file, as a separate application for Commission review and consideration for approval, a proposal to establish a gas AMI/AMR deployment cost/benefit tracking mechanism. The tracking mechanism will be designed to enable, among other things: an opportunity for Duke Kentucky to timely recover its costs of deployment (i.e., incremental operation and maintenance ["O&M"], return, depreciation, amortization of regulatory assets, and property taxes net of the O&M savings) for the natural gas portion of the AMI Project; the deferral of natural gas metering infrastructure of the regulatory asset established in this proceeding; and will factor in the appropriate level of ongoing Operational Savings attributed to reductions in meter reading and other O&M expense that is allocable to natural gas metering operations and attributable to the AMI Project as indicated in DLS-4. The gas tracking mechanism will continue with annual adjustments and true-ups until Duke Kentucky's next natural gas base rate case. The initial application will include deployment costs and any Operational Savings incurred to

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<sup>13</sup> The Stipulation states that the pro-forma adjustment for the projected Operational Savings calculation will be in the form of a levelized net present value calculated using the 7.05 percent as presented in DLS-4 for the projected future Operation Savings which will be factored into Duke Kentucky's ongoing revenue requirement.

date and a projection for the remainder of calendar year 2017 and calendar year 2018. Subsequent annual applications will true-up the actual costs from the previous year and adjust for recovery of the remainder of costs incurred during the year. The tracking mechanism will cease on the day that new gas base rates, which will include the gas AMI costs and Operational Savings, becomes effective.

- Customer Opt-Out Program. Duke Kentucky agrees to implement an Electric AMI Opt-Out Program Tariff for residential customers to be effective at the time of initial AMI Project deployment. The Advanced Meter Opt-Out (AMO) – Residential Tariff (“Rider AMO”) includes a one-time initial set-up fee of \$100 and a \$25 per month ongoing charge for manual meter reading. Customers who notify Duke Kentucky before an AMI meter is installed on their premise will not incur the \$100 initial set up fee but will be subject to the \$25 monthly charge.

- Residential Peak Time Rebate Pilot and Mandatory Residential Demand-Based Charges. No later than six months from completion of the AMI Project, Duke Kentucky agrees to file a pilot Peak-Time Rebate voluntary pilot tariff for up to 1,000 customers to have the opportunity to earn rebates by reducing usage during peak event periods. Duke Kentucky commits not to implement mandatory residential demand-based charges for at least six years unless otherwise ordered by the Commission or law.

- Customer Data. Duke Kentucky commits to allow its customers to have access to their own usage information through its web portal as part of the AMI Project. Duke Kentucky also agrees to provide non-customer specific usage data in aggregate

form to governmental and educational agencies, provided the information is solely for educational or research purposes.

- Annual and Semi-Annual Reporting. Duke Kentucky agrees that during deployment of its new metering infrastructure and for three years following completion of deployment, it will provide annual reporting to the AG and the Commission regarding the development of products and services designed to engage its customers around their energy consumption.

- Reconnection Charges. Duke Kentucky agrees that in its next electric base rate proceeding, it will revise its reconnection charges to reflect the then-current actual costs of performing a reconnection.

- Future Smart Grid Investments. Duke Kentucky agrees that in any future applications for major AMR or AMI meter investments, distribution grid investments for distribution automation, or "SCADA or volt/var resources" that require a CPCN, it will include a detailed cost-benefit analysis similar to what was submitted in this case.

#### DISCUSSION

The Commission's standard of review of a request for a CPCN is well settled. No utility may construct or acquire any facility to be used in providing utility service to the public until it has obtained a CPCN from this Commission except as provided for in KRS 278.020(1) and (2) and 807 KAR 5:001, Section 15(3). Based on the cost and nature of the project proposed by Duke Kentucky, the Commission finds that the exceptions are



not applicable and, thus, a CPCN is required.<sup>14</sup> To obtain a CPCN, the utility must demonstrate a need for such facilities and an absence of wasteful duplication.<sup>15</sup>

“Need” requires:

[A] showing of a substantial inadequacy of existing service, involving a consumer market sufficiently large to make it economically feasible for the new system or facility to be constructed or operated.

[T]he inadequacy must be due either to a substantial deficiency of service facilities, beyond what could be supplied by normal improvements in the ordinary course of business; or to indifference, poor management or disregard of the rights of consumers, persisting over such a period of time as to establish an inability or unwillingness to render adequate service.<sup>16</sup>

“Wasteful duplication” is defined as “an excess of capacity over need” and “an excessive investment in relation to productivity or efficiency, and an unnecessary multiplicity of physical properties.”<sup>17</sup> To demonstrate that a proposed facility does not result in wasteful duplication, we have held that the applicant must demonstrate that a thorough review of all reasonable alternatives has been performed.<sup>18</sup> Selection of a proposal that ultimately costs more than an alternative does not necessarily result in

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<sup>14</sup> KRS 278.020(1).

<sup>15</sup> *Kentucky Utilities Co. v. Pub. Serv. Comm'n*, 252 S.W.2d 885 (Ky. 1952).

<sup>16</sup> *Id.* at 890.

<sup>17</sup> *Id.*

<sup>18</sup> Case No. 2005-00142, *Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Certificate of Public Convenience and Necessity for the Construction of Transmission Facilities in Jefferson, Bullitt, Meade, and Hardin Counties, Kentucky* (Ky. PSC Sept. 8, 2005).

wasteful duplication.<sup>19</sup> All relevant factors must be balanced.<sup>20</sup> The statutory touchstone for ratemaking in Kentucky is the requirement that rates set by the Commission must be fair, just and reasonable.<sup>21</sup>

#### Duke Kentucky's Application

Having reviewed the record and being otherwise sufficiently advised, the Commission finds that Duke Kentucky has established a need to upgrade its metering system in order to enhance its ability to serve its customers by providing them with innovative programs and services to have greater access to data and better control over their energy consumption as well as to improve the reliability of Duke Kentucky's distribution system. We note that electro-mechanical meters are no longer being manufactured, and Duke Kentucky's current AMI meters are limited in its capabilities with respect to data collection and communication. In addition, we note that Duke Kentucky currently has 64,883 meters that are located inside its customers' premises.<sup>22</sup> Of these interior meters, nearly 50,000 are standard electro-mechanical meters, which require manual reading.<sup>23</sup> The proposed AMI Project will eliminate the costs and resources associated with Duke Kentucky having to enter these customers' homes on a

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<sup>19</sup> See *Kentucky Utilities Co. v. Pub. Serv. Comm'n*, 390 S.W.2d 168, 175 (Ky. 1965). See also Case No. 2005-00089, *Application of East Kentucky Power Cooperative, Inc. for a Certificate of Public Convenience and Necessity for the Construction of a 138 kV Electric Transmission Line in Rowan County, Kentucky* (Ky. PSC Aug. 19, 2005), final Order.

<sup>20</sup> Case No. 2005-00089, *East Kentucky Power Cooperative, Inc.* (Ky. PSC Aug. 19, 2005), final Order at 6.

<sup>21</sup> KRS 278.190(3).

<sup>22</sup> Henning Testimony at 10–11.

<sup>23</sup> *Id.*

monthly basis to conduct a meter reading.<sup>24</sup> In addition, the AMI Project will improve Duke Kentucky employee safety.<sup>25</sup>

The Commission further finds that the benefits from the proposed AMI Project outweigh the cost. Duke Kentucky performed a cost-benefit analysis, which showed that the proposed AMI Project would result in a net benefit of \$7,418,653, on a net present value basis over a 17-year study period.<sup>26</sup> The main benefits identified and quantified by Duke Kentucky are the elimination of monthly and off-cycle manual meter reads, the elimination of truck rolls due to the ability to conduct electric disconnects and reconnects remotely, enhanced theft detection, reduction of meter installation errors, reduction of underperforming meters, and the availability of interval usage data that can empower customers to better understand their energy usage and save energy.<sup>27</sup>

Duke Kentucky's application also requests a nine-year depreciable life for its gas modules. In support of the nine-year life, Duke Kentucky stated that "[t]his shorter depreciable life for the gas modules is driven by the operational efficiency created by aligning the replacement of the gas module with the nine-to-ten year replacement/testing schedule of the residential natural gas meters in accordance with Commission regulations."<sup>28</sup> <sup>29</sup> Information provided in Duke Kentucky's Application from

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<sup>24</sup> Henning Testimony at 11.

<sup>25</sup> *Id.*

<sup>26</sup> Schneider Testimony, Exhibit DLS-4.

<sup>27</sup> Schneider Testimony at 26.

<sup>28</sup> Application, ¶ 23.

<sup>29</sup> 807 KAR 5:022, Section 8 requires that gas meters be tested every ten years.

Itron, the gas module manufacturer, shows that the battery life of the modules can range from 13–20 years.<sup>30</sup> Furthermore, Itron information included in the Application specifically states that the expected battery life is 18 to 20 years for one scheduled transmission per day and 15 to 17 years for two scheduled transmissions per day.<sup>31</sup> The Commission is not convinced that a shorter, nine-year depreciable life is appropriate given that it is well below the shortest life estimate provided by the manufacturer. Therefore, the Commission finds that Duke Kentucky should use a 15-year depreciable life for its gas modules. When questioned about the useful life of the gas modules at the December 8, 2016 hearing, Duke Kentucky stated that it would be agreeable to a 15-year life if it were granted a deviation from 807 KAR 5:022, Section 8(5), to allow meter testing every 15 years rather than every ten years, as required by the regulation. However, Duke Kentucky has not provided sufficient information in compliance with KRS 278.210(4) to demonstrate through sample testing that no statistically significant number of its residential gas meters over-register. Thus, the Commission is unable to grant the requested deviation. As previously stated, Duke Kentucky currently replaces/tests its residential natural gas meters on a nine-to-ten year cycle. Given the information provided in the Application, the Commission believes it is likely that the gas modules will last through two replacement/testing cycles.

Duke Kentucky's application also requests, among other things, a deviation from 807 KAR 5:006, Section 7(5)(b), and 807 KAR 5:006, Section 14. 807 KAR 5:006,

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<sup>30</sup> Application, Exhibit 4, at 7 of 8.

<sup>31</sup> *Id.*, at 3 of 8.

Section 7(5)(b), requires each customer-read meter to be read manually at least once during a calendar year. Duke Kentucky asserts that “[t]o the extent this regulation could be interpreted as requiring Duke Energy Kentucky to manually read a meter at least once a year, the Company respectfully requests a waiver of such a requirement.”<sup>32</sup> Duke Kentucky further asserts that requiring the proposed new meters to be manually read every year would reduce one of the primary benefits of the AMI Project of being able to remotely read meters on a monthly basis. The Commission finds that the annual meter reading requirement under 807 KAR 5:006, Section 7(5)(b), applies only to customer-read meters. Because the proposed meters under the AMI Project are capable of being read remotely and do not fall within the class of meters that are customer read, the Commission finds that 807 KAR 5:006, Section 7(5)(b), would not apply to the proposed AMI Project and, thus, a waiver is not necessary.

With respect to 807 KAR 5:006, Section 14(3), which requires an electric utility to inspect the condition of its meter before making service connections to a new customer so that prior or fraudulent use of the meter shall not be attributed to the new customer, Duke Kentucky maintains that advanced theft detection and remote connection and disconnection provided by the new meters would allow Duke Kentucky to know if energy continues to flow through the meter after a customer has requested to be disconnected.<sup>33</sup> This would allow Duke Kentucky to fully investigate the theft and address it prior to a new customer’s taking service at that location, ensuring that the

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<sup>32</sup> Application ¶ 49.

<sup>33</sup> Schneider Testimony at 17.

new customer will not be adversely affected by the consumption or fraudulent acts of a prior customer.<sup>34</sup> The Commission finds that Duke Kentucky has established good cause to allow it a deviation from the inspection requirements of 807 KAR 5:006, Section 14(3).

#### Stipulation

The Commission finds that, with the exception of the Gas Cost/Benefit Tracker provision, the Stipulation entered into between Duke Kentucky and the AG is reasonable and should be approved. Duke Kentucky's application as filed did not request a Gas Cost/Benefit Tracker provision. However, as part of the stipulation, Duke Kentucky commits to submitting an application, within six months from the date of the Commission's decision approving the instant application, to establish a tracking mechanism designed to enable Duke Kentucky to timely recover the deployment costs related to the gas portion of the AMI Project, the deferral of natural gas metering infrastructure included in the regulatory asset established in this proceeding, and take into account the appropriate level of ongoing Operational Savings attributed to reductions in meter reading and other O&M expense that is allocable to natural gas metering operations and attributable to the AMI Project as indicated in DLS-4.

In reviewing the cost-benefit analysis performed by Duke Kentucky, the Commission finds that there will be large upfront capital costs in years one through three for the of the natural gas portion of the AMI Project, and the net benefits will not be achieved until year four. For these reasons, the Commission is not convinced that a

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<sup>34</sup> *Id.*

gas tracking mechanism is in the best interest of Duke Kentucky's ratepayers. Thus, we find that the commitment by Duke Kentucky to request immediate implementation of a tracking mechanism to be unreasonable and should be rejected. Consistent with the recovery and recognition of the costs and benefits of the electric metering infrastructure related portion of the AMI Project in Duke Kentucky's next electric base rate case, Duke Kentucky should include all of the costs and benefits associated with the gas metering infrastructure portion of the AMI Project in its next gas base rate case.

#### Pilot Peak Time Rebate Tariff

The Commission recognizes that the Stipulation contains a provision requiring Duke Kentucky to file a separate application for a Pilot Peak Time Rebate tariff as part of a future Demand-Side Management ("DSM") filing. The Commission gives notice that the merits of the Pilot Peak Time Rebate tariff will be reviewed at the time it is filed. As the Commission stated in a recent order in a Duke Kentucky DSM case,<sup>35</sup> we are concerned about the increasing number of utility DSM programs and the associated increase in costs to ratepayers, particularly as the costs of the programs are borne by all customers in a rate class and are not limited to the participants in the DSM programs. Therefore, the Commission will apply greater scrutiny in its review of all future DSM filings, with a particular emphasis on reviewing the costs, benefits, and rate impact of each program and measure.

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<sup>35</sup> Case No. 2016-00289, *Electronic Application of Duke Energy Kentucky, Inc. to Amend Its Demand Side Management Programs* (Ky. PSC Jan. 24, 2017).

### Depreciation of Existing Meters

At the December 8, 2016 hearing in this matter, Duke Kentucky stated that after receiving a final Order approving its AMI Project, and an additional internal approval, it would stop recording depreciation on the meters being replaced due to accounting rules governing the impairment of assets.<sup>36</sup> The Commission finds that a meter still being used to obtain a customer's usage information could not be considered to be impaired, because it is still used and useful. Furthermore, the Commission has approved a number of meter replacement projects and is unaware of any other jurisdictional utility that has been required to cease depreciating their meters upon the granting of a CPCN for such project and prior to the existing meters' being replaced by a new AMI meter. Therefore, the Commission finds that Duke Kentucky should continue to depreciate its meters until they are removed from service. Furthermore, the Commission finds that Duke Kentucky should make all reasonable efforts to mitigate the amount of the regulatory asset due to the stranded meter costs.

IT IS THEREFORE ORDERED that:

1. The Stipulation attached hereto as the Appendix is conditionally approved and Duke Kentucky is conditionally granted a CPCN to install AMI infrastructure for its electric and combination customers and AMR infrastructure for its gas-only customers subject to Duke Kentucky and the AG jointly or individually filing within seven days of the date of this Order a statement accepting the Commission's modifications to the Stipulation as set forth in Ordering Paragraphs 2, 3, and 4 below.

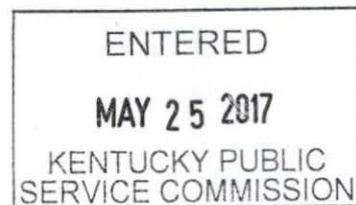
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<sup>36</sup> December 8, 2016 Hearing Video at 11:06.



2. Duke Kentucky shall use a 15-year depreciable life for its gas modules.
3. Duke Kentucky is not authorized to file a Gas Cost/Benefit Tracker mechanism prior to filing its next gas base gas base rate case.
4. Any request for cost recovery of the gas-related infrastructure approved in this case shall be included by Duke Kentucky in its next gas base rate case.
5. Duke Kentucky's request to deviate from 807 KAR 5:006, Section 7(5)(b), is denied as unnecessary.
6. Duke Kentucky's request to deviate from 807 KAR 5:006, Section 14(3), as it relates to Duke Kentucky's proposed AMI Project is granted.
7. Within 20 days of the date of this Order, Duke Kentucky shall file with this Commission, using the Commission's electronic Tariff Filing System, its Electric AMI Opt-Out Tariff Rider AMO, setting out the rates approved herein and reflecting that they were approved pursuant to this Order.

By the Commission



ATTEST:

  
Executive Director

APPENDIX

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE  
COMMISSION IN CASE NO. 2016-00152

**COMMONWEALTH OF KENTUCKY  
BEFORE THE  
KENTUCKY PUBLIC SERVICE COMMISSION**

In the Matter of:

The Application of Duke Energy Kentucky, )  
Inc., for (1) a Certificate of Public )  
Convenience and Necessity Authorizing )  
the Construction of an Advanced Metering ) Case No. 2016-00152  
Infrastructure; (2) Request for Accounting )  
Treatment; and (3) All Other Necessary )  
Waivers, Approvals, and Relief. )

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**STIPULATION AND RECOMMENDATION**

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On or about April 25, 2016 Duke Energy Kentucky, Inc., (Duke Energy Kentucky or the Company) filed its application with the Kentucky Public Service Commission (Commission), pursuant to KRS 278.020, and 807 KAR 5:001, Sections 14 and 15, for Certificate of Public Convenience and Necessity (CPCN) for approval to replace and upgrade its existing metering infrastructure by constructing and installing a more advanced system of digital technologies including Advanced Metering Infrastructure (AMI) for its electric and combination electric and natural gas operations and an Automated Meter Reading (AMR) infrastructure for its gas only operations (Metering Upgrade). The Company also requested establishment of equipment depreciation rates for the new metering equipment (15 years for electric AMI meters, and 9 years for gas modules) and approval of the creation of a regulatory asset related to the retirement of existing electric metering equipment, associated inventories and any waivers, approval, and relief necessary to implement the Metering Upgrade and achieve the anticipated

functionality. On or about May 10, 2016, the Attorney General of the Commonwealth of Kentucky (Attorney General) filed its motion to intervene, which was subsequently granted by the Commission.

The Attorney General and the Commission Staff have engaged in substantial investigation of the Company's Application by issuing numerous information requests to which the Company has responded.

Duke Energy Kentucky and the Attorney General (the Parties), representing diverse interests and viewpoints, have reached a complete settlement of all the issues raised in this proceeding and have executed this Stipulation and Recommendation (Stipulation) for purposes of submitting their agreement to the Commission for consideration and approval. It is the intent and purpose of the Parties to express their agreement to 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 278.020, and 807 KAR 5:001, Sections 14 and 15, including granting of the Company's Application as requested and as further modified below. 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 agreements set forth herein, the Parties agree as follows:

1. **Approval of Application.** Duke Energy Kentucky's Application shall be approved as filed and described in Company's Application and Supporting Testimony, except as modified below.

2. **Regulatory Asset.** The Parties agree that Duke Energy Kentucky shall establish a regulatory asset for the actual costs of the balance of the undepreciated value of the existing metering infrastructure upon retirement, including related inventory, as a result of the Metering Upgrade. The Parties agree that in its next base rate case, Duke Energy Kentucky shall propose an amortization period of fifteen years, for this regulatory asset, without carrying charges, for inclusion in the revenue requirement in the Company's electric base rates. Duke Energy Kentucky reserves the right to request carrying costs if the Commission approves an amortization period that is greater than fifteen years for this asset.

3. **Cost Over-runs.**

a. The Parties recognize that Duke Energy Kentucky anticipates filing a base electric rate case no later than December 31, 2019. Although Duke Energy Kentucky does not anticipate any cost-over runs during the Metering Upgrade deployment, in the event such cost-over runs occur, at the time the Company seeks recovery in that future rate case, Duke Energy Kentucky commits that it will specifically identify any such cost-over runs on an itemized basis that is consistent with the

itemization contained in Confidential Attachment DLS-4 in this proceeding. Duke Energy Kentucky shall include in its direct testimony an explanation of any such cost over-runs. Duke Energy Kentucky shall bear the burden of proof for prudence of the recovery of any such overruns. The Parties and the Commission maintain all rights to either support or oppose the prudence of any cost over-runs.

b. Duke Energy Kentucky commits that there will be no degradation of the AMI capabilities and operational benefits described in its direct testimony in the event of any cost over-run.

c. Duke Energy Kentucky commits to look for opportunities for additional efficiencies and cost savings through the Metering Upgrade Deployment. The Company shall report on its efforts as part of the six month Metering Upgrade Deployment reporting described in section 8 below.

4. **Operational Benefits.**

a. **Electric.** The Parties agree that in its next base electric rate case, estimated to be filed before December 31, 2019, Duke Energy Kentucky shall make appropriate adjustments to its rate case test period to reflect: 1) the projected deployment costs<sup>1</sup>; 2) ongoing costs of operations; 3) an adjustment to reflect the non-fuel-related portion of the Benefit Type: Increased Revenues reflected in Confidential Exhibit DLS-4; 4) an adjustment to reflect the Operational Savings<sup>2</sup> to date if a historic test year, and, if a forecasted test year, the forecasted Operational Savings that would be obtained during that test year; and 5) a pro-forma adjustment to account for the projected ongoing

<sup>1</sup> Or actual costs if deployment is completed.

<sup>2</sup> The term "Operational Savings" is defined as the Benefit Types listed in Confidential Exhibit DLS-4 of Expense Reduction; and the Avoided Costs-[operations and maintenance] O&M savings descriptions associated with: i) Avoided restoration costs-OK on arrival; ii) Avoided restoration costs-major storms; iii) Associated with maintenance of TWACS; iv) Associated with Operations of TWACS; and v) Miscellaneous O&M.

Operational Savings as reflected in Confidential Exhibit DLS-4, adjusted to factor in any Operational Savings degradation that may accrue due to the establishment of an electric AMI opt-out tariff as described below. The pro-forma adjustment for the projected Operational Savings calculations shall be in the form of a levelized net present value calculated using the 7.05% as presented in Confidential Exhibit DLS-4 for the projected future Operational Savings which will be factored into the Company's ongoing revenue requirement.

b. **Gas.** The Parties acknowledge that Duke Energy Kentucky does not currently have a natural gas rate case planned during the scope of the Metering Upgrade deployment. In order to provide an opportunity for its natural gas customers to timely receive the anticipated levels of Operational Savings attributed to the natural gas portion of the Metering Upgrade proposal and for the Company to timely recover its deployment costs, the Parties agree that Duke Energy Kentucky will file , as a separate application for Commission review and consideration for approval, a proposal to establish a gas AMI/AMR deployment cost/benefit tracking mechanism. This separate application shall be filed within six months of the Commission approving the Company's CPCN application in this proceeding. The tracking mechanism will be designed to enable, among other things, an opportunity for the Company to timely recover its costs of deployment (i.e., incremental O&M, return, depreciation, amortization of regulatory assets, and property taxes, net of the O&M savings) for the natural gas portion of the Metering Upgrade, the deferral of natural gas metering infrastructure of the regulatory asset established in this proceeding and will factor in the appropriate level of ongoing Operational Savings attributed to reductions in meter reading and other O&M expense

that is allocable to natural gas metering operations and attributable to the Metering Upgrade as indicated in Confidential Attachment DLS-4. The gas tracking mechanism, which shall be modeled after the Company's Accelerated Service Line Replacement Rider (Rider ASRP), shall continue with annual adjustments and true-ups until the Company's next natural gas base rate case. The initial application shall include deployment costs and any Operational Savings incurred to date and a projection for the remainder of calendar year 2017 and calendar year 2018. Subsequent annual applications will true-up the actual costs from the previous year and adjust for recovery of the remainder of costs incurred during the year. The Gas AMI rider will cease on the day that new base rates, which will include the gas AMI costs and Operational Savings, will be effective. The Company will propose a smooth transition so as to ensure that costs will not be double recovered and Operational Savings credited are not double counted. The Attorney General agrees that it will support the establishment of the rider mechanism as contemplated in this Stipulation, but reserves the right to support or oppose other aspects of the filing that are yet to be established, such as rate design, return, etc.

5. **Customer Opt-Out Program.** The Parties agree that Duke Energy Kentucky shall implement an Electric AMI Opt-Out Program Tariff for residential customers to be effective at the time of initial AMI deployment. The Opt-Out Program Tariff, included as Appendix A to this Stipulation, includes recovery of fixed and ongoing costs of providing residential customers a voluntary Electric AMI Opt-Out Program. The costs that will initially be established under the rider are as follows:

- a. A one-time initial set-up fee of \$100; and
- b. \$25.00 per month ongoing charge for manual meter reading.



To assure customers have multiple opportunities to become aware of the Metering Upgrade project and installation of an AMI meter, Duke Energy Kentucky will include a bill insert for all electric customers notifying them of the Metering Upgrade program and the installation of an AMI meter within the next 18 months. Secondly, this will be followed up with a direct mail postcard via United States Postal Service to the billing address notifying the customer of the Metering Upgrade program and the installation of an AMI meter starting in the following two weeks period. Each of these written notifications will include Company contact information regarding the Metering Upgrade and Opt-Out Program. And thirdly, on the day of the meter installation, the meter installation technician will attempt to make personal notification to customer if they are on site.

Subject to Commission approval of this Opt-Out Program, and during the Metering Upgrade project deployment phase, if prior to the installation of an AMI meter at a customer's premise, any existing residential electric customer elects to participate in the Opt-Out Program, Duke Energy Kentucky will not charge the one-time set-up fee, if the residential electric customer notifies the Company of such election before an AMI meter is installed under this Metering Upgrade. However, those residential customers electing to participate in the Residential Opt-Out Program will still be subject to the \$25.00 per month ongoing charge. Following deployment completion, any residential customer who elects to participate in the Opt-Out Program will be assessed the one-time \$100 set-up fee in addition to the ongoing monthly charge.

Any costs that are not fully recovered by the Opt-Out Program Tariff for providing the ongoing Opt-Out Program shall be eligible for recovery in Duke Energy

Kentucky's base rates. The Company reserves the right to update the Opt-Out Program Tariff in future electric base rate proceedings if levels of participation change or if actual costs differ from the estimated costs caused by customers electing the Opt-Out. Duke Energy Kentucky shall have the burden of proof for recovery of these costs and will support such costs with a detailed and itemized schedule.

The Parties acknowledge that the provision of an Opt-Out Program was not included in the Company's application and thus is not reflected in the Company's cost-benefit analysis or deployment costs. The incremental non-recurring O&M costs for the information technology solution required to enable this Opt-Out Program is estimated to be an additional \$140,000. The Parties agree that Duke Energy Kentucky should be permitted to defer these costs for future base rate recovery. The accounting for this deferral would be to create a Regulatory Asset Account 182.3 and to credit the relevant O&M expenses to be deferred.

The Parties further acknowledge that the creation of the Opt-out Program will have an impact on the Company's cost benefit analysis and the benefits projected. The Parties agree that such incremental costs shall not be considered as cost-over runs and that any savings that cannot be achieved as a result of the Opt-Out Program implementation shall be factored into any base rate case pro-forma adjustments discussed above.

Additionally, the Company shall have the right to refuse or to terminate a customer's participation in the Residential Opt-Out Program in either of the following circumstances:

a. If providing such a service creates a safety hazard to consumers, their premises, the public or the electric utility's personnel or facilities; or

b. If a customer does not allow the electric utility's employees or agents access to the meter at the customer's premises for maintenance, connection/disconnection, or regular meter-reading.

6. **Residential Peak Time Rebate Pilot and Mandatory Residential Demand-Based Charges.**

a. No later than six months from completion of the Metering Upgrade Deployment, Duke Energy Kentucky commits to design and propose for Commission review and approval, a Residential Peak-Time Rebate Voluntary Pilot (PTR Pilot). The intent of the PTR Pilot will be to collect the information from voluntary participants needed to properly evaluate the potential addition of a Peak-Time Rebate program that could be made available to all eligible residential customers. The PTR design to be tested will provide an after-the-fact bill credit to participating residential customers who, after advance notice by the Company, are able to actually lower their energy consumption from that of a defined consumption baseline in response to, and during, defined pricing "events" throughout the year. The yet-to-be determined bill credit will be designed on a cents per kWh basis. Participating customers who do not lower their consumption during those periods will not earn the rebate credit.

So to avoid any negative earnings impacts to Duke Energy Kentucky during the PTR Pilot period, the PTR Pilot shall be designed and approved as a complementary program to the Company's existing energy efficiency and demand response portfolio of programs and shall be vetted through Duke Energy Kentucky's Residential Demand Side

Management (DSM) Collaborative process, of which the Attorney General is a member. Upon Collaborative approval, the PTR Pilot will be filed for Commission review and approval as part of one of the Company's annual DSM portfolio filings. Should the expiration of the six months from completion of the Metering Upgrade deployment not coincide in such a way that the Company can include the PTR Pilot as part of its annual DSM portfolio update filing currently made on or about August 15<sup>th</sup>, annually, the Company shall file for approval of the PTR Pilot as a separate application.

Upon Commission approval, the incremental costs of developing, and operating the PTR Pilot, as well as any lost fixed revenues, shall be recoverable through Duke Energy Kentucky's annual Rider DSM adjustments so as to prevent any possible erosion of the Company's lost fixed revenues. The PTR Pilot shall be excluded from the shared savings incentive mechanism calculation computed in the annual Rider DSM.

The initial PTR Pilot shall be conducted for a two-year period and will be limited to the first one thousand (1,000) eligible residential customers that enroll in the program for the opportunity to earn rebates by reducing usage during event periods. The PTR Pilot design phase shall also include a recommended marketing plan with annual caps on spending that will be presented to the DSM Collaborative. Duke Energy Kentucky shall market the program to all eligible residential customers for the duration of the program pilot until it is fully subscribed. Eligibility terms and conditions for the pilot will be determined during the pilot design phase. As part of the registration/application process for interested residential customers, the Company will include a self-identification that indicates whether a participating customer has a programmable thermostat. At the conclusion of the two-year pilot period, enrollment will be closed at the existing level and

no new customers will added so that Duke Energy Kentucky can have an independent evaluation, measurement and verification (EM&V) study performed to determine the cost-effectiveness and participation results of the PTR Pilot.

Prior to the PTR pilot commencing, the independent third party EM&V evaluator selected shall provide a detailed presentation to Duke Energy Kentucky's DSM Collaborative on the topics of the EM&V protocols and methodologies to be used as well as feedback related to the pilot design. After completion of the pilot, the evaluator will review the pilot results with the DSM Collaborative. In addition to these formal recommendations, the EM&V report will discuss, among other things, the following questions:

- Did the chosen bill credit motivate behavior change?
- Were customers properly identified for the bill credit and paid accordingly?
- Was the marketing campaign successful?
- Were customers effectively educated and motivated to use the program?
- Did event notifications reach the customer such that they could effectively respond to the event?
- What reasonable enhancements, if any, could be made cost effectively to continue the PTR Program?

Duke Energy Kentucky shall submit the results of the EM&V study to the Commission along with recommendations regarding the continuation of the PTR program, the cost effectiveness of the PTR, whether the PTR program participation limitation should be expanded to additional eligible residential customers and small commercial tariffs , whether any reasonable enhancements that should be made to the program for such expansion and cost-effectiveness, or whether it should simply be terminated.

b. Duke Energy Kentucky commits that, unless ordered by the Commission or otherwise required by law, it will not implement a mandatory default residential charge based upon monthly kilowatt demand for at least six years following Commission approval of this Stipulation and Recommendation. This commitment does not foreclose the Company from seeking approval of any voluntary demand-based rates.

7. **Customer Data.** Duke Energy Kentucky commits to allow its customers to have access to their own usage information as part of the Metering Upgrade through the Company's web portal. Customers with AMI devices will have access to interval usage data that the customer will be able to download at regular intervals, which the customer is free to provide to third parties at the customer's discretion. Additionally, Duke Energy Kentucky agrees that at its sole discretion, such discretion not to be unreasonably withheld, it will provide non-customer specific usage data in aggregate form and within reasonable parameters in terms of frequency and format, upon request, to governmental and educational agencies provided such information is solely for educational or research purposes. Duke Energy Kentucky commits to continue developing additional products and to engage customers around their energy consumption.

8. **Annual and Semi-Annual Reporting:** During deployment, and for three years following completion of deployment, Duke Energy Kentucky agrees to provide annual reporting to the Attorney General and the Commission regarding the development and implementation of products and services designed to engage Duke Energy Kentucky's customers around energy consumption. This annual reporting shall include, but is not limited to, the development of Company portal enhancements, flexible billing

programs, and other payment programs. The Company commits to making a monthly usage alert program as described on page 10 of Company witness Weintraub's testimony in this Case as soon as practicable following completion of deployment. .

During deployment and continuing for one year from completion of deployment, Duke Energy Kentucky agrees to provide periodic reporting in six month increments regarding the progress of deployment. This semi-annual reporting shall identify the costs incurred during deployment and as contained in and compared to the projected cost benefit analysis submitted in this case. Duke Energy Kentucky shall also report on various non-financial metrics of benefits that have been achieved during deployment, with context given in terms of percentages of totals, including:

- Number of electric meters installed;
- Number of gas modules installed;
- Number of grid routers installed;
- Number of meter reading routes;
- Failure rate of electric meters;
- Remote routine electric and gas meter reads;
- Remote electric meter disconnection (non-pay);
- Remote connection (non-pay); and
- Remote Read-in/Read-out.

The annual and semi-annual reporting described above shall be filed in written form in this case as part of the post case correspondence.

9. **Utility Reconnection Charges**. Duke Energy Kentucky agrees that in its next base rate proceeding(s), the Company will include a revision to its reconnection

charges to reflect the then-current actual costs, reflecting the availability of the remote disconnection and reconnection technology for electric customers who have advanced meters and have not opted-out.

10. **Future Smart Grid Investments.** Consistent with the Commission's April 13, 2006 Order in Case No. 2012-00428, Duke Energy Kentucky commits that for any future "major AMR or AMI meter investments, distribution grid investments for DA" [Distribution Automation] or "SCADA or volt/var resources" that require a CPCN, the Company will include a detailed cost-benefit analysis similar to what was submitted in this case.<sup>3</sup>

11. **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. 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, Exhibits, direct testimony, rebuttal 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

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<sup>3</sup> See *In the Matter of Consideration of the Implementation of Smart Grid and Smart Meter Technologies*, Case No. 2012-00428 (Ky.PSC April 13, 2016) at 11 and 30.



the Commission, nor an appeal to the Franklin County Circuit Court with respect to such order.

12. **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 none of the Parties shall be bound by any of the provisions herein;

b. Each Party shall have the right, within twenty days of the Commission's order, to file an application 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 any of the signatory Parties to this Stipulation or be construed against any 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.

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

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

14. **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.

15. **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.

16. **Admissibility and Non-Precedential Effect.** Neither the Stipulation nor any of the terms 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. This Stipulation shall not have any precedential value in this or any other jurisdiction.

17. **No Admissions.** Making this Stipulation shall not be deemed in any respect to constitute an admission by any Party hereto that any computation, formula, allegation, assertion or contention made by any other 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.

18. **Authorizations.** The signatory Parties hereto warrant that they have informed, advised, and consulted with the respective Parties hereto in regard to the contents of the stipulation, and based upon the foregoing, are authorized to execute this Stipulation on behalf of the Parties hereto.

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


20. **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.

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


22. **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 natural gas rate case proceeding of Duke Energy Kentucky.

IN WITNESS WHEREOF, this Stipulation has been agreed to effective this \_\_\_\_\_ day of December 2016. 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:   
Rocco D'Ascenzo  
Title: Associate General Counsel

ATTORNEY GENERAL OF THE  
COMMONWEALTH OF KENTUCKY

By:   
Hon. Lawrence Cook  
Title: Assistant Attorney General,  
Office of Rate Intervention

Duke Energy Kentucky, Inc.  
4580 Olympic Blvd.  
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KY.P.S.C. Electric No. 2  
Original Sheet No. 74  
Page 1 of 1

## RIDER AMO

### ADVANCED METER OPT-OUT (AMO) – RESIDENTIAL

#### APPLICABILITY

Applicable to residential customers served under Rate RS who request an electric meter that does not utilize radio frequency communications to transmit data provided that such a meter is available for use by the Company. At the Company's option, meters to be read manually may be either an advanced meter with the radio frequency communication capability disabled or other non-communicating meter. The meter manufacturer and model chosen to service the customer's premise are at the discretion of the Company and are subject to change at the Company's option, at any time. Rider AMO is optional and is available subject to the Terms and Conditions below.

#### DEFINITION

"Advanced meter" means any electric meter that meets the pertinent engineering standards using digital technology and is capable of providing two-way communications with the electric utility to provide usage and/or other technical data.

#### CHARGES

Residential customers who elect, at any time, to opt-out of the Company's advanced metering infrastructure (AMI) system shall pay a one-time fee of \$100.00 and a recurring monthly fee of \$25.00. During the Metering Upgrade project deployment phase, if prior to an advanced meter being installed at a customer premise, any existing residential electric customer that elects to participate in this opt-out program, Duke Energy Kentucky will not charge the one-time set-up fee, providing the residential electric customer notifies the Company of such election in advance of the advanced meter being installed. Those residential customers electing to participate in this residential opt-out program will be subject to the ongoing \$25.00 per month ongoing charge. Following deployment completion, any residential customer who later elects to participate in the Opt-Out Program will be assessed the \$100 set-up fee in addition to the ongoing monthly charge.

#### TERMS AND CONDITIONS

The Company shall have the right to refuse to provide advanced meter opt-out service in either of the following circumstances:

- (a) If the customer has a history of meter tampering or unauthorized use of electricity at the current or any prior location.
- (b) If such a service creates a safety hazard to consumers or their premises, the public, or the electric utility's personnel or facilities.
- (c) If a customer does not allow the electric utility's employees or agents access to the meter at the customer's premises for either maintenance, connection/disconnection, or meter-reading.

#### SERVICE REGULATIONS

The supplying of, and billing for, service and all conditions applying thereto, are subject to the jurisdiction of the Kentucky Public Service Commission, and to Company's Service Regulations currently in effect, as filed with the Kentucky Public Service Commission, as provided by law.

Issued by authority of an Order by the Kentucky Public Service Commission dated xxxxxx in Case No. 2016-00152.

Issued: December 6, 2016

Effective: August 1, 2017

Issued by James P. Henning, President /s/ James P. Henning

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