

**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) Case No. 2016-00152
the Construction of an Advanced Metering)
Infrastructure; (2) Request for Accounting)
Treatment; and (3) All Other Necessary)
Waivers, Approvals, and Relief.)

TESTIMONY IN SUPPORT OF SETTLEMENT OF

PEGGY LAUB

ON BEHALF OF

DUKE ENERGY KENTUCKY, INC.

December 6, 2016

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ATTACHMENT:

PAL-SET-1-AMO opt-out costs

I. INTRODUCTION AND PURPOSE

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Peggy A. Laub. My business address is 139 East Fourth Street,
3 Cincinnati, Ohio 45202.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed by Duke Energy Business Services LLC, (DEBS) an affiliate
6 service company of Duke Energy Kentucky, Inc., (Duke Energy Kentucky or
7 Company) as Director, Rates and Regulatory Planning. DEBS provides various
8 administrative and other services to Duke Energy Kentucky, Inc., (Duke Energy
9 Kentucky or the Company) and other affiliated companies of Duke Energy
10 Corporation (Duke Energy).

11 **Q. ARE YOU THE SAME PEGGY A. LAUB THAT SUBMITTED DIRECT
12 AND REBUTTAL TESTIMONY IN THIS PROCEEDING?**

13 A. Yes.

14 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN SUPPORT OF
15 SETTLEMENT?**

16 A. The purpose of my supplemental testimony is twofold. First, I will generally
17 describe this proceeding and explain and support the Stipulation and
18 Recommendation (Stipulation), along with the attachments thereto, that was
19 entered into by and among Duke Energy Kentucky, Inc. (Duke Energy Kentucky
20 or Company), and the Office of the Attorney General of the Commonwealth of
21 Kentucky, by and through the Office of Rate Intervention (the AG) (Duke Energy
22 Kentucky and the AG may be referred to collectively herein as the Parties).

1 Second, I will explain why the Stipulation represents a fair, just and reasonable
2 resolution of all the issues in this proceeding. The Stipulation was filed on
3 December 6, 2016. I have personally reviewed the Stipulation, was directly
4 involved in the negotiations that resulted in the Stipulation, and affirm that it
5 accurately reflects the agreement that the Company and the AG have reached.

II. OVERVIEW OF THE PROCEEDING

6 **Q. PLEASE GENERALLY DESCRIBE THE RELIEF SOUGHT BY DUKE**
7 **ENERGY KENTUCKY IN THIS PROCEEDING.**

8 **A.** Duke Energy Kentucky's Application in this proceeding requests the Kentucky
9 Public Service Commission (Commission) issue a Certificate of Public
10 Convenience and Necessity (CPCN) for approval to replace and upgrade its
11 electric and gas metering infrastructure technology (Metering Upgrade) for both
12 its gas and electric operations. Duke Energy Kentucky's existing metering
13 infrastructure consists mostly of meters that are manually read once a month by
14 Company personnel. With the Metering Upgrade, Duke Energy Kentucky is
15 seeking approval to install Advanced Metering Infrastructure (AMI) devices for
16 the Company's electric and combination electric and natural gas customers
17 (Combination Customers) and Automated Meter Reading (AMR) devices for its
18 customers who only receive natural gas service from the Company (gas-only
19 customers). Duke Energy Kentucky also requested specific accounting treatment
20 through creation of a regulatory asset related to the undepreciated remaining net
21 book value of the Company's existing metering equipment and inventory, as well
22 as a proposal to establish depreciation rates for the new metering devices (fifteen

1 years for electric devices and nine years for gas modules), and any necessary
2 waivers to optimize the functionality of the Metering Upgrade and obtain the
3 expected operational efficiencies that it enables.

4 **Q. HAS THE AG INTERVENED IN THIS PROCEEDING?**

5 A. Yes. On May 10, 2016, the AG moved the Commission for full intervenor status
6 in this action pursuant to KRS 367.150(8) and 807 KAR 5:001 Section 4(11).
7 The Commission granted the AG's motion by Order entered May 17, 2016.

8 **Q. HAS THE AG AND COMMISSION STAFF PROPOUNDED ANY**
9 **REQUESTS FOR INFORMATION UPON DUKE ENERGY KENTUCKY**
10 **IN THIS PROCEEDING?**

11 A. Yes. Both the AG and Staff of the Commission (Staff) have engaged in
12 substantial investigation of the Company's Application in this proceeding. Both
13 the Staff and AG have each propounded two sets of discovery upon Duke Energy
14 Kentucky in accordance with the procedural schedule issued by the Commission.
15 The first set of data requests was issued on May 23, 2016, with the Company
16 providing its responses on June 7, 2016. The Staff issued its second set of
17 discovery on June 17, 2016, and the AG issued its second set of discovery on June
18 20, 2016. The Company provided responses to both sets on July 5, 2016.

19 Additionally, following the AG's submittal of his expert's testimony of
20 Paul Alvarez, both the Staff and Duke Energy Kentucky issued discovery
21 questions to the AG. Responses to those questions were timely submitted on
22 August 15, 2016. Finally, in response to Mr. Alvarez's testimony, Duke Energy
23 Kentucky submitted rebuttal testimony on October 13, 2016. All this is to

1 demonstrate that the record in this proceeding is fully developed, which facilitated
2 the resulting Stipulation.

III. OVERVIEW OF THE STIPULATION

3 **Q. PLEASE BRIEFLY DESCRIBE HOW THE STIPULATION CAME**
4 **ABOUT.**

5 A. The Stipulation is the product of much negotiation and compromise by the
6 Company and the AG. The filed Stipulation resolves all issues in this proceeding
7 regarding the Company's Application to construct its Metering Upgrade
8 initiative. The negotiation of the final Stipulation occurred over several weeks,
9 with multiple meetings both in person at the AG's offices and at the
10 Commission's offices with Staff, and via teleconference. Duke Energy Kentucky
11 is appreciative of the AG's willingness to view this case on its own facts and to
12 fashion an agreement accordingly.

13 **Q. PLEASE DESCRIBE THE STIPULATION.**

14 A. There are many terms and conditions contained in the Stipulation, which
15 demonstrates the level of thoughtfulness and attention to detail exhibited by the
16 Parties. As an overall package, the Stipulation addresses all issues raised by the
17 Company in its Application as well as many of those raised by the AG, through
18 its witness. On balance, I believe the Stipulation, as a whole, represents a fair
19 balance of interests.

20 I will summarize the significant key points. The Parties agree that the
21 Company's Application for a Metering Upgrade, establishment of depreciation
22 rates for the new devices, deferral requests, and waivers should be approved as

1 filed and supported in its Application and testimony but subject to the following
2 modifications:

3 1. The Parties agree that the Company should be permitted to create a
4 regulatory asset for the actual undepreciated costs of its existing metering
5 infrastructure upon retirement, including related inventory as requested in
6 its Application. Duke Energy Kentucky agrees that in its next rate case, it
7 will propose an amortization period of fifteen years for this asset, without
8 carrying charges. The fifteen-year amortization period is intended to align
9 with the depreciable life of the new Metering Upgrade electric
10 infrastructure. The Company does, however, reserve the right to request
11 carrying charges if the Commission requires and orders a longer
12 amortization period for this asset.

13 2. The Parties agree, although the Company does not anticipate any cost
14 over-runs, that in the event such over-runs occur, the Company will
15 specifically identify those over-runs on an itemized basis in a manner
16 consistent with how the information is presented in the Company's
17 Confidential Attachment DLS-4 in this proceeding. Duke Energy
18 Kentucky commits to include an explanation of such over-runs in its
19 testimony and will bear the burden to prove the prudence of the recovery
20 of such over-runs. Additionally, the Company commits that there will be
21 no degradation of the device capabilities or the operational benefits due
22 to the over-runs. Finally, the Company commits to look for additional
23 opportunities for efficiencies during deployment and will report on those

1 opportunities as part of periodic reporting during the Metering Upgrade
2 deployment phase.

3 3. The Parties have agreed to two distinct processes for electric and gas
4 operations, which will enable customers to experience the estimated
5 operational benefits that are anticipated with the Metering Upgrade along
6 with providing the Company an opportunity to recover its costs. First,
7 the Company is committing that in its next electric rate case, estimated to
8 be filed sometime before December 31, 2019, to make appropriate test
9 period adjustments related to the electric Metering Upgrade for recovery
10 of costs, revenue, realized savings to date, and projected future
11 operational savings through a levelized, net-present value, pro-forma
12 adjustment to the test year revenue requirement.

13 Second, because the Company is uncertain of the timing of its next
14 natural gas base rate case, in order to enable natural gas customers to also
15 experience the operational benefits anticipated with the metering upgrade,
16 the Parties have agreed upon a separate process through a subsequent
17 application to the Commission intending to establish a gas Metering
18 Upgrade tracking/reconciliation mechanism. The concept is to enable gas
19 customers to also share in the estimated operational benefits, and the
20 Company to recover its costs of enabling such benefits, without the
21 pending likelihood of a full-blown natural gas base rate proceeding.

22 As stipulated, within six months of approval of this Stipulation,
23 Duke Energy Kentucky will file a separate and distinct application for the

1 Commission to review and consider the creation of a discrete tracking
2 mechanism to allow Duke Energy to both recover natural gas Metering
3 Upgrade deployment costs and to offset these costs by crediting customers
4 with the anticipated natural gas operational benefits as set forth in the
5 Expense Reduction and certain Avoided Cost O&M Benefit Types in
6 Confidential DLS-4.

7 This mechanism will be subject to annual review and true-up in a
8 manner that is similar to the Company's recently approved Accelerated
9 Service-Line Replacement Program (ASRP). The precise details and rate
10 impacts of this mechanism are not yet known, as the Company has not
11 begun analyzing and developing this program. Again, the Parties are not
12 requesting approval of the mechanism itself in this proceeding. The Parties
13 are merely asking that the Commission approve the stipulated process
14 where the Company will file a separate application to establish the
15 mechanism for review and consideration in the near future. The merits of
16 the tracking/reconciliation mechanism will be fully addressed by the
17 Commission in the later proceeding and the Parties and the Commission
18 have all rights to support or oppose any portion of the filing.

- 19 4. The Parties have agreed to the creation of a Residential Electric
20 Advanced Meter Opt-out (AMO) Program tariff. This voluntary offer will
21 enable residential electric customers the ability to not have an AMI
22 device capability enabled on their electric meter. This will mean that
23 those electric and combination electric/gas customers will continue to

1 experience a monthly manual meter reading, rather than having automatic
2 meter reading. This will also mean that the remote
3 connection/disconnection capabilities will not be enabled and that those
4 customers will not have access to interval usage data or be able to take
5 advantage of many of the enhanced basic services that will eventually be
6 enabled by fully functional AMI devices.

7 The Company's business case for pursuing the Metering Upgrade
8 is based upon the operational benefits achievable with full deployment.
9 In order to not to significantly erode those benefits for all other
10 customers, the AMO tariff has been designed to recover the costs of
11 providing the AMO option from those electing the program. These costs
12 are based upon the estimated incremental costs to manually read a
13 customer's meter after deployment is completed and to enroll the
14 customer into the AMO program. The monthly incremental fee will be
15 \$25.00 per customer premises. The one-time registration fee for Opt-out
16 service will be \$100.00. It is important to know that, with the approval of
17 this AMO program at the outset of deployment, Duke Energy Kentucky
18 intends to waive the \$100.00 one-time fee for any residential customer
19 who elects to participate in the program before a new AMI device is
20 installed. These costs were negotiated and are supported by the actual
21 estimated incremental costs as depicted in Attachment PAL-SET-1.
22 Once an AMI meter is installed, any customer who then elects to opt-out
23 will be charged the \$100.00 registration fee. This is because the

1 Company will then have to send out a technician to either disable the
2 radio communication capability or install a different meter with disabled
3 radios and to register the customer as an opt-out customer.

4 Finally, because the costs of developing this AMO program are not
5 included in the Company's Application and will result in an immediate
6 and unplanned operations and maintenance (O&M) expense to develop
7 this capability, the Parties have agreed to the creation of a deferral of
8 those one-time O&M costs (estimated to be \$140,000) for future
9 recovery.

10 5. Finally, the Parties have also agreed upon a process to develop and file
11 for approval a Residential Peak-Time Rebate Pilot (PTR Pilot). Similar to
12 the Metering Upgrade gas tracking mechanism I previously described, the
13 Parties are merely asking the Commission approve this process in this
14 case. The actual PTR Pilot program, once designed, will be filed
15 separately for Commission review and consideration in a subsequent
16 proceeding. The PTR Pilot will be designed and developed as a demand
17 side management (DSM) program and vetted through the Company's
18 residential DSM collaborative. The PTR Pilot is intended to collect
19 information to evaluate future similar rate offerings that are enabled by
20 the Metering Upgrade technologies. In concept, the PTR Pilot will
21 provide a credit to eligible residential customers who are able to actually
22 lower their consumption from a defined baseline in response to a pricing
23 event during the year. The costs of developing and operating this program

1 will be included as part of the Company's DSM recovery mechanism
2 (Rider DSM) which is reviewed by the Commission annually. The PTR
3 Pilot will be open to up to 1,000 residential electric customers and will
4 run for two years from implementation. Following the conclusion of the
5 two-year period, the Company will have an independent evaluation,
6 measurement, and verification (EM&V) study performed to determine
7 the program's effectiveness in terms of both cost and benefits achieved.
8 The Company will then present the results and recommendations to the
9 Commission upon completion.

10 **Q. ARE THERE ANY ADDITIONAL COMMITMENTS CONTAINED IN**
11 **THE STIPULATION TERMS AND CONDITIONS?**

12 A. Yes. Duke Energy Kentucky is making several commitments in resolution of this
13 proceeding. These commitments include providing customers access to their
14 data, providing aggregate non-customer specific usage data to governmental and
15 educational institutions for research purposes, updating certain charges in future
16 rate cases, as well as periodic (annual and semi-annual) reporting during the
17 Metering Upgrade deployment, including but not limited to, progress of
18 deployment, various non-financial benefits metrics, and development of new
19 AMI-enabled products and services for its customers.

20 **Q. WHY HAVE DUKE ENERGY KENTUCKY AND THE AG ENTERED**
21 **INTO THE STIPULATION?**

22 A. There are a number of reasons why Duke Energy Kentucky and the AG have
23 entered into the Stipulation. In general terms, the Parties, who represent diverse

1 interests and divergent viewpoints, agree that the Stipulation, viewed in its
2 entirety, is a fair, just, and reasonable resolution of all the issues in this
3 proceeding. This Stipulation creates a clear path for the Company to proceed
4 with its Metering Deployment initiative with certainty. This Stipulation also
5 creates value for customers and benefits for the Company that were not included
6 in the initial application, but raised by the AG in testimony or during settlement
7 negotiations. For example, the creation of the AMO program gives residential
8 customers a choice in whether they continue to have a manual meter reading. It
9 is anticipated that existence of the AMO program will also provide a smoother
10 deployment process for the Company in that customers will have the ability to
11 choose between the AMI electric meter or manual meter reading without
12 significantly impacting the anticipated operational savings anticipated with the
13 Metering Upgrade deployment. The creation of the Residential PTR Pilot
14 program, if approved, will provide an opportunity for eligible customers to
15 proactively take action to reduce their energy bill. This PTR Pilot provides an
16 AMI-enabled voluntary rate design that will be available to interested and
17 eligible residential customers soon after deployment. This will be done in a way
18 that that is financially neutral to the Company because it enables Duke Energy
19 Kentucky an opportunity to recover its costs. The commitments regarding future
20 electric rate case adjustments and the creation of the process for the gas Metering
21 Upgrade cost/benefit tracking and reconciliation mechanism addresses concerns
22 raised by the AG regarding the handling of costs and sharing of benefits with
23 customers. The Commission will still have all of its authority in future rate

1 proceedings to evaluate the Company's proposals in terms of prudence and
2 reasonableness.

IV. CONCLUSION

3 **Q. DOES THIS CONCLUDE YOUR PRE-FILED REBUTTAL TESTIMONY?**

4 A. Yes.

5 **Q. WAS ATTACHMENT PAL-SET-1 PREPARED AND COMPILED AT**
6 **YOUR DIRECTION AND UNDER YOUR CONTROL?**

7 A. Yes.

VERIFICATION

STATE OF OHIO)
) SS:
COUNTY OF HAMILTON)

The undersigned, Peggy A. Laub, Director, Rates and Regulatory Planning, being duly sworn, deposes and says that she has personal knowledge of the matters set forth in the foregoing testimony are true and correct to the best of her knowledge, information and belief.

Peggy A. Laub
Peggy A. Laub, Affiant

Subscribed and sworn to before me by Peggy A. Laub on this 6th day of December, 2016.

Adele M. Frisch
NOTARY PUBLIC

ADELE M. FRISCH
Notary Public, State of Ohio
My Commission Expires 01-05-2019

My Commission Expires: 1/5/2019

Duke Energy Kentucky - Advanced Meter Opt-out Cost Analysis

Expenses (One-Time per Participant)

<u>One-time Costs to Establish AMO</u>			
1	Customer Service @ 3 mins/customer	\$1.37	Customer Call Center will take calls for AMO participants, explain tariff details, and set up account.
2	Metering Services work order mgmt @ 5 mins/customer	\$4.63	Metering Services to create initial work orders for meter programming, meter exchange and manual read routing.
3	Meter Reading to perform route analysis @ 20 mins/customer	\$21.57	Metering Services to determine location of AMO participant and find existing manual reading route to adjust for efficient meter reading route.
4	Metering Services to disable meter radios @ 30 mins/customer	\$40.47	Metering Services to disable radios in the Meter Lab
5	Field service personnel to exchange meter @ 45 mins/customer	\$54.26	Service Delivery to travel to customer premise, remove existing meter and replace with non-communicating meter, close work orders
6	Vehicle to exchange meter @ 45 mins/customer	\$2.96	Pickup 1/2 Ton 4x4 @ \$3.95/hour
7	Gas Operations to remove AMI module from gas meter @ 45 mins/customer; 70% of electric customers have dual gas service	\$40.09	Gas Operations to travel to and from customer premise, remove existing gas module for dual service customer, and close work orders
8	Vehicle to remove gas AMI module @ 45 mins/customer	\$2.24	Van >8500 @ \$4.27/hour
	Total One-Time Costs	\$167.60	Sum of rows (1) through (8)

Note- All costs reflect fully loaded costs

143 : Estimated # AMO Customers

Topic Area	Topic Details	Rate	Hours to Complete	Unit Cost	Frequency	# of Events Annually	Annual Cost	
Monthly Meter Reading - Labor	Meter Reader must perform manual meter reads each month. Includes average travel time between AMO customers and time to exit vehicle, locate meter, probe meter, and return to vehicle.	\$ 46.18	0.5	\$ 23.09	Monthly per AMO Customer	1,716	\$ 39,625.75	
Monthly Meter Reading - Vehicle	Meter Reading employee vehicle costs (Sport Utility - Compact 4x4) for duration of monthly meter reading throughout the route, per customer	\$ 3.69	0.5	\$ 1.84	Monthly per AMO Customer	1,716	\$ 3,162.16	
Off-cycle Meter Reading - Labor	Manual off-cycle meter reads. Necessary due to inability to perform Remote Order Fulfillment services for non-AMI meters (bill complaints, move in/move out, re-reads)	\$ 52.23	1	\$ 52.23	Annually for 10% of AMO Customers	14	\$ 746.94	
Off-cycle Meter Reading - Vehicle	Meter Reading employee vehicle costs (Sport Utility - Compact 4x4) for duration of off-cycle meter reading	\$ 3.69	1	\$ 3.69	Annually for 10% of AMO Customers	14	\$ 52.70	
							\$ 43,587.55	Annual Total
							\$3,632.30	Total Monthly costs
							\$25.40	Costs per AMO Customer per Month

Note- all costs reflect fully loaded costs