

**Duke Energy Kentucky
Case No. 2016-00152
Attorney General's First Set Data Requests
Date Received: May 23, 2016**

AG-DR-01-053

REQUEST:

Reference the Schneider testimony at p. 32, wherein he discusses cybersecurity. State whether the AMI architecture and infrastructure DEK plans to deploy in the instant filing can provide upgraded cybersecurity measures such as those envisioned and/or mandated by FERC and NERC without having to replace entire meters, meter modules and other associated hardware.

RESPONSE:

The metering upgrade will include a communications network that is more secure, more adaptable to future security needs, and compliant with NISTIR 7628 Guideline for Smart Grid Cyber Security (the Security Standard most commonly referenced by the DOE for AMI systems). This change in technology cannot be achieved using existing meters.

PERSON RESPONSIBLE: Donald L. Schneider, Jr.

**Duke Energy Kentucky
Case No. 2016-00152
Attorney General's First Set Data Requests
Date Received: May 23, 2016**

AG-DR-01-054

REQUEST:

Reference the Weintraub testimony at pp. 3-4. Is the Duke Customer Solutions Organization a subsidiary of Duke Energy?

RESPONSE:

No. It is simply the name of a department and not a separate legal entity under Duke Energy Corp.

PERSON RESPONSIBLE: Alexander J. Weintraub

**Duke Energy Kentucky
Case No. 2016-00152
Attorney General's First Set Data Requests
Date Received: May 23, 2016**

**PUBLIC AG-DR-01-055
(As to Attachment Only)**

REQUEST:

Reference the Weintraub testimony at p. 4, line 11, wherein he references Duke Energy's research of its residential customers. State whether this research involves only DEK's residential customers, or whether it is based on the combined jurisdictions of Duke Energy?

- a. Provide all studies and/or survey research regarding the concerns of DEK's residential customers.

RESPONSE:

CONFIDENTIAL PROPRIETARY TRADE SECRET (As to Attachment Only)

Objection. To the extent this Data Request is intended to be duplicative of AG-DR-01-007 and AG-DR-01-009, it is overly burdensome and must be seen as intending to harass. Without waiving said objection, to the extent discoverable, and in the spirit of discovery, please see response to AG-DR-01-004. Duke Energy's research did not involve only Duke Energy Kentucky's residential customers; it was based on the combined jurisdictions of Duke Energy.

- a. Please see AG-DR-01-055 Confidential Attachment submitted under seal and pursuant to a Motion for Protection.

PERSON RESPONSIBLE:

As to objection: Legal
As to response: Alexander J. Weintraub

AG-DR-01-055
CONFIDENTIAL
ATTACHMENT
PROVIDED
UNDER SEAL WITH A
PETITION FOR
CONFIDENTIAL
TREATMENT

**Duke Energy Kentucky
Case No. 2016-00152
Attorney General's First Set Data Requests
Date Received: May 23, 2016**

AG-DR-01-056

REQUEST:

Reference the Weintraub testimony at p. 6, lines 9-10. Since the EBS programs will all be new to DEK customers, how is it reasonable to conclude that DEK customers "have grown to expect" them from DEK?

RESPONSE:

Please see response to AG-DR-01-004.

PERSON RESPONSIBLE: Alexander J. Weintraub

**Duke Energy Kentucky
Case No. 2016-00152
Attorney General's First Set Data Requests
Date Received: May 23, 2016**

PUBLIC AG-DR-01-057

REQUEST:

Reference the Weintraub testimony at p. 6, lines 12-13. Identify the company or organizations which conducted the customer satisfaction surveys, and identify what company's customers responded to the surveys.

RESPONSE:

CONFIDENTIAL PROPRIETARY TRADE SECRET (As to Attachment Only)

Please see Confidential Attachment in response to AG-DR-01-55, provided under a petition for confidential treatment.

PERSON RESPONSIBLE: Alexander J. Weintraub

**Duke Energy Kentucky
Case No. 2016-00152
Attorney General's First Set Data Requests
Date Received: May 23, 2016**

AG-DR-01-058

REQUEST:

Reference the Weintraub testimony at p. 6, lines 17-19. Will participants in those programs be subsidized by ratepayers who do not partake in those programs?

RESPONSE:

As stated in the Weintraub testimony at Page 12, Lines 6-14, "Duke Energy Kentucky is not specifically seeking the Commission's authorization to begin offering all of these programs in this proceeding... Accordingly, the Company has not provided estimates for costs or benefits associated with these programs and services in this filing." The Company has not estimated any potential rate impact or cost recovery methods for the enhanced basic services at this time.

PERSON RESPONSIBLE: Alexander J. Weintraub

REQUEST:

Describe the measures DEK is proposing to take to insure that the technology it has chosen for its software, firmware, middleware and hardware does not become obsolete.

- a. Has the company factored into its cost projections the costs for software, firmware and/or hardware upgrades necessary to satisfy any potential standards from the National Institute for Standards and Technology (NIST)? If not, provide a cost projection that includes these estimates.

RESPONSE:

Duke Energy conducted a competitive RFQ process with leaders in the industry to insure that it does not deploy technology that is likely to become obsolete. The Company has selected industry leaders for its Metering Upgrade deployment, and is using this technology enterprise-wide.

- a. See Testimony of Donald L. Schneider, Jr. at page 23, line 13-22. Duke Energy Kentucky continually upgrades all systems for security enhancements as cyber threats develop or standards from the National Institute for Standards and Technology (NIST) are revised or new ones developed. Such upgrades associated with the Metering Upgrade project will be handled by Duke Energy's internal IT Security group just as they do with all other systems deployed by the Company. These costs to perform such upgrades are allocated across the enterprise to

minimize impacts to specific jurisdictions. Costs for potential standards cannot be estimated without knowing what future standards may require.

PERSON RESPONSIBLE: Donald L. Schneider, Jr.

Duke Energy Kentucky
Case No. 2016-00152
Attorney General's First Set Data Requests
Date Received: May 23, 2016

AG-DR-01-060

REQUEST:

To what extent will the proposed AMI architecture and infrastructure be interoperable with DEK's other systems, including but not limited to: IT office systems, metering systems, SCADA and DSM systems, outage management systems, analytic systems, and external partners and services? For purposes of this question, the term "interoperable" means the ability of different information technology systems and software applications to communicate, exchange data, and use the information that has been exchanged.

RESPONSE:

See Schneider Testimony Page 9, beginning with line 9 through page 11, line 5, including Figure A on page 9. Also see response to AG-DR-01-041 regarding external partners and services and response to STAFF-DR-018 regarding integration with distribution systems. Please see Schneider testimony page 12, beginning at line 23 through page 13, line 23 referencing the capability to ping the AMI meters to assist in outage restoration. This is accomplished via interoperability between the Metering Upgrade systems and Duke Energy's Outage Management System (OMS).

PERSON RESPONSIBLE: Donald L. Schneider, Jr.

**Duke Energy Kentucky
Case No. 2016-00152
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AG-DR-01-061

REQUEST:

Reference the Confidential versions of Attachments DLS-3 and DLS-4, p. 2 of 13. Are all capital and O & M costs identified in these two documents? If not, please identify all such costs, the amounts thereof, and restate the impact of all such additional costs on DEK's cost-benefit analysis.

RESPONSE:

Duke Energy Kentucky included all foreseen capital and O&M costs in Confidential Attachments DLS-3 and DLS-4.

PERSON RESPONSIBLE: Donald L. Schneider, Jr.

Duke Energy Kentucky
Case No. 2016-00152
Attorney General's First Set Data Requests
Date Received: May 23, 2016

AG-DR-01-062

REQUEST:

Reference the Confidential version of Attachment DLS-3.

- a. Are all of the operational savings identified under the program benefits identified in this document based on estimates derived from Duke Energy's experience in its other service territories in which system-wide AMI and AMR replacements have been executed?
- b. With regard to each operational saving identified in this document, state to what degree each item of savings is based upon: (i) estimates, and if any, identify the source of the estimates; or (ii) experience, and if any, identify what experience it is based upon.
- c. To what extent are the estimates of program benefits contained in this attachment based on the individual characteristics and/or peculiarities of DEK's own service territory?

RESPONSE:

- a. See response to AG-DR-01-048(b).
- b. See response to AG-DR-01-048(b).
- c. The cost-benefit analysis is all based on expectations in regards to conditions in Duke Energy Kentucky's own service territory.

PERSON RESPONSIBLE: Donald L. Schneider, Jr.

REQUEST:

Reference the Confidential version of Attachment DLS-4, pp. 8-9.

- a. With regard to the dollar figures provided in years 2 through 17, state to what degree each benefit type is based upon: (i) estimates, and if any, identify the source of the estimates; or (ii) experience, and if any, identify what experience it is based upon.
- b. To what extent are the estimates of program benefits contained in this attachment based on the individual characteristics and/or peculiarities of DEK's own service territory?

RESPONSE:

- a. The "Expense Reduction" and "Avoided Costs" benefit types are all estimates based upon the experience of Duke Energy experts from affected business units in Duke Energy jurisdictions having completed a full-scale AMI deployment. The "Increased Revenue" and "Customer Savings" benefit types are estimates with sources outlined in response to AG-DR-01-048(b).
- b. The cost-benefit analysis is all based on expectations in regards to conditions in Duke Energy Kentucky's own service territory.

PERSON RESPONSIBLE: Donald L. Schneider, Jr.

**Duke Energy Kentucky
Case No. 2016-00152
Attorney General's First Set Data Requests
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AG-DR-01-064

REQUEST:

Reference the Confidential version of Attachment DLS-4, pp. 10-11.

- a. With regard to the dollar figures provided in years 2 through 17, state to what degree each benefit type is based upon: (i) estimates, and if any, identify the source of the estimates; or (ii) experience, and if any, identify what experience it is based upon.
- b. To what extent are the estimates of program benefits contained in this attachment based on the individual characteristics and/or peculiarities of DEK's own service territory?

RESPONSE:

- a. The "Expense Reduction" and "Avoided Costs" benefit types are all estimates based upon the experience of Duke Energy experts from affected business units in Duke Energy jurisdictions having completed a full-scale AMI deployment. The "Increased Revenue" and "Customer Savings" benefit types are estimates with sources outlined in response to AG-DR-01-048(b).
- b. The cost-benefit analysis is all based on expectations in regards to conditions in Duke Energy Kentucky's own service territory.

PERSON RESPONSIBLE: Donald L. Schneider, Jr.

REQUEST:

Reference the Confidential version of Attachment DLS-4, pp. 12-13.

- a. With regard to the dollar figures provided in years 2 through 17, state to what degree each benefit type is based upon: (i) estimates, and if any, identify the source of the estimates; or (ii) experience, and if any, identify what experience it is based upon.
- b. To what extent are the estimates of program benefits contained in this attachment based on the individual characteristics and/or peculiarities of DEK's own service territory?

RESPONSE:

- a. The "Expense Reduction" and "Avoided Costs" benefit types are all estimates based upon the experience of Duke Energy experts from affected business units in Duke Energy jurisdictions having completed a full-scale AMI deployment. The "Increased Revenue" and "Customer Savings" benefit types are estimates with sources outlined in response to AG-DR-01-048(b).
- b. The cost-benefit analysis is all based on expectations in regards to conditions in Duke Energy Kentucky's own service territory.

PERSON RESPONSIBLE: Donald L. Schneider, Jr.

**Duke Energy Kentucky
Case No. 2016-00152
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AG-DR-01-066

REQUEST:

Were DEK's material and labor estimates developed by DEK or affiliate company employees historically responsible for preparing similar cost estimates for DEK? If not, explain why not.

RESPONSE:

Objection. This Data Request is vague, ambiguous, and confusing. Without waiving said objection, to the extent discoverable, and in the spirit of discovery, some of the employees that developed material and labor estimates have 'historically' developed similar cost estimates for Duke Energy Kentucky. Due to turnover and changes in responsibilities among employees, it is possible that, 'historically,' other employees have developed similar cost estimates for Duke Energy Kentucky.

PERSON RESPONSIBLE:

As to objection: Legal

As to response: Donald L. Schneider, Jr.

Duke Energy Kentucky
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AG-DR-01-067

REQUEST:

With regard to DEK's assertions of cost and benefit estimates based on experience of other Duke Energy subsidiaries, provide documentation supporting the historical cost and benefit information from such other subsidiaries regarding the deployment of AMI and associated architecture and infrastructure, including but not limited to testimony in other jurisdictions supporting internal estimation procedures.

RESPONSE:

Objection. This question is overbroad, unduly burdensome, and not likely to lead to the discovery of admissible evidence. Without waiving said objection, to the extent discoverable, and in the spirit of discovery, the information requested is available in publicly available sources and can be obtained as follows:

1. https://myweb.in.gov/IURC/eds/Modules/Ecms/Cases/Docketed_Cases/ViewDocument.aspx?DocID=0900b631801cf9f4 (link to Donald L. Schneider, Jr. testimony, pg. 16-22 in Duke Energy Indiana TDSIC Case No. 44720.)
2. <http://dis.puc.state.oh.us/CaseRecord.aspx?Caseno=10-2326&link=DIVA> (link to Duke Energy Ohio midterm review Case No. 10-2326-GE-RDR; Donald L. Schneider, Jr. testimony at p. 146 and Peggy A. Laub testimony at p. 162.)

PERSON RESPONSIBLE: Legal

**Duke Energy Kentucky
Case No. 2016-00152
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AG-DR-01-068

REQUEST:

Confirm that Duke Energy's conversion to AMI meters in North Carolina, South Carolina and Florida is being done on an incremental and not a system-wide basis.

RESPONSE:

At this time, Duke Energy is installing AMI meters incrementally in North and South Carolina. The Company is not actively installing AMI meters in Florida at this time.

PERSON RESPONSIBLE: Donald L. Schneider, Jr.

**Duke Energy Kentucky
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PUBLIC AG-DR-01-069

REQUEST:

Provide copies of any and all workpapers showing how DEK's estimates of costs and benefits were performed.

RESPONSE:

CONFIDENTIAL PROPRIETARY TRADE SECRET (as to Attachment Only)

See response to AG-DR-01-048(b) for reference to work papers associated with estimated benefits. See Confidential attachment AG-DR-01-069(1) for work papers associated with estimated costs, being provided on CD under a petition for confidential treatment

PERSON RESPONSIBLE: Donald L. Schneider, Jr.

AG-DR-01-069
CONFIDENTIAL
ATTACHMENT
PROVIDED ON CD
UNDER SEAL WITH A
PETITION FOR
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TREATMENT

**Duke Energy Kentucky
Case No. 2016-00152
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AG-DR-01-070

REQUEST:

Confirm that the application's cost estimates include any and all costs related to: (i) substation upgrades; and (ii) transformers which will be required as a result of the program.

RESPONSE:

There are no such costs related to the Metering Upgrade outside of the decommissioning costs associated with the retirement of the 2007 pilot metering infrastructure which includes some equipment located in distribution substations.

PERSON RESPONSIBLE: Donald L. Schneider, Jr.

**Duke Energy Kentucky
Case No. 2016-00152
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AG-DR-01-071

REQUEST:

Confirm that costs included within the application include any and all costs necessary to upgrade DEK's data backbone and back office computer infrastructure.

RESPONSE:

Duke Energy Kentucky included all known estimated costs to upgrade back office systems to support the additional meters that will be deployed in Kentucky through this proposed project.

PERSON RESPONSIBLE: Donald L. Schneider, Jr.

REQUEST:

Confirm that the project will require no changes to DEK's transmission system.

- a. If DEK cannot so confirm, confirm that all costs related to transmission upgrades required as a result of the instant program are included in the application's cost estimates.

RESPONSE:

There are no transmission related changes foreseen in relation to the Metering Upgrade.

PERSON RESPONSIBLE: Donald L. Schneider, Jr.

**Duke Energy Kentucky
Case No. 2016-00152
Attorney General's First Set Data Requests
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AG-DR-01-073

REQUEST:

Regarding the employees who currently perform meter reading services for DEK, describe what will be done with those positions in the event the Commission should approve all or a portion of DEK's application in the instant matter.

RESPONSE:

Meter Reading employees will be offered assistance to transition to different positions including resume writing, interview skills training, and education reimbursement costs for approved courses of study. The employees will be able to apply and be considered for other open positions within the company if they meet the required qualifications. In addition, targeted severance offerings may also be considered as the work needs are reduced.

PERSON RESPONSIBLE: Everett Greene

REQUEST:

In the event the Commission should approve DEK's application in the instant matter, state whether the company would be willing to allow residential customers to opt-out of the program for medical purposes, in the event such customers agree to the following:

- a. to pay any and all costs associated with manual connects/disconnects;
- b. to pay for manual meter readings; and
- c. to pay for any and all other metering-related costs included within customers' existing rates, which otherwise would have to be socialized within the remaining residential customer rate base.

RESPONSE:

Objection. The question assumes facts not in evidence. With our waiving said objection, and to the extent discoverable, Please see Direct Testimony of Donald L. Schneider, Jr. at page 24, line 10-21. While Duke Energy Kentucky's deployment plan does not propose an AMI meter opt-out, Duke Energy Kentucky is not opposed to considering an AMI meter opt-out. The Company would agree that if the Commission approves the metering upgrade and the Commission were to require a customer opt out option, that such customers should be required to pay any costs attributable to the opt out, including but not limited to the following:

- a. any and all costs associated with manual connects/disconnects;

- b. manual meter readings; and
- c. any and all other metering-related costs included within customers' existing rates, which otherwise would have to be socialized within the remaining residential customer rate base.

PERSON RESPONSIBLE: Legal-as to objection
Donald L. Schneider, Jr.

Duke Energy Kentucky
Case No. 2016-00152
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AG-DR-01-075

REQUEST:

State whether DEK is seeking a return on equity (ROE) associated with all or any portion of the instant application, and if so, identify the amount thereof.

a. If DEK is seeking an ROE:

- (i) provide an annual amount in dollars that each residential customer can expect to pay for that ROE, based upon yearly cost estimates as provided in the application, for each year of the project until the year that total benefits exceed total costs;
- (ii) confirm that shareholders receive 100% of the benefit of the ROE;
- (iii) confirm that shareholders will benefit as a result of the enhanced revenue collection DEK envisions as a result of implementing this program.

RESPONSE:

Duke Energy Kentucky is not seeking to establish a return on equity in this application.

PERSON RESPONSIBLE: Peggy Laub

Duke Energy Kentucky
Case No. 2016-00152
Attorney General's First Set Data Requests
Date Received: May 23, 2016

AG-DR-01-076

REQUEST:

In the event the Commission should approve the application, state the number of years following the completion of the project until estimated total savings will exceed estimated total costs.

- a. If the number of years is greater than 15, state whether a longer period of time would be required given that the expected life span of AMI meters to be deployed in the project is only 15 years.
- b. Provide copies of any independent analyses conducted on behalf of DEK regarding the cost-effectiveness of the project.

RESPONSE:

Please see Attachment DLS-3.

- a. Objection. To the extent this Data Request is intended to be duplicative of AG-DR-01-033, it is unreasonable, overly burdensome and must be seen as intending to harass. Without waiving said objection, to the extent discoverable, and in the spirit of discovery, see response to AG-DR-01-033(a).
- b. Duke Energy Kentucky conducted its own cost-benefit analysis.

PERSON RESPONSIBLE: Donald L. Schneider, Jr.
Legal- as to objection

**Duke Energy Kentucky
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AG-DR-01-077

REQUEST:

Confirm that the instant filing is not intended in any manner to be a part of, or augment DEK's DSM program pursuant to KRS 278.285.

RESPONSE:

Confirmed.

PERSON RESPONSIBLE: Donald L. Schneider., Jr.

Duke Energy Kentucky
Case No. 2016-00152
Attorney General's First Set Data Requests
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AG-DR-01-078

REQUEST:

Provide copies of any studies or analyses DEK performed, or which were performed on DEK's behalf regarding any and all alternatives to the proposed project.

- a. Has DEK considered any and all other direct load control programs as a means of meeting its load management goals, including but not limited to: (i) air conditioning controls; and (ii) programmable thermostats? If not, why not?

RESPONSE:

Duke Energy Kentucky did not conduct any studies or analyses regarding alternatives to the proposed Metering Upgrade metering solution outside of information provided by potential vendors via the RFQ and the process used by Duke Energy Kentucky to evaluate all vendor proposals as described in response to STAFF-DR-01-004.

- a. Objection. Irrelevant, not likely to lead to the discovery of admissible or relevant evidence. Without waiving said objection, and to the extent discoverable, see response to AG-DR-01-077.

PERSON RESPONSIBLE: Objection- Legal
Donald L. Schneider, Jr.

REQUEST:

State whether DEK has any net metering customers, and if so, explain whether such customers will continue to be able to net meter if they so choose.

- a. Describe all costs that DEK requires net metering customers to pay under its current net metering tariff.
- b. Describe all changes to DEK's net metering tariff that will result as a consequence of the instant application, if approved.
- c. Does DEK anticipate that AMI meters to be installed under this project will more accurately capture the amounts of electricity that net metering customers sell to the company? If so:
 - (i) provide all estimates that DEK and/or other Duke Energy subsidiaries have performed regarding effects that net metering customers can anticipate once they receive a new AMI meter under the instant program; and
 - (ii) state whether the solar credit reporting system will report actual meter reading, or readings from the prior month.

RESPONSE:

Yes, Duke Energy Kentucky currently has net metering customers. Those customers were excluded from the proposed project, since they already have advanced meters

installed. The AMI meters installed through this project will also be capable of supporting future net metering customers.

- a. Objection. The information requested herein is public record, contained in Commission-approved net metering tariffs and thus equally accessible to the Attorney General.
- b. Duke Energy Kentucky does not propose any changes to its net metering tariff through this proceeding.
- c. The AMI meters will capture usage information equally as accurately as the current meters used for net metering customers.
 - (i) Duke Energy Kentucky's net metering customers will not receive a new AMI meter under the instant program.
 - (ii) Not applicable.

PERSON RESPONSIBLE: Alexander J. Weintraub

**Duke Energy Kentucky
Case No. 2016-00152
Attorney General's First Set Data Requests
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AG-DR-01-080

REQUEST:

With regard to other Duke Energy subsidiaries in which system-wide conversion to AMI meters has been executed, provide a breakdown of any estimated increases in conservation that can fairly be attributed to the AMI program.

RESPONSE:

Duke Energy Ohio conducted a system-wide conversion to AMI meters. However, the Company has not conducted analysis to directly attribute conservation increases to AMI meter installation. As stated in response to AG-DR-01-048(b), the Prius Effect is calculated using actual customer access to their usage information and an industry-wide estimate of the amount of energy that such engaged customers could conserve.

PERSON RESPONSIBLE: Donald L. Schneider, Jr.

**Duke Energy Kentucky
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AG-DR-01-081

REQUEST:

In the event that the Commission approves the instant application, state whether DEK believes that the company would be sharing in the risks associated with the deployment of the new technologies identified in the application, and if so, state how it would be so sharing.

RESPONSE:

Objection. This question is vague, ambiguous, and unduly burdensome. Moreover the question is confusing as to what is meant by the term risks associated with deployment. Without waiving said objection, and to the extent discoverable, Duke Energy Kentucky is not aware of any exposure to risks as part of deployment of the metering upgrade.

See AG-DR-01-50 for discussion of financial risk.

PERSON RESPONSIBLE: Peggy Laub

Duke Energy Kentucky
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AG-DR-01-082

REQUEST:

In the event that the Commission approves the instant application, and in the event that total program costs exceed total program benefits, would DEK object to having shareholders being made responsible for that portion of costs that exceed benefits? If so, why?

RESPONSE:

Yes, the Company would object. It would only be appropriate for the Commission to disallow imprudently incurred costs based upon information known at the time the investment decision was made. The extent to which actual benefits exceed actual costs or to which actual costs exceed actual benefits can only be done on a post hoc basis. It would be inappropriate and unfair to the utility to evaluate prudence purely on an 'after-the-fact' basis as prudency reviews should always be limited to evaluating the reasonable of management decisions based on the information that was known and knowable at the time investment decision are made. Furthermore, such hindsight review would have the potential to stymie future investment decisions, if such investments were consistently subject to after-the-fact prudency reviews.

PERSON RESPONSIBLE: Peggy Laub

REQUEST:

Provide a complete description of the education program DEK plans to undertake to make ratepayers aware of the goals of the program, and its costs and benefits.

- a. Provide copies of any and all bill inserts or scripts of advertisements DEK plans to use in this regard. If such materials are not yet completed, will DEK agree to provide them to the Commission and the Attorney General when they are available? If not, why not?
- b. State whether DEK's education program will explain: (i) how much the bill of a residential customer will increase as a result of program implementation; and (ii) how the program will eventually pay for itself.

RESPONSE:

Duke Energy Kentucky's education program is described in the Testimony of Donald L. Schneider, Jr. on pages 21-24. Please see response to Staff DR-01-028.

- a. Duke Energy Kentucky agrees to provide the information to the Commission and Attorney General. The Company will not develop this material unless the metering upgrade is approved.

b. Objection. The question misstates facts and assumes facts not in evidence. Duke Energy Kentucky is not seeking to increase its rates as part of this CPCN application nor is it seeking to unbundle its rates into the various components of the cost of providing utility service. Without waiving said objection, and to the extent discoverable, Duke Energy Kentucky's education program will not explain how much the bill of a residential customer may increase as a result of program implementation because the Company is not proposing any discrete rate recovery/surcharge mechanism for the AMI deployment and thus a rate increase, if any, can only be determined through a base rate proceeding. Duke Energy Kentucky is unaware of the Commission requiring utilities in its jurisdiction to unbundle all components (metering, substations, generating plants, etc.) of its base rates for all customers. Suggesting that metering equipment be carved out for separate display on customers' bills is uninformative, at best, and very impractical.

On the other hand, if the Attorney General is recommending that the Company implement a surcharge or rider mechanism to immediately begin recovering costs for the metering upgrade, the Company could consider such a proposal, and that proposal would accommodate apparent interest in unbundling this element of customers' rates. The Company will describe benefits associated with the new meters that customers can enjoy.

PERSON RESPONSIBLE: Donald L. Schneider, Jr. / Peggy Laub

REQUEST:

Explain why it would not be cost-effective for DEK to replace existing meters on a rolling basis (i.e., whenever they reach the end of their effective life span), rather than replacing all meters on an immediate, system-wide basis.

- a. Does DEK believe that a system-wide replacement of meters will prove cost-effective for all residential customers? Explain fully.

RESPONSE:

The metering solution proposed in the Metering Upgrade utilizes an RF mesh technology. This technology relies on data jumping from meter to meter to find its way to a collection point (grid router). To replace meter on a rolling basis is not feasible with this type of metering solution. Also, completing a system-wide deployment allows the Company to employ efficient, consistent operations across its service territory, rather than having multiple metering solutions in place.

- a. Yes, the cost-effectiveness of the proposed solution is evidenced in the Company's cost-benefit analysis.

PERSON RESPONSIBLE: Donald L. Schneider, Jr.

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AG-DR-01-085

REQUEST:

Provide an estimate of how much the average residential customer's bill will increase once the proposed program has been fully implemented.

- a. Describe how and where total program savings will be reflected in the company's statutory and regulatory accounting.

RESPONSE:

The residential customer bill will not change until the Company has its next gas or electric base rate case. The next cases will include both costs that incorporate actual achieved/budgeted savings related to the AMI program. It is not possible to estimate how much a customer's gas or electric bills will increase (or decrease) without knowing precisely (1) when the next rate cases will be filed and approved, (2) what all of the revenue requirement components will be, and (3) how the approved overall revenue requirements will be allocated by the Commission among the rate classes.

PERSON RESPONSIBLE: Peggy Laub

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AG-DR-01-086

REQUEST:

Describe whether DEK's cost-benefit analysis took into consideration that some of its residential customers do not have home computers and/or lack remote internet access through which they could view the company's internet-based energy usage portal.

RESPONSE:

Duke Energy Kentucky's cost-benefit analysis does not assume that all customers will access their energy usage through the customer portal. To the degree that computer or internet access increases, those benefits would be more readily available to more customers. Customers can also access their energy usage using mobile devices using cellular data.

PERSON RESPONSIBLE: Donald L. Schneider, Jr.

**Duke Energy Kentucky
Case No. 2016-00152
Attorney General's First Set Data Requests
Date Received: May 23, 2016**

AG-DR-01-087

REQUEST:

Does DEK agree that outage detection and restoration at the circuit level could be accomplished without a system-wide roll-out of AMI meters? If not, why not?

RESPONSE:

Outage detection at the circuit level is being accomplished today at Duke Energy Kentucky but relies on customers to call the Company when they experience an outage. A system-wide roll-out of AMI meters will greatly improve the outage detection and restoration capabilities that Duke Energy Kentucky currently has available. With the full deployment of AMI, the Company would have far more end-points that can be used to detect outages and monitor restoration.

PERSON RESPONSIBLE: Donald L. Schneider, Jr.

REQUEST:

Does DEK's cost-benefit analysis take into consideration that any AMI meters deployed as a result of the program will have to be replaced in 15 years?

- a. In the event new AMI metering technology and/or infrastructure is developed, is DEK willing to commit that it will not seek to deploy such new technology prior to the end of the projected lifespan of the technology that will be deployed in the instant project? If not, why not?

RESPONSE:

Duke Energy Kentucky's cost-benefit analysis does not assume that all AMI meters deployed will definitely have to be replaced in 15 years.

- a. Duke Energy Kentucky does not believe that its customers should be denied the benefit of new and more cost-effective technology if such technology becomes available in the future and the results of a comprehensive cost-benefit analysis are net positive.

PERSON RESPONSIBLE: Donald L. Schneider, Jr.

**Duke Energy Kentucky
Case No. 2016-00152
Attorney General's First Set Data Requests
Date Received: May 23, 2016**

AG-DR-01-089

REQUEST:

If the Commission should approve the instant application, state whether DEK plans to introduce mandatory dynamic pricing, and if so, what protections it plans to provide for those customers who lack options to avoid peak pricing.

RESPONSE:

Objection. To the extent this Data Request is intended to be duplicative of AG-DR-01-043, it is overly burdensome and must be seen as intending to harass. Without waiving said objection, to the extent discoverable, and in the spirit of discovery, the Commission Order in Case No. 2012-00428 states, "Customer participation in any Dynamic Pricing program or tariff shall be voluntary" (Order at 35). Therefore, Duke Energy Kentucky has no plans to introduce mandatory dynamic pricing.

PERSON RESPONSIBLE:

As to objection: Legal

As to response: Alexander J. Weintraub