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VIA OVERNIGHT DELIVERY

March 6, 2009

RECEIVED
MAR 09 2009
PUBLIC SERVICE COMMISSION

Mr. Jeff Derouen
Executive Director
Kentucky Public Service Commission
211 Sower Blvd
Frankfort, KY 40601

Re: Case No. 2008-00408

Dear Mr. Derouen:

Enclosed please find for filing an original and twelve copies of the Motion to Amend Testimony of Todd W. Arnold in the above captioned case.

Please date-stamp the extra two copies of the filing and return to me in the enclosed envelope.

Sincerely,

Dianne Kuhnell

Dianne B. Kuhnell
Senior Paralegal

cc: Parties of Record

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of Consideration of the New Federal Standards of the Energy Independence and Security Act of 2007	))))	Case No. 2008-408

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PUBLIC SERVICE COMMISSION

MOTION TO AMEND TESTIMONY OF TODD W. ARNOLD

Duke Energy Kentucky (DE-Kentucky or Company) moves the Commission for leave to amend the testimony of Todd A. Arnold filed with the Commission on January 12, 2009. DE-Kentucky further seeks leave to substitute all pages of the previously filed pages of Mr. Arnold's testimony for all the pages of Mr. Arnold's testimony's attached hereto as Attachment A.

Mr. Arnold's testimony submitted on January 12, 2009 was inadvertently filed in draft form and contains testimony pertaining to Ohio SmartGrid issues not pertinent to his testimony to be filed in Kentucky.

Mr. Arnold's testimony as tendered herewith as Attachment A contains the corrected testimony.

Wherefore, DE-Kentucky respectfully requests that it be granted leave to amend the January 12, 2009 testimony of Todd A. Arnold, and that the amended pages tendered herewith be substituted for the pages of the previously filed testimony. The correct version of Mr. Arnold's testimony is being served upon all parties of record to the proceeding.

Respectfully submitted,

DUKE ENERGY KENTUCKY, INC.

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of Duke Energy Kentucky, Inc.'s Motion to Amend Testimony of Todd W. Arnold was served on the following by overnight mail, this 6th day of March 2009.

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Attachment A

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MAR 09 2009

PUBLIC SERVICE
COMMISSION

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of Consideration of the New Federal Standards of the Energy Independence and Security Act of 2007	))))	Case No. 2008-408

DIRECT TESTIMONY OF

TODD W. ARNOLD

ON BEHALF OF

DUKE ENERGY KENTUCKY, INC.

January 12, 2009

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I. INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Todd W. Arnold. My business address is 139 East Fourth Street, Cincinnati, Ohio 45202.

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

A. I am employed by the Duke Energy Corporation ("Duke Energy") affiliated companies as Senior Vice President, SmartGrid and Customer Systems.

Q. PLEASE BRIEFLY DESCRIBE YOUR JOB DUTIES AS SENIOR VICE PRESIDENT, SMARTGRID AND CUSTOMER SYSTEMS.

A. As Vice President, SmartGrid and Customer Systems, I am responsible for the SmartGrid strategy, deployment planning and implementation, as well as the customer and meter data management systems for all of Duke Energy's utility operating companies including Duke Energy Kentucky, Inc. ("Duke Energy Kentucky" or the "Company").

Q. PLEASE BRIEFLY DESCRIBE YOUR PROFESSIONAL AND EDUCATIONAL BACKGROUND.

A. I received a Bachelor's Degree in Marketing from Indiana State University in 1977 and a Master's Degree in Business Administration from the University of Indianapolis in 1986. I began my career with Public Service Indiana ("PSI") in 1977 in field sales and marketing. I have served in many customer operations, distribution operations and corporate office capacities. I have my "Strategic Leader" professional certification from the Call Center Industry Advisory Council

("CIAC"). CIAC is a non-profit corporation established by the call center industry to provide standardized competency-based professional certification for call center leaders. I am a member of the Board of Directors of People Working Cooperatively.

Q. PLEASE SUMMARIZE YOUR WORK EXPERIENCE.

A. I have over 32 years of utility experience, including field operations, customer service, strategic planning, system implementation, process reengineering and merger integration. Prior to my current position, I was Senior Vice President, Customer Service for Duke Energy, responsible for call center operations, billing, credit and collections and meter data management for Duke Energy's affiliated operating companies.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. The purpose of my testimony is to discuss the standards for electric utilities relating to SmartGrid as set forth in the Energy Independence and Security Act of 2007 ("EISA 2007"), which amends the Public Utilities Regulatory Act of 1978 ("PURPA"). In particular, I will discuss Duke Energy Kentucky's recommendations in consideration of the factors required by EISA 2007 related to SmartGrid and the status of Duke Energy Kentucky's advanced metering project.

II. <u>ENERGY INDEPENDENCE AND SECURITY ACT OF 2007</u>

Q. ARE YOU FAMILIAR WITH THE EISA 2007 STANDARDS THAT ARE APPLICABLE TO THE COMMISSION'S CONSIDERATION OF SMARTGRID INVESTMENT?

A. Yes. The EISA 2007 standards contained is Section 1307(a)(16) and (17) for SmartGrid require that each state, prior to undertaking investment in non-advanced grid technologies, require the electric utility to demonstrate that it has considered its investment in grid technologies as they relate to six factors: total cost, cost effectiveness, improved reliability, security, system performance, and societal benefits.

Q. WHAT IS DUKE ENERGY'S DEFINITION OF SMARTGRID?

A. SmartGrid is the industry term for new technology, systems and processes that transform gas and electric distribution systems into an integrated, digital network – much like a computer network – to produce operating efficiencies, enhanced customer and utility information and communications, innovative services, and improved reliability among other benefits. One fundamental component of the SmartGrid project is Advanced Metering Infrastructure ("AMI"). AMI is a metering and communication system that records customer usage data over frequent intervals, and transmits the data over an advanced communication network to a centralized data management system. The usage data is made available to the utility and customers on a frequent and timely basis. SmartGrid projects use the communication network to carry data from AMI and other intelligent devices on the distribution grid, creating a networked system and utilizing the AMI to its greatest extent.

SmartGrid, however, is not limited to AMI metering. The possibilities with SmartGrid technologies are infinite as it is continuously evolving much like the internet has evolved over time. SmartGrid is much more than simply the sum of the functions it is capable of performing. It is an integration of many points on the electric distribution system which will provide capabilities and/or a platform for emerging technologies, many of which will be beyond the meter.

Q. DOES DUKE ENERGY KENTUCKY AGREE WITH THE EISA 2007 FACTORS FOR CONSIDERATION RELATED TO SMARTGRID IMPLEMENTATION?

A. The Company supports the EISA 2007 standards related to SmartGrid, but does not believe the standards need to be formally adopted by the Commission. All of the six factors set forth in EISA 2007 are appropriate elements to consider in implementation of SmartGrid and in fact, Duke Energy Kentucky has considered each of them in evaluating SmartGrid notwithstanding the requirements of EISA 2007.

Q. ARE THERE POLICY CONSIDERATIONS DUKE ENERGY KENTUCKY DOES NOT SUPPORT UNDER THE EISA 2007 ENERGY EFFICIENCY ELECTRIC RATE DESIGN STANDARD.

A. No. Duke Energy Kentucky has, in fact, analyzed and considered these same factors as it has studied and moved forward with its SmartGrid initiatives in the five states in which it operates, including Kentucky. Since Duke Energy Kentucky provides both natural gas and electric utility service to its Northern Kentucky customers, Duke Energy has and is analyzing SmartGrid technologies for both electric and natural gas investment.

Q. PLEASE DESCRIBE DUKE ENERGY'S EFFORTS IN INVESTIGATING INVESTMENT IN SMARTGRID TECHNOLOGY.

A. Duke Energy began investigating the development of a data management system in 2004. Initially, the purpose was to gather and correlate data on generation characteristics, outages, transmission loading, distribution system constraints and meters, and then use that data to better optimize Duke Energy's system and employee work loads. The investigation led to the determination that opportunities existed to further enhance system performance and operations. Near that same time, Duke Energy Kentucky was also considering the possibility of an automated meter reading (AMR) project using a power line system in its Midwest region.

In 2006, Duke Energy initiated an internal working group consisting of every operational area (except for generation) tasked with putting together "use cases" designed to describe what technology Duke Energy needed to accomplish this initiative and how it wanted to provide service and use products in the future. Approximately 18-20 "use cases" were developed in conjunction with a consultant, KEMA, Inc., hired to assist Duke Energy with this endeavor. KEMA's staff analyzed and shaped the "use cases" using information from peer companies, and helped to determine what technology would be needed in order to accomplish the goals of each use case.

Once Duke Energy determined the actual technologies needed to bring its vision for the future (as set forth in its "use cases"), vendors of metering, behind-the-meter and communication products were surveyed to assess their product offerings and to compare to Duke Energy's functional requirements. Duke Energy's vision was to have interoperable metering endpoints which would work with any communication system, and what was offered were metering endpoints that only connected to proprietary communication systems. We have selected a few firms that were closest to meeting our needs and have been working with them to move toward full compliance with our requirements and vision. Duke Energy is continuing to work with several vendors to best implement its vision of Duke Energy's future in this area. At this point, we have developed an architecture that allows us to minimize the proprietary communications networks and increase the long-term flexibility of the "smart grid." The process of developing technology and vendors will be an ongoing process.

Duke Energy has developed a prototype of its SmartGrid vision, which it calls the EnVision Center. Located in Erlanger Kentucky, the EnVision Center represents what Duke Energy foresees as the culmination of SmartGrid technology design and implementation for the future of energy delivery. The EnVision Center provides visitors an interactive and special effects experience that demonstrates the possibilities of modernizing to "smart grid" and energy efficiency technology. The center features a movie-style studio with sets consisting of a substation with two-way digital technology, a "smart" home – complete with solar panels and a plug-in hybrid vehicle, an apartment complex with "smart meters" and a power delivery work center – monitoring conditions with real-time data. Electric poles equipped with "intelligent" power equipment are also staged throughout.

Q. HAS DUKE ENERGY CONSULTED WITH INDUSTRY GROUPS ON ITS SMARTGRID VISION?

A. Yes. Duke Energy has consulted and collaborated on its SmartGrid initiative with the Electric Power Research Institute ("EPRI"), the research and development arm of the electric utility industry. Duke Energy is working on approximately twelve projects under EPRI's "Intelligrid" umbrella.

Duke Energy has also been working with the Gridwise Architectural Council and Gridwise Alliance, which were formed by the Pacific Northwest National Lab and the U.S. Department of Energy to focus on researching the future of the smart grid. The focus of the Gridwise Architectural Council is on standards, *i.e.*, how communication systems work together and the benefits of meters using the same "language." The Gridwise Alliance is involved in developing policies and standards at the state and federal levels. Duke Energy personnel are also involved in many other organizations that may have "smart grids" as a subset of their main focus, and participate in the internal development of Duke Energy's SmartGrid.

Representatives from Duke Energy have been involved with several conferences and seminars relating to smart grid investments. Utilimetrics (formerly AMR Associates) and Distributech hold annual conferences and trade shows in which Duke Energy participates in order to keep up-to-date on new developments in technology.

Q. HAS DUKE ENERGY KENTUCKY OR ANY OF ITS SISTER UTILTIES DEPLOYED SMARTGRID COMPONENTS WITHIN THEIR RESPECTIVE SERVICE TERRITORIES?

A. Yes. Duke Energy has introduced various components of SmartGrid technologies in four of its service territories that include installation of electric and gas smart meters and the associated AMI infrastructure, distribution communications equipment and software, substation automation and line sensor equipment. Duke Energy Ohio will install approximately 50,000 electric smart meters and 40,000 gas modules in Ohio, and approximately 20,000 in both North Carolina and South Carolina in early 2009. In 2008, we completed the majority of an initial deployment of AMI in Kentucky. In December 2008, Duke Energy – Ohio received approval to install, over a five year period, over 700,000 electric smart meters, over 450,000 gas modules, significant distribution automation, communication backbone and information technology systems to enable the Smart Grid.

Q. WHAT IS THE STATUS OF DUKE ENERGY KENTUCKY'S SMARTGRID DEPLOYMENT?

A. Pursuant to the Commission's order in Duke Energy Kentucky's last electric rate case, Duke Energy Kentucky started deploying an AMI solution based on Power Line Communications ("PLC") technology. PLC technology uses the electrical distribution system as the communication medium between the meter and the controlling software.

Duke Energy has deployed approximately 25,800 gas AMI modules and approximately 37,300 electric AMI meters in Northern Kentucky since 2007. In addition, approximately 1,200 single phase commercial electric meters, 300 extended range (320 amp) residential electric meters and 50 Transformer Type commercial electric meters have not been deployed. As of December 1, 2008, Duke Energy Kentucky obtained 98.5% of the AMI Electric readings on the first reading attempt and 95.6% of the Gas readings on the first reading attempt. Automatic reread attempts raise the billing % (November cycle) to 99.5% electric and 97.7% gas. Duke Energy Kentucky is currently testing 15 minute interval readings on a small subset of commercial electric meters and 60 minute interval readings on a small group of residential electric meters. We expect to collect interval data from all AMI electric meters by 2nd quarter 2009.

Duke Energy Kentucky continues to proactively tune the system and investigate error codes to improve the reading percentage. To date, the system is working successfully and we continue to evaluate improvements as we gain experience and knowledge for integrating AMI capabilities into our operations and customer service processes.

Q. HAS DUKE ENERGY KENTUCKYCONSIDERED THESE SIX POLICY FACTORS SET FORTH IN EISA 2007, IN CONNECTION WITH ITS INVESTMENT IN SMARTGRID?

A. Yes. Duke Energy Kentucky has considered all of these factors and is continuing to monitor them as they related to its AMI initiative in Kentucky.

Q. PLEASE EXPLAIN IN GREATER DETAIL THE CONSIDERATION OF EACH OF THESE EISA 2007 FACTORS IN CONNECTION WITH SMARTGRID IMPLEMENTATION?

A. The first factor which we are required to consider is total cost. Duke Energy has retained an expert to monitor and track costs and benefits of SmartGrid implementation. The expert is an Executive Consultant with KEMA, Inc., (KEMA). Established in 1927, KEMA is an international energy solutions firm providing technical and management consulting, systems integration and training services to more than 500 electric industry clients in 70 countries. As we move forward with implementation of our SmartGrid initiative in each of the states in which Duke Energy operates, we are evolving our understanding of costs and benefits as they develop. We already know that implementing SmartGrid will provide many benefits to the Company, to customers and to society. At present, many of these benefits are not capable of measurement. For example, if an outage occurs on a residential circuit, we may know of it even before the customer is aware of the outage. It may be repaired even while a customer is away from the home. Thus there is no inconvenience or unnecessary time loss for the customer. On the business side, such efficiency can be measured in man hours saved, but the convenience to the customer is difficult to measure. As a result, although we can measure some benefits, others should be considered as well even though it is difficult to assign dollar values.

Q. HAS DUKE ENERGY ALSO CONSIDERED COST EFFECTIVENESS AS IT RELATED SO SMARTGRID IMPLEMENTATION?

A. Benefits, or cost savings, that offset the costs of deploying the SmartGrid, can be grouped into three major categories: operational benefits, quantifiable customer / societal benefits, and qualitative customer / societal benefits.

Operational benefits directly impact Duke Energy's costs of providing electric and gas service to its customers. These operational benefits can be grouped into four primary categories:

- Metering Benefits including:
    1. Elimination of regular meter reads (up to 90% of manual meter reading costs eliminated)
    2. Reduction in off-cycle / off-season meter reads, including the ability to remote connect/disconnect (up to 90% of off-cycle meter reading costs and 80% of electric connect/disconnect costs)
    3. Reduction in power theft resulting in increased revenues – this benefit is attributable to analysis of the continuous data flowing from the meters to back-office systems
- Outage Benefits including:
    1. Reduction in time spent by assessors determining which customers have been restored and which customers still have outages
    2. Reduction in time spent by outage crews in determining the location of the next work to be performed as part of outage restoration
- Distribution Benefits including:
    1. Reduction in demand through System Voltage Control – with the data provided by distribution automation components (substation, circuit breakers, capacitor bank, regulators), the Company is able to operate the entire system at a lower voltage

level in the range of acceptable voltage levels. The lower voltage level translates into reduced demand that translates into an avoided cost benefit in terms of avoided capital investment or avoided power purchases

2. Reduction in the costs of continuous voltage monitoring as this will now be an automated process
3. Reduction in capital expenditures from more accurate and automated asset management techniques
4. Reduction in maintenance costs associated with capacitor and circuit breaker inspections

- Other Operational Benefits including:
  1. Decreased in call volumes and call lengths improve the call center efficiency
  2. Decrease in workers compensation associated with meter reading employees
  3. Reduction in billing costs related to a reduction in estimated bills
  4. Reduction in vehicle costs associated with meter reading vehicles, including reduced insurance, reduced fuel costs, and reduced vehicle ownership/leasing costs

Quantifiable customer / societal benefits are those benefits that accrue to customers and society as a whole and can be quantified based on external / industry studies. These benefits include:

- Reduction in the number of customer outages – A primary benefit of the distribution automation part of the SmartGrid Initiative is an increase in reliability, whereby the number of outage events may not be affected, but the number of customers experiencing outages as a result of these outage events will be reduced.
- Reduction in usage – Often called the Customer Feedback Benefit or the Prius Effect, this benefit results from a decrease in customer usage (thus lower customer bills) as a result of detailed usage information being provided to the customer by the utility. This benefit is not based on time-of-use pricing; it is simply the decrease in usage that results when customers become more aware of their usage habits and the associated costs.
- Avoided costs associated with plug-in hybrid electric vehicles (PHEVs) – this societal benefit values the generation costs (typically additional construction) that will be avoided if the predicted market penetration of PHEVs is realized and a SmartGrid is in place to assist in controlling the timing of the vehicle recharging.

Qualitative customer / societal benefits are those benefits that are readily identifiable as a benefit to customers or society as a whole, but that are extremely hard to accurately quantify. These benefits include:

- Increased customer satisfaction related to more accurate billing (few estimated bills), shortened time frames for meter read requests, connects and disconnects that do not require a service visit, and decreased outages and outage durations

- Increased customer satisfaction related to additional choices, such as different rates and selectable bill dates, and additional usage information with which to make informed purchase/usage decisions
- Increased road safety due to decreases in the number of vehicles on the road
- Increased perceived safety as a result of elimination of the requirement for a meter reader to physically be on your property or within your residence
- Increased health of the environment due to reduced demand or managed demand

Q. HOW WILL SMARTGRID IMPROVE RELIABILITY FOR ELECTRIC AND NATURAL GAS SERVICE?

A. SmartGrid, including both distribution automation and advanced metering infrastructure builds the foundation for improving reliability in a number of ways. In addition to deploying smart meters and the supporting AMI infrastructure, Duke Energy's vision for its Electric Distribution SmartGrid includes:

1. Establishing communication links to all substations;
2. Replacing any distribution feeder circuit protective devices that are not conducive to automation with new circuit breakers that are conducive to automation;
3. Upgrading old electromechanical relays with state of the art microprocessor controlled relays, and establishing remote control capability of all electric distribution circuit breakers greater than 4kv;

4. Automating switched bank capacitors and voltage regulators to enable integrated volt / var optimization and implement a voltage reduction strategy;
5. Establish communication links and enable remote control capability of electronic reclosers; and
6. Enhanced sectionalization and deployment of self healing technology.

The steps noted above will allow for auto outage reporting capability, provide accurate real time information on distribution grid network status, and position Duke Energy Kentucky to respond to outages in a timelier manner based on greater real time intelligence. The automation strategy noted above will allow for the response to some outages from remote locations such as work centers and introduce the utilization of localized on site switching to mitigate the impacts on outages. The automation strategy noted above will reduce the system average interruption frequency index ("SAIFI") and system average interruption duration index ("SAIDI"). This is achieved by reduction the number of customers impacted during an outage event.

Q. HAS DUKE ENERGY KENTUCKY CONSIDERED SECURITY MEASURES IN CONNECTION WITH ITS IMPLEMENTATION OF SMARTGRID?

A. Yes. The SmartGrid system will be secure. Duke Energy Kentucky has a robust, defense-in-depth security architecture based on accepted and mature industry best practices. These best practices include network firewalls, intrusion detection systems, isolated network segments, and user access controls. Additionally, SmartGrid devices are secured by being connected to a dedicated network that is not accessible to the public Internet.

Q. PLEASE DISCUSS WHAT THE SYSTEM PERFORMANCE WILL PROVIDE.

A. For responding to this question, Duke Energy Kentucky assumes that System Performance means functionality that is enabled through SmartGrid technologies. For example, the SmartGrid can enable Duke Energy Kentucky to assess load profile data for a home on an hourly basis for several days for trouble-shooting purposes. This information could be provided to customers concerned about their levels of usage. Information from the "end points" of the system will also be combined with data from other distribution assets to better plan for growth, asset management, restoration services, *etc.* Such data would also be helpful for short-term load forecasts, as well as the Company's voltage reduction proposal. Distribution system, energy efficiency and demand-response planning will also be enhanced by gathering more granular consumption data over weeks and months.

It is not just the meters that enable new options, but the entire SmartGrid system working together that will provide the Company with the ability to provide new service options for its customers. The data collected and transmitted through the intelligent meters, in conjunction with the distribution automation and communication equipment, will provide new operational efficiencies. Restoration of service after an outage will be more rapid and efficient. Duke Energy will also be able to troubleshoot distribution problems using the communications network versus visual inspection. This will also reduce crew time in the field.

The intelligent meters and related SmartGrid equipment would also enable Duke Energy Kentucky to limit its amount of load in an emergency. It will enable the Company to increase its energy efficiency offerings, provide for larger-scale distributed generation and maximize load control potential.

Customer service would also be enhanced. The Company will be able to obtain special reads for customers calling in with questions about their meters, usage or billing. A larger quantity of customer-sited generation could be deployed and net metered.

Q. WHY DOES DUKE ENERGY KENTUCKY BELIEVE THE EISA 2007 ELECTRIC ENERGY EFFICIENCY STANDARD DOES NEED NOT BE FORMALLY ADOPTED?

A. Duke Energy Kentucky agrees with the standard. The Company merely suggests that a formal adoption of it is not necessary as there are sufficient regulations, and policies in place that accomplish the goals of the EISA 2007 standard.

Q. WHAT COMMISSION POLICIES AND REGULATIONS ARE ALREADY IN PLACE THAT ACCOMPLISH THE GOALS OF EISA 2007?

A. The Commission has jurisdiction to approve utilities' investment in infrastructure. In fact, Duke Energy Kentucky received the Commission's approval to deploy advanced metering, with an expenditure of $14,000,000 in Duke Energy Kentucky's last electric rate case, Case No. 2006-00172. Also, the Commission may consider residential SmartGrid deployment as an element of demand side management (DSM) plans which are submitted for approval under

KRS Chapter 278.285. The Kentucky statute gives the Commission authority to review utility sponsored demand side management and energy conservation plans and approve such plans for recovery via a discrete rider adjustment. The Commission can approve such programs if the Commission determines that the programs are reasonable.

Q. HAS DUKE ENERGY PARTICIPATED IN ANY GOVERNMENTAL INITIATIVES RELATING TO SMART GRIDS?

A. Yes. Duke Energy has monitored the Department of Energy's ("DOE") Modern Grid Initiative and frequently participates in venues to help shape the definition, direction and policy setting of this group. Duke Energy personnel also contribute, through trade associations, material to be considered in defining the smart grid, as well as setting national policy through the DOE. Duke Energy has also applied for funding for a few smart grid-related projects from DOE, but has not been selected to date.

Q. HOW DOES DUKE ENERGY KENTUCKY'S AMI INTIATIVE FURTHER THE GOALS OF THE EISA 2007 STANDARD?

A. Duke Energy Kentucky's AMI Initiative provides one solution of the possible components which build a Smart Grid and is providing benefits today to our Kentucky customers. These defined technology benefits are continuously evaluated using the six factor criteria set forth above. The current deployment provides an effective foundation for learning as Duke Energy continues to build out the necessary components and evolve the system to create an energy internet or SmartGrid. The solution has the capability to confirm power-restoration events, contributing to improved reliability. The Kentucky AMI Initiative also supports security best practices including firewalls, intrusion detection, isolated network segments and user access controls. The network is not accessible to the public internet. The Duke Energy Kentucky's AMI Initiative supports interval data collection from electric meters and daily data collection from gas meters. This functionality supports rate structure flexibility. All of these potential benefits can be netted against their potential costs and benefits and will be considered incrementally by the Commission as the network is developed and refined. The goals set forth in the EISA Standard set forth in Section 1307 represent a rational framework for analyzing the reasonableness of the SmartGrid deployment.

III. CONCLUSION

Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECTTESTIMONY?

A. Yes.

VERIFICATION

STATE OF OHIO) SS:
COUNTY OF HAMILTON)

The undersigned, Todd W. Arnold , being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing testimony, and that the answers contained therein are true and correct to the best of his knowledge, information and belief.

ADELE M. DOCKERY
Notary Public, State of Ohio
My Commission Expires 01-05-2014

Todd W. Arnold (signature)
Todd W. Arnold, Affiant

Subscribed and sworn to before me by Todd W. Arnold on this 6TH day of MARCH, 2009.

Adele M. Dockery (signature)
NOTARY PUBLIC

My Commission Expires: 1/5/2014