Duke Energy®

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Anita M. Schafer
Sr. Paralegal

VIA OVERNIGHT DELIVERY

April 24, 2009

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 response to Staff Second Set of Data Requests in the above captioned case.

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

Sincerely,

Anita M. Schafer
Senior Paralegal

cc: Parties of Record

VERIFICATION

State of Indiana)
) SS:
County of Hendricks)

The undersigned, Jeffrey R. Bailey, being duly sworn, deposes and says that I am employed by the Duke Energy Corporation affiliated companies as Director of Pricing and Analysis for Duke Energy Business Services, Inc.; that on behalf of Duke Energy Kentucky, Inc., I have supervised the preparation of the responses to the foregoing responses to information requests; and that the matters set forth in the foregoing response to information requests are true and accurate to the best of my knowledge, information and belief after reasonable inquire.

Jeffrey R. Bailey

Jeffrey R. Bailey, Affiant

Subscribed and sworn to before me by Jeffrey R. Bailey on this 23rd day of April 2009.

Lana J Horner

NOTARY PUBLIC LANA J. HORNER

My Commission Expires: 04/19/2015

VERIFICATION

State of Ohio)
) SS:
County of Hamilton)

The undersigned, Todd W. Arnold, being duly sworn, deposes and says that I am employed by the Duke Energy Corporation affiliated companies as Senior Vice President, – SmartGrid and Customer Systems; that on behalf of Duke Energy Kentucky, Inc., I have supervised the preparation of the responses to the foregoing responses to information requests; and that the matters set forth in the foregoing response to information requests are true and accurate to the best of my knowledge, information and belief after reasonable inquire.

Todd W. Arnold

Todd W. Arnold, Affiant

Subscribed and sworn to before me by Todd W. Arnold on this 20th day of April 2009.

Anita M. Schafer

NOTARY PUBLIC

My Commission Expires:

NOTARY PUBLIC STATE OF OHIO

ANITA M. SCHAFER
Notary Public, State of Ohio
My Commission Expires
November 4, 2009

VERIFICATION

State of Ohio)
) SS:
County of Hamilton)

The undersigned, Richard G. Stevie, being duly sworn, deposes and says that I am employed by the Duke Energy Corporation affiliated companies as Managing Director, Customer Market Analysis; that on behalf of Duke Energy Kentucky, Inc., I have supervised the preparation of the responses to the foregoing responses to information requests; and that the matters set forth in the foregoing response to information requests are true and accurate to the best of my knowledge, information and belief after reasonable inquire.

Richard G. Stevie, Affiant

Subscribed and sworn to before me by Richard Stevie on this 17th day of April, 2009.

NOTARY PUBLIC

My Commission Expires:

NOTARY PUBLIC STATE OF OHIO

ANITA M. SCHAFER
Notary Public, State of Ohio
My Commission Expires
November 4, 2009

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Duke Energy Kentucky, Inc.
Case No. 2008-00408
Second Set Staff Data Requests
Date Received: April 13, 2009

STAFF-DR-02-017

REQUEST:

Refer to Duke Kentucky's response to Staff's Initial Data Request, Item 24. Duke Kentucky lists its DSM programs and provides the annual kWh saved by each program.

a. Are there additional DSM programs in place for other Duke Energy subsidiary companies that Kentucky Power Company ("Kentucky Power") may consider?

b. If the answer to a. above is yes, identify and explain each program.

RESPONSE:

a. Duke Energy Kentucky assumes the referenced utility was intended to be Duke Energy Kentucky. With that assumption in mind, there is one.

b. In our Ohio service area, we are offering the Home Performance with ENERGY STAR Program. A description is provided below.

Program Description: Home Performance with ENERGY STAR

Home Performance with ENERGY STAR is an energy efficient program for existing houses that uses building science to deliver a whole house solution. The program strives to achieve cost effective home improvements that are capable of delivering measurable improvements in energy efficiency, comfort, health, safety and durability.

Targeted Customer Segments

Home Performance program will be available to any Duke Energy homeowner. The participation will be created by targeting inefficient customers, HVAC replacements, re-modelers and movers.

Duke Energy can help homeowners make their home more comfortable and energy efficient with a simple and financially appealing suite of services including high tech audit, skilled contractor network and optional low cost financing.

- Custom Whole House Solution
  - High tech energy audit by qualified auditor
  - Detailed audit report
    - Recommended energy efficiency measures
    - Potential savings
  - Experienced contractor network for measure installation
  - Opportunity for shared cost of energy audit and measure incentives

PERSON RESPONSIBLE: Richard G. Stevie

Duke Energy Kentucky, Inc.
Case No. 2008-00408
Second Set Staff Data Requests
Date Received: April 13, 2009

STAFF-DR-02-018

REQUEST:

Refer to Duke Kentucky's response to Staff's Initial Data Request, Item 25. Explain whether Duke Kentucky believes its current customer charge for Rate RS is sufficient to allow Duke Kentucky to encourage energy efficiency.

RESPONSE:

The customer charge for residential service is significantly below cost. This by itself is not a significant factor in encouraging energy efficiency. However, it does exacerbate the effects of declining sales when the fixed charges that should be recovered in the customer charge must be recovered in the energy charge.

PERSON RESPONSIBLE: Jeffrey R. Bailey

Duke Energy Kentucky, Inc.
Case No. 2008-00408
Second Set Staff Data Requests
Date Received: April 13, 2009

STAFF-DR-02-019

REQUEST:

Refer to Duke Kentucky's response to Staff's Initial Data Request, Item 38. Explain whether any Duke Energy programs incorporate smart grid technology. If other Duke Energy subsidiary companies incorporate these technologies, identify the companies and explain the technologies employed. Include in the explanation the conditions existing in Kentucky that discourage employing such technologies.

RESPONSE:

The current energy efficiency programs do not rely on smart grid technology. In addition, the initial set programs proposed under the Company's save-a-watt application also do not rely on smart grid technology. However, the Company anticipates that future programs will rely on and incorporate the capabilities of smart grid technology. This situation is the same across all Duke Energy subsidiary companies. Duke Energy Kentucky believes that the regulatory mechanism advocated in its recent save-a-watt application provides adequate support for incorporating the capabilities of smart grid technology into its energy efficiency programs.

PERSON RESPONSIBLE: Richard G. Stevie

Duke Energy Kentucky, Inc.
Case No. 2008-00408
Second Set Staff Data Requests
Date Received: April 13, 2009

STAFF-DR-02-020

REQUEST:

Refer to the response to Staffs Initial Data Request, Item 113, regarding changes in Duke Ohio's rates. General Service ("GS") rates change in phases, as do the Residential Service ("RS") rates. The GS rate changes follow a pattern of the customer charge increasing concurrent with a decrease in the volumetric charge. Explain why the initial RS rate change more than doubles both the customer charge and volumetric charge before following a pattern similar to the GS rates in subsequent rate changes.

RESPONSE:

The settlement in the gas case called for the RS customer charge to be effective from June 2008 through May 2009 as follows:

Proposed Rates per Settlement - Year 1

	Customer Charge	First 40 MCF Per MCF Charge	Additional MCF Per MCF Charge
Low Income	$16.25	$1.07044	$1.07044
RS / RFT	$20.25	$1.07044	$1.71544

Through settlement discussions, it was decided to lower the Rate RS customer charge for the period June through September 2008 to somewhat mitigate the impact of the new monthly charge on the typically low summer bills. The June through September rates are:

Proposed Rates with $15 Customer Charge
June - September Year 1

	Customer Charge	First 40 MCF Per MCF Charge	Additional MCF Per MCF Charge
Low Income	$11.00	$4.01134	$4.01134
RS / RFT	$15.00	$4.01134	$4.65634

The June through September volumetric charges were calculated by dividing the reduced customer charge revenue (i.e., $20.25 minus $15.00) for the June-September period by the MCF usage for the same four months. The volumetric charges substantially increased because summer gas usage is normally low relative to the rest of the year.

Beginning with October 2008 billing, the RS rates reverted back to the settlement rates as shown above.

PERSON RESPONSIBLE: Jeffrey R. Bailey

Duke Energy Kentucky, Inc.
Case No. 2008-00408
Second Set Staff Data Requests
Date Received: April 13, 2009

STAFF-DR-02-021

REQUEST:

Duke Kentucky's response to Staffs Initial Data Request, Item 113, provides the increased customer charges resulting from a form of decoupling recently implemented by Duke Ohio. Does Duke Kentucky envision a similar proposal in Kentucky?

RESPONSE:

Duke Energy Kentucky currently anticipates requesting increased customer charges.

PERSON RESPONSIBLE: Jeffrey R. Bailey

Duke Energy Kentucky, Inc.
Case No. 2008-00408
Second Set Staff Data Requests
Date Received: April 13, 2009

STAFF-DR-02-022

REQUEST:

The major gas utilities other than Duke Kentucky, either in their testimony in this proceeding or in their data responses, have stated a preference for, or interest in, some form of annual rate review as a means to keep revenues "current" and minimize the throughput incentive. Explain whether Duke Kentucky shares the other utilities' interest in this approach to mitigating a perceived obstacle to pursuing energy efficiency.

RESPONSE:

Duke Energy Kentucky does have an interest in some form of annual rate review or an increased customer charge as a means to keep revenue current and minimize the throughput incentive. The scope of the annual review and potential impacts to return would be considerations for final support of such reviews.

PERSON RESPONSIBLE: Jeffrey R. Bailey

Duke Energy Kentucky, Inc.
Case No. 2008-00408
Second Set Staff Data Requests
Date Received: April 13, 2009

STAFF-DR-02-040

REQUEST:

Refer to the response of Duke Kentucky to Staffs Initial Data Request, Item 36, Attachment (a), pages 17-18. Describe the extent to which your plans for smart grid reflect the addition of infrastructure and new technology that will enhance the integration of demand response and energy efficiency into your system.

RESPONSE:

Duke plans to deploy a two way communications network within its distribution grid that will enable SmartGrid functionality and provide the necessary foundation to enable demand response and new energy efficiency programs. Duke's SmartGrid Initiative will continue to explore a variety of new means to convey more meaningful and timely usage information that is of value to our customers. Over the next several years Duke will be developing new products and services to leverage the capabilities of the SmartGrid. Technologies like Home Area Networks (HANs) and other smart devices like programmable communicating thermostats that meet both our customer's needs and our thresholds for cost effective energy efficiency programs will be considered for future offers. We are in the early stages of evaluating new customer offers and the required technologies that will enable network communications into the HAN. Final decisions have not been made regarding how the HAN will be integrated into the SmartGrid network or the extent that these technologies will be incorporated into future customer offers.

PERSON RESPONSIBLE: Todd W. Arnold

Duke Energy Kentucky, Inc.
Case No. 2008-00408
Second Set Staff Data Requests
Date Received: April 13, 2009

STAFF-DR-02-041

REQUEST:

Refer to the response of Duke Kentucky to Staffs Initial Data Request, Item 36, Attachment (c), pages 49-50. Describe the extent to which your plans for smart grid incorporate the addition of communication infrastructure that will enhance the use of distributed resources on your system.

RESPONSE:

Through strategic partnerships and development of new systems, Duke plans to deploy a two way communications network within its distribution grid that will provide the necessary foundation to enable distribution automation and distributed computing capabilities. The communications network will support the collection of metering data, outage data and new automated distribution functionality required to optimize the grid. Duke will leverage mobile wireless, power line carrier, fiber optic, Wi-Fi and potentially other communications technologies to establish Home Area Networks, Local Area Networks and Wide Area Networks needed to support its SmartGrid deployments in multiple jurisdictions.

PERSON RESPONSIBLE: Todd W. Arnold

Duke Energy Kentucky, Inc.
Case No. 2008-00408
Second Set Staff Data Requests
Date Received: April 13, 2009

STAFF-DR-02-042

REQUEST:

It does not appear from the testimony and data responses that any of the electric utilities are considering networking options for smart grid, such as partnering with broadband and mobile wireless providers to provide network connections, as opposed to investing in the construction of their own networks. Explain whether such partnering is being explored on either a utility-specific or industry-wide level.

RESPONSE:

Duke Energy has been working closely with commercial network providers to develop and deploy networking technologies that support its SmartGrid pilot deployments. Duke prefers to leverage existing public/commercial broadband networks, such as mobile wireless, fiber optic or cable to provide network connectivity to its current and future SmartGrid deployments where possible. Duke has and will continue to develop strategic partnerships with commercial network providers to provide the capability to back haul data required for distribution automation, metering systems and energy efficiency functionality.

PERSON RESPONSIBLE: Todd W. Arnold

Duke Energy Kentucky, Inc.
Case No. 2008-00408
Second Set Staff Data Requests
Date Received: April 13, 2009

STAFF-DR-02-043

REQUEST:

It does not appear from the testimony and data responses that any of the electric utilities have indicated to what extent they have prioritized the smart grid elements they plan to pursue. Provide a list showing how you have prioritized the items in your smart grid plan along with an explanation thereof.

RESPONSE:

Duke Energy has prioritized the SmartGrid elements it plans to pursue in jurisdictions where a comprehensive SmartGrid deployment has been approved such as Ohio. Key components of the Duke plan include company operational benefits and customer benefits as outlined in Todd Arnold's testimony, Case No. 2008-408, page 10, line 19. Duke's first priority includes the deployment of an extensive communications network designed specifically for its distribution grid. This network will provide the two way communications connectivity to enable AMI, distribution automation and energy efficiency.

PERSON RESPONSIBLE: Todd W. Arnold