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VIA OVERNIGHT MAIL

March 20, 2008

Ms. Elizabeth O'Donnell
Executive Director
Kentucky Public Service Commission
211 Sower Boulevard
P.O. Box 615
Frankfort, Kentucky 40602-0615

RECEIVED

MAR 20 2008

**PUBLIC SERVICE
COMMISSION**

Re: Case No. 2007-477

Dear Ms. O'Donnell:

Enclosed please find an original and 10 copies of the Responses of the First Data Request of Joint Utilities and Responses of the First Data Request of Commission Staff on behalf of Duke Energy Kentucky, Inc. in the above captioned case pursuant to the Commission's Order dated March 11, 2008.

Please date stamp and return the two extra copies of each cover page of the packets of responses in the enclosed, self-addressed envelope.

If you have any questions, please do not hesitate to contact me at (513) 419-1847.

Sincerely,

Anita M. Schafer
Senior Paralegal

cc: Parties of Record

CERTIFICATE OF SERVICE

I certify that a copy of the attached Responses of the First Data Request of Joint Utilities and Responses of the First Data Request of Commission Staff (both dated March 11, 2008) on behalf of Duke Energy Kentucky, Inc. has been served by UPS overnight mail to the following parties on this 20th day of March, 2008:

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Michael J. Pahutski

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF AN)
INVESTIGATION OF THE ENERGY AND)
REGULATORY ISSUES IN SECTION 50)
OF KENTUCKY'S 2007 ENERGY ACT)

CASE NO. 2007-00477

RECEIVED

MAR 20 2008


PUBLIC SERVICE
COMMISSION

RESPONSES OF DE-KENTUCKY TO
FIRST DATA REQUESTS OF
COMMISSION STAFF
DATED MARCH 11, 2008

VERIFICATION


State of Ohio)
) ss:
County of Hamilton)

The undersigned, Paul G. Smith being duly sworn, deposes and says that I am employed by the Duke Energy Corporation affiliated companies as Vice President Rates,-Ohio and Kentucky, that on behalf of Duke Energy Kentucky, Inc., I have supervised the preparation of the responses to the foregoing information requests; and that the matters set forth in the foregoing responses to information requests are true and accurate to the best of my knowledge, information and belief after reasonable inquiry.



Paul G. Smith., Affiant

Subscribed and sworn to before me by Paul G. Smith, on this 20th of March 2008.



Notary Public

My Commission Expires



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

KyCOM Staff First Set Data Requests
Duke Energy Kentucky
Case No. 2007-00477
Date Received: March 11, 2008
Response Due Date: March 20, 2008

KyCOM-DR-01-001

REQUEST:

Refer to page 3 of the Direct Testimony of Theodore E. Schultz (“Schultz Testimony”).

- a. What percentage of each class of customers (residential, commercial, and industrial) does not have the “data, time or desire to evaluate efficiency options?” Explain how Duke determined this to be the case.
- b. What percentage of each class of customers (residential, commercial, and industrial) “lack the capital to invest in energy efficiency?” Explain how Duke determined this to be the case.
- c. What percentage of each class of customers (residential, commercial, and industrial) is not “aware of the positive impact their individual behaviors can have on the welfare of others on such issues as climate change or national independence?” Explain how Duke determined this to be the case.
- d. How long would it take, and what level of effort would be required, for Duke to educate its customers regarding the three issues noted above?

RESPONSE:

- a.-c. Duke Energy does not have specific percentages pertaining to these questions. The company did conduct extensive research specifically targeting the residential and small business customer which is the basis for these statements.
- d. There is no way of knowing the time and effort necessary to assist Duke Energy customers in becoming better informed regarding these topics. Based on our research, helping customers become better informed does not necessarily result in any action being taken by the customer.

WITNESS RESPONSIBLE: Ted Schultz

**KyCOM Staff First Set Data Requests
Duke Energy Kentucky
Case No. 2007-00477
Date Received: March 11, 2008
Response Due Date: March 20, 2008**

KyCOM-DR-01-002

REQUEST:

Refer to page 4, line 22, through page 5, line 10, of the Schultz Testimony. Mr. Schultz recommends that, in order to align stakeholder interests and expand energy efficiency as a resource, the electric distribution utility “receive compensation or cost recovery including but not limited to, lost revenues, shared savings and compensation based upon capitalization of a percentage of avoided costs achieved by or associated with all energy efficiency programs.”

- a. Given the statements on page 3 of Mr. Schultz’s testimony, identify the specific “stakeholder interests” of each customer class to which he refers.
- b. Identify the jurisdictions where this recommendation has been approved or authorized.
- c. Is this approach under consideration in any jurisdiction in which the Duke Energy System operates? If yes, describe the status of such consideration.

RESPONSE:

- a. All customers benefit from an expansion of energy efficiency which produces zero environmental impacts and lower bills.
- b. No jurisdiction at this time has approved this recommendation
- c. Yes. Duke Energy has filed in the following jurisdictions;
 - a. North Carolina – procedural schedule is set with hearing to commence on June 10th
 - b. South Carolina – hearings were complete on February 5th & 6th.
 - c. Indiana – procedural schedule is set with hearings to commence on May 14th

WITNESS RESPONSIBLE: Ted Schultz

**KyCOM Staff First Set Data Requests
Duke Energy Kentucky
Case No. 2007-00477
Date Received: March 11, 2008
Response Due Date: March 20, 2008**

KyCOM-DR-01-003

REQUEST:

Refer to page 5 of the Schultz Testimony concerning the need for a new regulatory model regarding energy efficiency in Kentucky. Explain whether Duke believes that the language in KRS 278.285 allowing for rate recovery of “incentives designed to provide positive financial rewards to a utility to encourage implementation of cost-effective demand-side management programs” is not adequate to allow for the design and implementation of cost recover mechanisms that allow for the capitalization and amortization of costs, along with a return on the unrecovered costs.

RESPONSE:

Duke Energy Kentucky believes that KRS 278.285 gives the Commission authority to allow for the capitalization and amortization of costs along with a return on the unrecovered costs. However, Duke Energy Kentucky suggests that KRS 278.285 be amended to expressly allow an amortization of and return on avoided costs as an incentive for cost-effective demand side management programs. This would avoid possible litigation.

WITNESS RESPONSIBLE: N/A

KyCOM Staff First Set Data Requests

Duke Energy Kentucky

Case No. 2007-00477

Date Received: March 11, 2008

Response Due Date: March 20, 2008

KyCOM-DR-01-004

REQUEST:

Refer to pages 5-6 of the Schultz Testimony, specifically, the discussion of the proposal to capitalize, amortize and earn a return on the generation costs that are avoided through the energy efficiency efforts.

- a. Explain, in detail, why it is appropriate, from a rate-making perspective, to allow such treatment of non-existent costs.
- b. Explain why Duke is not considering capitalizing, amortizing, and earning a return of the actual costs of energy efficiency and demand-side management programs.

RESPONSE:

Will supplement.

WITNESS RESPONSIBLE: Ted Schultz

KyCOM Staff First Set Data Requests
Duke Energy Kentucky
Case No. 2007-00477
Date Received: March 11, 2008
Response Due Date: March 20, 2008

KyCOM-DR-01-005

REQUEST:

Refer to the Schultz Testimony, page 6, where he advocates that energy efficiency programs be flexible “to assist customers to address rising energy prices in the near term in a manner that provides value from our customer’s perspective.”

- a. Given the statements on page 3 of his testimony, describe the specific customer perspective being referenced on page 6.
- b. Explain how Duke expects to deliver this value to its customers.

RESPONSE:

- a. Based on research performed by the company, customers in our focus groups voiced a willingness to act when there is clear leadership and a compelling value proposition for them. We identified the following customer prerequisites for participation:
 - Productivity and/or lifestyle cannot be compromised
 - Minimal up front investment
 - Quick and material pay-off
 - Problem-free solution that is simple to understand, easy to act upon, convenient – one step solution and can be fulfilled immediatelyCustomers also viewed energy efficiency as an important aspect of their relationship with Duke Energy which is consistent with national customer satisfaction benchmark studies conducted by J.D. Power and Associates for the utility industry.
- b. The programs in the portfolio take our customer prerequisites into consideration and delivers them through new and innovative channels.

WITNESS RESPONSIBLE: Ted Schultz

**KyCOM Staff First Set Data Requests
Duke Energy Kentucky
Case No. 2007-00477
Date Received: March 11, 2008
Response Due Date: March 20, 2008**

KyCOM-DR-01-006

REQUEST:

Refer to the Schultz Testimony, page 6, which states that Duke plans to “build energy efficiency into standard service offerings making it part of a customer’s everyday life without having to sacrifice the comfort and convenience of electric use.” Identify the type of programs Duke plans to offer and explain how they will assist Duke in accomplishing this objective.

RESPONSE:

Duke has filed for the Advanced Power Manager pilot program in North and South Carolina. This pilot will integrate advanced communications infrastructure and time differentiated rates into the home to enable the delivery of energy efficiency solutions in a manner that makes sense to customers and provides more choices and options to use energy more efficiently.

WITNESS RESPONSIBLE: Ted Schultz

**KyCOM Staff First Set Data Requests
Duke Energy Kentucky
Case No. 2007-00477
Date Received: March 11, 2008
Response Due Date: March 20, 2008**

KyCOM-DR-01-007

REQUEST:

Does Duke believe that the Commission currently has the authority under KRS 278.285 to grant the approach suggested in the Schultz Testimony on pages 6 and 7? Explain the answer in detail.

RESPONSE:

Duke Energy Kentucky believes that KRS 278.285 allows the proposed program. However, to avoid any regulatory uncertainty and potential litigation, Duke Energy Kentucky supports the change to the current statute as described in Mr. Schultz's testimony.

WITNESS RESPONSIBLE: N/A

**KyCOM Staff First Set Data Requests
Duke Energy Kentucky
Case No. 2007-00477
Date Received: March 11, 2008
Response Due Date: March 20, 2008**

KyCOM-DR-01-008

REQUEST:

Refer to pages 6-7 of the Schultz Testimony. What specific measurement and verification protocols does Duke recommend be implemented to judge achieved demand and energy savings?

RESPONSE:

The measurement and verification protocols employed will vary according to the type of demand response and energy efficiency conservation measure / program being evaluated. In general, the protocols employed should be consistent with the International Performance Measurement and Verification Protocol prepared by the Efficiency Valuation Organization which is referenced in the Model Energy-Efficiency Program Impact Evaluation Guide which is a product of the National Action Plan for Energy Efficiency.

WITNESS RESPONSIBLE: Ted Schultz

**KyCOM Staff First Set Data Requests
Duke Energy Kentucky
Case No. 2007-00477
Date Received: March 11, 2008
Response Due Date: March 20, 2008**

KyCOM-DR-01-009

REQUEST:

Refer to page 7 of the Schultz Testimony, specifically, the discussion of the need for flexibility to make program changes, reallocate resources, etc., so that customers should not be turned away from a program due to pre-set limits on the program funding.

- a. Explain how Duke would propose that the Commission allow such flexibility while maintaining its current level of oversight of spending levels and cost recovery.
- b. Explain how Duke would propose that the Commission allow such flexibility assuming there is an increased level of oversight that includes measurement and verification of existing programs.

RESPONSE:

- a. Duke Energy would propose a running multi-year plan that is updated annually through a Commission filing for approval of the plan. The plan would address the results from the previous year and updates to the plan going forward. The program portfolio and revenue requirements would be part of the plan. The addition or deletion of new programs would also be part of the plan as they are approved based on cost effectiveness on a per unit basis. The flexibility is created by having the Commission approve the overall plan which provides an overall portfolio of programs and revenue requirement. There are no pre-set spending limits on each individual program. In addition, Duke Energy believes the revenue requirements should be based on results, not how much a company spends. There is the possibility that results could be higher than planned between annual review periods based on customer's participation levels. The Commission could set a threshold with regards to results achieved (kW and kWh impacts) and allow oversight authority to the existing DSM Collaborative to review results relative to the threshold between annual filings. This approach assumes that energy efficiency is a system resource that is the first choice in our supply stack which implies you want all you can get cost effectively.
- b. Measurement and verification results would be provided to the Commission in the annual update filings. These studies are done on a set schedule relative to the type of program. In other words, the program has to be implemented for a period of time

in order to measure and verify the impacts compared to what was filed in the plan. Measurement and verification results are incorporated into programs as they are completed. The updated programs are included in the portfolio of programs that is updated annually in the filing with the Commission. The verified results are also used to true up the revenue requirements based on actual results obtained relative to the filed and approved plan.

WITNESS RESPONSIBLE: Ted Schultz

KyCOM Staff First Set Data Requests
Duke Energy Kentucky
Case No. 2007-00477
Date Received: March 11, 2008
Response Due Date: March 20, 2008

KyCOM-DR-01-010

REQUEST:

Refer to the Schultz Testimony at page 9. Mr. Schultz states that, in order to opt out of the utility's conservation offerings, larger commercial and industrial customers should be required to self-certify to the Commission that they have undertaken significant conservation initiatives on their own.

- a. Describe how Duke envisions the self-certify process working including the utility's role in the process.
- b. Explain why the serving utility should not be obligated to perform the verification and certification for each larger commercial and industrial customer that wants to opt out.
- c. Identify any jurisdictions that have mandatory energy efficiency programs in which this opt-out opportunity is currently allowed.
- d. Explain how the conservation initiatives by the larger customers could be verified and quantified by the Commission. Include in the explanation whether there are third-party consultants that provide this function.

RESPONSE:

- a. DE-Kentucky believes that all customers benefit from energy efficiency programs, but has offered some ideas relative to large customer opt-out should the Commission determine such an opt-out is appropriate. DE-Kentucky has offered some ideas for how an opt-out could work based on collaborative work with large customers in other states. Customers would provide to the utility an affidavit, or some form of official notice, listing of the accounts they wish to opt out with some description of the energy efficiency initiatives they have undertaken or are in the process of implementing. The utility will provide to the commission annually a listing of the customers who have opted out of the utilities conservation offerings.
- b. Customers wishing to opt out have already made the decision they would not receive value from the utility's programs. To require the utility to verify certification would place the utility in an adversarial position of evaluating work already done by the customer and or their contractors and add increased costs to

the program, with little chance of the customer participating in the utility's conservation programs if certification is denied.

- c. DE-Kentucky does not have a list of the opt-out conditions that are in place across all states today. The reference point for this approach was part of a settlement agreement in DE-Carolinas South Carolina energy efficiency case.
- d. Verification could be done by looking at normalized consumption data before and after the installation date of the conservation initiatives to verify consumption reduction. There are third-party measurement and verification consultants that provide this service.

WITNESS RESPONSIBLE: Ted Schultz

**KyCOM Staff First Set Data Requests
Duke Energy Kentucky
Case No. 2007-00477
Date Received: March 11, 2008
Response Due Date: March 20, 2008**

KyCOM-DR-01-011

REQUEST:

Refer to pages 8-9 of the Direct Testimony of Paul G. Smith ("Smith Testimony") concerning renewable resources. Provide any Duke system-specific data relied upon in making the statement that renewable resources tend to have higher rates of forced outages (presumably, compared to conventional generating resources). The data should be shown by specific types of renewable resource and should also include forced outage data/rates for Duke's system-specific conventional generation.

RESPONSE:

Although DE-Kentucky does not have system specific data upon which this comment was based, the introduction of new technology could include renewable resources that will experience an above average failure rate. The comment was intended to identify a potential risk factor concerning renewable resources.

WITNESS RESPONSIBLE: Paul G. Smith

**KyCOM Staff First Set Data Requests
Duke Energy Kentucky
Case No. 2007-00477
Date Received: March 11, 2008
Response Due Date: March 20, 2008**

KyCOM-DR-01-012

REQUEST:

Refer to pages 8-9 of the Smith Testimony concerning the forced outage provision in the Commission's fuel adjustment clause ("FAC") regulation, 807 KAR 5:056. The FAC regulation's provision addressing forced outages pertains to the cost of power purchased to substitute for the cost of fuel burned in utility generating plants experiencing the forced outages. The costs permitted to be recovered through the FAC from utility generating plants are limited to fossil fuel costs. Explain why Duke believes that the cost of renewable resources or the cost of replacement power purchased in the event of forced outages at the renewable source generating plants would be recoverable under the FAC regulation.

RESPONSE:

To the extent that there is a cost of "fuel" associated with the generation from renewable resources (*e.g.*, ethanol, biomass, or other), this cost should be recoverable via the FAC similar to the treatment of fossil fuel and nuclear. Without recovery of such fuel costs, it is unlikely that these types of renewable generation resources would be installed for retail customers in Kentucky. Therefore, to the extent DE-Kentucky native load is served by renewable generation resources, the definition of allowable fuel costs in 807 KAR 5:056 should be expanded to include renewable sources and the FAC should include both the cost and the output of such generating resource.

To the extent the renewable generating resource experiences an above-average forced outage rate due to the nature of the generation, replacement power costs should not be limited in the manner prescribed by 907 KAR 5:056 Section 1(4).

WITNESS RESPONSIBLE: Paul G. Smith

KyCOM Staff First Set Data Requests
Duke Energy Kentucky
Case No. 2007-00477
Date Received: March 11, 2008
Response Due Date: March 20, 2008

KyCOM-DR-01-013

REQUEST:

Refer to the Smith Testimony at page 8. Mr. Smith proposes that the FAC regulation should be amended to allow forced outages to be recovered through the FAC, or the regulation should be reevaluated such that a utility is not penalized if it chooses to purchase a renewable resource that may experience a higher rate of unplanned or force outages.

- a. The prohibition against recovering certain forced outages from being recovered through the FAC exists, at least in part, to discourage utilities from postponing, or eliminating, maintenance of generation facilities, and to encourage utility control of replacement power costs. Does Duke agree that this proposal could lessen the incentives for utilities to properly maintain facilities and control replacement power costs? Explain the response in detail.
- b. Other than amending the FAC to allow all forced outage cost recovery, does Duke have other alternative proposals to eliminate the forced outage discouragement to the purchase of renewable energy purchases? If yes, describe the proposals.
- c. Would Duke support a less restrictive disallowance of forced outage costs that did not include outages from renewable resources? Explain whether there is any mechanism to distinguish between renewables that are unavailable due to forced outage of equipment versus renewables that are unavailable due to lack of energy source (wind, water availability, solar availability, etc).

RESPONSE:

- a. The proposal is intended to focus on the probability that renewable generation resources will experience higher forced outage rates than traditional fossil fuel generation. The existing rule would force a utility that is considering the installation of a renewable generation resource that is prone to higher forced outage rates to consider the cost of replacement power to be borne by shareholders. Such consideration would likely have a chilling effect on the installation of such generation.

Although the proposal is limited to renewable resources, it should be noted that, it is questionable whether the existing FAC rules regarding forced outages actually minimize the total recoverable cost. The restriction essentially encourages utilities to take more and/or longer planned outages than they may otherwise take which, in turn, drives up costs to customers as the substitute power for planned outages is recoverable and much of the cost of forced outages is not.

- b. No.
- c. Yes, DE-Kentucky would support a less restrictive disallowance of forced outage costs that did not include outages from renewable resources. To the extent that none already exist, the regulation can be modified to define acceptable renewable resources (e.g, biomass, ethanol, wind, water availability, solar availability, etc.) eligible for such treatment. For renewable generation that is made unavailable due to the lack of the underlying resource (wind, water, and solar), DE-Kentucky submits that this type of forced outage would be considered an Act of God (807 KAR 5:056 Section 1(4)); consequently, the restriction on the recoverability of substitute power would not be imposed.

WITNESS RESPONSIBLE: Paul G. Smith

**KyCOM Staff First Set Data Requests
Duke Energy Kentucky
Case No. 2007-00477
Date Received: March 11, 2008
Response Due Date: March 20, 2008**

KyCOM-DR-01-014

REQUEST:

Refer to the Smith Testimony at pages 9 and 10. Mr. Smith proposes that the Commission consider recommending that the General Assembly re-evaluate and restructure the appellate process so that Commission Orders bypass Franklin Circuit Court and become a direct appeal to the Appellate Court. Mr. Smith also states that such a proposal would be beneficial to all stakeholders. Identify each entity that is a stakeholder and explain in detail how this proposal will benefit each entity.

RESPONSE:

Stakeholders include utilities, the Commission, the Attorney General's office and other intervenors and ultimately customers. Lengthy appellate processes necessarily involve increased expenses for all participants and provide greater uncertainty between a Commission order and a final decision on appeal. This is especially true when there are multiple layers to an appellate process. By means of comparison, in Ohio, appeals of commission decisions are a direct appeal to the Ohio Supreme Court. In Indiana, appeals of Commission orders go to the Indiana Court of Appeals then to the Indiana Supreme Court. Because there are fewer layers to the appellate procedure, issues can be resolved sooner and potentially at a lesser expense of resources and less uncertainty.

WITNESS RESPONSIBLE: N/A