

DUKE ENERGY CORPORATION 139 East Fourth Street P.O Box 960 Cincinnati, OH 45201-0960 Duke Energy Shared Service, Inc. 139 E. Fourth Street, Rm 25 AT II P.O. Box 960 Cincinnati, Ohio 45201-0960 John J. Finnigan, Jr. Senior Counsel 513.287-3801 513.287-3810 fax

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PUBLIC SERVICE

VIA FAX AND OVERNIGHT DELIVERY

April 27, 2006

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

Re: Consideration of the Requirements of The Federal Energy Policy Act of 2005 Regarding Time-Based Metering, Demand Response and Interconnection Service Case No. 2006-00045

Dear Ms. O'Donnell:

Enclosed please find an original and ten copies of the responses of The Union Light, Heat and Power Company d/b/a Duke Energy Kentucky to Metro Human Needs Alliance to All Jurisdictional Utilities first set of data requests in the above-referenced case.

Please file-stamp and return the two extra copies of this letter in the enclosed over-night envelope.

If you have any questions, please call me at (513) 287-3601.

Sincerely,

mige

John J. Finnigan, Jr. Senior Counsel

JJF/sew

cc: All parties of record (w/encl.)

MetroHumanNeedsAlliance-DR-01-001

REQUEST:

1. Under a critical peak pricing and real time pricing program, as described in the Commission's order of February 24, 2006, how would you notify customers of pricing changes so that they could make adjustments in their usage?

RESPONSE:

Under the current real time pricing program (RTP), customers are provided information on pricing changes on a day-ahead basis through the internet. This program is available to larger energy using customers. The Company does not currently offer a critical peak pricing (CPP) program. The Company has not considered how it would notify customers under a CPP program. The Company has also not determined how it would notify residential or small business customers of pricing changes if it were to offer an RTP or CPP rate to those customer groups.

MetroHumanNeedsAlliance-DR-01-002

REQUEST:

2. Provide a general discussion of what you perceive to be the pros and cons with respect to low-income utility customers of implementing a smart metering standard in Kentucky.

RESPONSE:

The pros of smart metering for low-income customers would include the ability of the customer to take more control over their bill and experience a reduced bill if they are able to take advantage of the variability in pricing. In addition, customers in general could see lower future rates if customers were to respond to the variability of pricing.

The cons of smart metering for low-income customers would include the increase in costs for the systems to implement smart metering and the increase in costs for education needed to inform customers on how to take advantage of pricing variability.

MetroHumanNeedsAlliance-DR-01-003

REQUEST:

3. Provide a general discussion of what you perceive to be the pros and cons with respect to low-income utility customers of implementing a smart metering standard in Kentucky.

RESPONSE:

Not aware of any at this time specific to low-income customers.

MetroHumanNeedsAlliance-DR-01-004

REQUEST:

4. Provide a description of any formal or informal analysis, discussion or study of the impact of any time based rate schedules and/or smart metering programs on low-income customers you have conducted or of which you are aware. Please describe any conclusions reached and provide copies of any documentation or results of such analysis, discussion or studies.

RESPONSE:

The Company has not conducted any study of the impact of time-based rates and/or smart metering programs on low-income customers and is not aware of any.

MetroHumanNeedsAlliance-DR-01-005

REQUEST:

5. Would implementation of smart metering result in higher costs or rates to nonparticipating customers? Please describe any projected costs by category and amount, including any costs of installing, maintaining or reading new meters or other technology, and any systemic or program changes, such as software and billing changes, that you expect to be charged directly (or indirectly by higher rates) to nonparticipating customers.

RESPONSE:

This is unknown at this time. It is expected that participants could have lower bills if they respond to the changes in prices. Generally, if a mandatory approach is taken, the cost for mass deployment would be allocated to all customers. If the approach is not mandatory, then smart metering may only be installed for the participants in the program although this approach would not allow any operational efficiencies to be gained; therefore, the ability to maintain and control operational costs are negated. The projection of costs is being evaluated at this time.

MetroHumanNeedsAlliance-DR-01-006

REQUEST:

- 6. Describe in general the availability of the technology for smart meters, including:
 - a) How many suppliers provide smart meters and related technology;
 - b) The price range for smart meters.

RESPONSE:

Smart metering technology is available from nearly all qualified meter manufacturers. Smart metering technology has been available since the early 1980s, and as with other forms of technology it continues to evolve, improve, and reduce in price. In the past, smart meters were defined as advanced meters capable of collecting usage data in relation to time of day and at least hourly, but the definition today has changed to include basic meters containing smart modules with the same collection capabilities.

MetroHumanNeedsAlliance-DR-01-007

REQUEST:

7. How accurate are the available smart meters? Have these meters been sufficiently tested for accuracy both prior to installation and in actual use?

RESPONSE:

The accuracy of smart meters complies with ANSI C12.1. The same testing standard that all meters are subjected to before they can be approved for manufacture and sale. During development and after they are approved for production, smart meters and module combinations are tested by the manufacturers for accuracy and reliability under all ANSI C12.1 required test conditions. One advantage of electronic meters is that the accuracy is held consistent for a longer period of time. In contrast, the mechanical meter accuracy will change over time due to the slow degradation of the mechanical equipment.

MetroHumanNeedsAlliance-DR-01-008

REQUEST:

8. How reliable are smart meters? Have any specific maintenance problems been identified?

RESPONSE:

Smart meters and modules, while more complex, follow the same quality and reliability standards and expectations as other meter types currently in production. Maintenance issues for electronic meters are related to:

- 1. Susceptibility of the electronics to lightning and handling;
- 2. Errors in programming or microprocessor errors; and
- 3. Maintenance of an accurate clock.

MetroHumanNeedsAlliance-DR-01-009

REQUEST:

9. Low income customers are often considered unable to lower energy use because of poor housing stock and/or use of older, inefficient appliances. Would you assist in enhancing or enlarging weatherization programs to help make smart meters an advantage to low-income customers?

RESPONSE:

This may be possible depending upon the benefits and costs. This is an issue that could be pursued within the Company's Residential DSM Collaborative.

MetroHumanNeedsAlliance-DR-01-010

REQUEST:

10. If you implement time based rate schedules and/or smart metering, would you make any attempt to target any particular types of customers for participation?

RESPONSE:

There are no plans to target particular types of customers at this time. If a program were mandatory, this would not matter. If it is voluntary, targeting might be directed at those with high summer usage or those with central air conditioning.