COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF AN	)	
INVESTIGATION OF THE ENERGY AND	)	
REGULATORY ISSUES IN SECTION 50	)	CASE NO. 2007-00477
OF KENTUCKY'S 2007 ENERGY ACT	)	

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PUBLIC SERVICE
COMMISSION

RESPONSES OF DE-KENTUCKY TO
FIRST DATA REQUESTS OF
JOINT UTILITIES
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
Paul G. Smith., Affiant

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

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

KyCOM-DRGU-01-001

REQUEST:

Refer to the Joint Testimony of Lonnie E. Bellar ("Bellar Testimony"), page 5, which discusses the potential for renewable resource power purchases to result in a net reduction in the amount of new generation utilities propose to build. There are a number of bills pending in the U. S. Congress that my impact the construction of new generation facilities in the future, primarily those bills that would result in federal regulation of the amount of Carbon Dioxide ("CO_2") produced by utilities in the generation of electricity.

a. Explain whether each of the Generating Utilities anticipates some form of federal CO_2 regulation to be enacted in the near future. Identify which of the pending bills each of the Generating Utilities favor and which of the pending bills, if any, each believes will be come law.

b. Explain whether each of the Generating Utilities is currently incorporating the uncertainty and/or potential for CO_2 regulation into its respective Integrated Resource Plan demand-side and supply-side planning processes and how this may be affecting the timeline for future construction of new generation.

c. Using the Generating Utilities' own estimates of the cost of CO_2 removal, describe the potential changes in the type of new or expanded demand-side management ("DSM") programs that each believes may become cost effective in Kentucky and the potential energy and demand savings each program is estimated to produce.

d. Using each of the Generating Utilities' own estimates of the cost of CO_2 removal, identify the potential changes in the relative cost effectiveness of renewable generation, distributed generation and cogeneration in Kentucky.

e. Explain whether each of the Generating Utilities is aware of anything the presently would prevent each of them from developing additional generation capacity from renewable sources, distributed generation sources or cogeneration sources in Kentucky either as sole owner or with an equity stake in these types of projects.

RESPONSE:

a. Duke Energy believes federal legislation will pass sometime in the next three years, most likely in the next Congress. Duke Energy believes Congress will regulate and reduce greenhouse gases through use of a cap and trade mechanism with the first year of the program beginning around the 2012 timeframe. The cap will establish a price to emit CO_2 from fossil fuel combustion and will cover most of the economy. For the moment, S.2171, sponsored by Senators Joe Lieberman and John Warner is the leading Senate legislative vehicle, having been passed by the Senate Environment and Public Works Committee in December 2007. The Senate Majority Leader has tentatively scheduled this bill to be debated on the Senate floor right after the Memorial Day recess. Another leading bill is S.1766, sponsored by Senators Jeff Bingaman and Arlen Specter, which establishes caps but is less stringent particularly in the early years. In the House, the House Energy and Commerce Committee has held numerous hearings and issued several white papers on the critical issues in the climate debate. Committee leadership has indicated its intent to mark up a bill this year although no drafts have yet been released. It is too early to say which, if any of these bills will become law.

b. In the Duke Energy Kentucky IRP that will be filed on July 1, 2008, the Company will be incorporating the potential for CO_2 regulation into its planning through the modeling of a CO_2 tax/emission allowance price. However, we are not far enough along in the process to be able to comment on the impacts on the timing of future new generation.

c. The Company has not investigated the level of additional energy efficiency / DSM programs that could become cost-effective after including the cost of CO_2 removal. If the cost of CO_2 were included in the evaluation of energy efficiency/DSM programs, the types of programs that could more easily be implemented include:
   - Advanced communication equipment for control of consumer loads
   - Increased incentives for the installation of higher efficiency equipment as well as incentives for more types of appliances
   - Increased installation of insulation in existing buildings
   - Increased use of renewable resources such as solar

d. Duke Energy Kentucky will be using an estimate for the cost of a CO_2 tax/emission allowance price, not the cost of CO_2 removal in its modeling. With the inclusion of these additional costs, renewable generation should be relatively more cost-effective in comparison to conventional supply-side alternatives such as coal units or natural gas-fired CTs and CCs, all else being equal. However, recent increases in construction costs have impacted renewables as well as other types of units. In addition, if the demand for renewables increases such that the supply of these resources cannot keep pace, the price of these resources may include a scarcity premium that might not be incurred by other resources. With regard to distributed generation and cogeneration, the relative cost-effectiveness will be dependent on the fuels used in such resources.

e. Duke Energy Kentucky is unaware of any such obstacles other than the economics of renewable resources.

WITNESS RESPONSIBLE: John Stowell, Dick Stevie, Diane Jenner

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

KyCOM-DRGU-01-002

REQUEST:

Refer to pages 5-6 of the Bellar Testimony. Expand on the scope of work the Generating Utilities anticipate that the proposed task force would consider. For example, explain whether metering and interconnection standards, standard offer contracts, avoided cost analysis, and cost recovery of new meters, renewables, and distributed generation would be considered as part of the scope of work for the task force. What groups do the Generating Utilities expect would be members of the task force?

RESPONSE:

This response is being provided on the Joint Utility Responses.

WITNESS RESPONSIBLE:

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

KyCOM-DRGU-01-003

REQUEST:

Refer to the Bellar Testimony, page 2, lines 8-14.

a. Mr. Bellar states that, with the exception of Duke Energy Kentucky ("Duke"), the Generating Utilities do not believe that additional legislation is necessary or desirable to eliminate the impediments to cost-effective DSM strategies. Is it the position of the Generating Utilities, other than Duke, that additional incentives for DSM would not result in the adoption of additional DSM programs or the expansion of any current DSM programs?

b. The Generating Utilities also believe that the current planning and certificating processes are adequate to ensure the utilities consider such programs. The Integrated Resource Plan ("IRP") regulation 807 KAR 5:584, Section 8(4)(a)(6), requires each generating utility to provide the reductions or increases in peak demand from new conservation and load management or other demand-side management programs. Cite any requirement included in the certificate process that requires such documentation.

RESPONSE:

This response is being provided on the Joint Utility responses.

WITNESS RESPONSIBLE:

KyCOM-DRGU-01-004

REQUEST:

Refer to the Bellar Testimony, page 2, line 17 to page 4, line 7.

a. Mr. Bellar states that the Generating Utilities have an impressive array of successful energy efficiency and DSM strategies. Are there any programs that have not been implemented by every Generating Utility? If yes, describe each such program, identify the generating utility that has not adopted the program, and explain the reason why that utility has not adopted that program.

b. If not addressed in 4(a) above, identify the Generating Utilities with residential or commercial load control programs (for example, air-conditioners, water heaters, pool pumps). Explain why the Generating Utilities without such load control programs do not offer such direct load control.

c. Explain where consideration of renewables is specifically required in the IRP or certificate process.

d. Explain the relevance to this proceeding of the fact that the report "Kentucky's Energy Opportunities for Our Future: A Comprehensive Energy Strategy," a document released in February 2005, does not mention revision of any utility planning process.

RESPONSE:

a. Duke Energy Kentucky, in working through its collaborative process and with approval of the Kentucky Public Service Commission, has been implementing a broad set of energy efficiency programs. At this time, Duke Energy Kentucky is implementing all of the cost-effective programs it has found. However, Duke Energy Kentucky is currently undergoing a thorough review of its energy efficiency efforts and may find that additional programs are warranted. At this point in time, the analysis is not yet complete.

b. Duke Energy Kentucky currently operates the Power Manager program to cycle residential air conditioners.

WITNESS RESPONSIBLE: Richard G. Stevie
Diane L. Jenner

KyCOM (to Generating Utilities) Staff First Set Data Requests
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Date Received: March 11, 2008
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KyCOM-DRGU-01-005

REQUEST:

Refer to the discussion of "full-cost accounting" included on pages 6 and 7 of the Bellar Testimony. Identify the specific externalities that the Generating Utilities incorporate in their planning processes.

RESPONSE:

The externalities incorporated into Duke Energy Kentucky's planning process are the projected costs for SO_2, NOx, Mercury, and CO_2 emission allowances.

WITNESS RESPONSIBLE: Diane Jenner

WITNESS RESPONSIBLE:

KyCOM (to Generating Utilities) Staff First Set Data Requests
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KyCOM-DRGU-01-006

REQUEST:

Although the Generating Utilities see no need to modify rate structures for achieving energy efficiency, what is the Generating Utilities' position regarding "revenue decoupling?"

RESPONSE:

Revenue decoupling is intended to minimize economic disincentives to the utility related to reduced billable consumption resulting from demand side management ("DSM") programs. In that light, the Company believes that some form of revenue decoupling may be appropriate. It is DE-Kentucky's position, however, that a better approach would be to create new incentives for the utility to implement conservation and DSM programs. While eliminating disincentives through decoupling may help utilities recover from the impacts of lost load, it falls short of truly motivating the companies to invest in programs and projects.

Approaches to incentivize utilities to invest in such programs include shared savings (similar to the mechanism currently employed for DE-Kentucky's DSM programs) and allowing for a sharing of the avoided cost benefit accrued from implementing certain conservation measures.

WITNESS RESPONSIBLE: Paul G. Smith

KyCOM (to Generating Utilities) Staff First Set Data Requests
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KyCOM-DRGU-01-007

REQUEST:

Refer to the Bellar Testimony at page 7, lines 15-17. Explain whether additional opportunities exist to encourage the further development of energy efficiency and DSM programs through rate structures and cost recovery. Include in the explanation a discussion of the position of the Generating Utilities on the use of inclining block rates as well as other rate design techniques to discourage usage.

RESPONSE:

As discussed in response to KyCOM-DRGU-01-006, approaches to incentivize utilities to develop energy efficiency and other DSM programs include shared savings (similar to the mechanism currently employed for DE-Kentucky's DSM programs) and allowing for a sharing of the avoided cost benefit accrued from implementing certain conservation measures.

Inclining rate blocks are among various rate structures that could be used to discourage usage. Similarly, seasonal rates could be used to motivate customer behavior during peak periods. To the extent that advanced metering technology is available, time-of-day and real-time pricing could also discourage usage. Any modification to the current rate structure to introduce inclining block rates, however, would have to be done in a way that was revenue neutral as a result of any lost load.

WITNESS RESPONSIBLE: Paul G. Smith

KyCOM-DRGU-01-008

REQUEST:

Refer to the discussion on page 2, line 9, through page 3, line 16, of the Bellar Testimony filed on behalf of Kentucky Utilities Company ("KU") and Louisville Gas and Electric Company ("LG&E"). Mr. Bellar essentially supports annual reviews of utilities financial results to ensure that utility revenues remain consistent. What is the position of the Generating Utilities regarding such reviews?

RESPONSE:

DE-Kentucky does not advocate annual filings that constitute earnings reviews unless the scope of the review is symmetrical, and is very limited in nature. For example, any decoupling mechanism introduced by the Commission would require periodic reviews, possibly annually, to restore lost revenue incurred by the utilities as a result of conservation measures. However, DE-Kentucky would oppose an annual earnings review process which requires lengthy, costly and administratively burdensome litigation involving the utility, the Commission Staff, the Attorney General and other intervenors.

WITNESS RESPONSIBLE: Paul G. Smith

KyCOM (to Generating Utilities) Staff First Set Data Requests
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Date Received: March 11, 2008
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KyCOM-DRGU-01-009

REQUEST:

Refer to the incentives set forth for energy efficiency on page 4, lines 4-19, of the Bellar Testimony filed on behalf of KU and LG&E. What is the position of the Generating Utilities regarding these incentives?

RESPONSE:

1. *Capitalizing non-expense components of energy efficiency programs for future recovery.*

   DE-Kentucky supports the proposal advanced by Mr. Bellar including a return on such capitalized costs at the companies' overall weighted average cost of capital.

2. *Durable incentive rate of return on equity.*

   DE-Kentucky agrees with Mr. Bellar that any incentive return awarded to the utilities to promote conservation should persist apart from any other Commission actions affecting rates such as setting a "base" ROE, to use Mr. Bellar's example.

3. *Shared savings.*

   DE-Kentucky advocates the concept of shared savings approaches. Specifically, DE-Kentucky endorses the shared savings approach currently allowed in DSM recovery, as well as the more advanced concept of sharing avoided cost benefits.

WITNESS RESPONSIBLE: Paul G. Smith

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KyCOM-DRGU-01-010

REQUEST:

Refer to the discussion of the proposed treatment of purchased power on page 5, lines 1-10, of the Bellar Testimony filed on behalf of KU and LG&E. What is the position of each of the Generating Utilities regarding the treatment proposed by Mr. Bellar?

RESPONSE:

Mr. Bellar's proposal would provide the same, but not more, incentive for a utility to secure purchased power from a renewable resource generator that currently exists to construct new generation.

WITNESS RESPONSIBLE: Paul G. Smith

KyCOM (to Generating Utilities) Staff First Set Data Requests
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KyCOM-DRGU-01-011

REQUEST:

Refer to the Bellar Testimony on behalf of KU and LG&E. Mr. Bellar discusses the demand-side management statute, KRS 278.285 and notes the "plethora of cost-effective" programs; however, the majority of these programs have been developed for residential and small commercial customers. KRS 278.285(3) states, "The commission shall allow individual industrial customers with energy intensive processes to implement cost-effective energy efficiency measures in lieu of measures approved as part of the utility's demand-side management programs if the alternative measures are not subsidized by other customer classes."

a. Describe in detail the actions taken by each of the Generating Utilities to ensure that its industrial customers are in compliance with this condition.

b. Have the Generating Utilities utilized any benchmark in terms of dollars spent or in terms of savings, dollars saved or energy saved, in order for industrial customers to qualify for the "opt-out" provision? Explain your response.

RESPONSE:

a. In the Company's original filing to establish DSM rider rates, the Company indicated that all of the transmission-level customers filed affidavits testifying that they had already made significant investments in energy conservation activities and therefore, wished to "opt-out" of the DSM programs.

b. The Company has not utilized any benchmark such as dollars spent or energy saved. The only customers that have "opted-out" of the utility's demand side management programs are the very large ones that receive service from the transmission system. All other industrial customers participate. It should be noted that the large customers do participate in the PowerShare demand response program.

WITNESS RESPONSIBLE: Richard G. Stevie