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BEFORE THE PUBLIC SERVICE COMMISSION

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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

TESTIMONY OF

DIANE L. JENNER

ON BEHALF OF

DUKE ENERGY KENTUCKY, INC.

April 1, 2008

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I. INTRODUCTION AND PURPOSE OF TESTIMONY

1	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
2	\mathbf{A}_{\cdot}	My name is Diane L. Jenner and my business address is 1000 East Main Street,
3		Plainfield, Indiana 46168.
4	Q.	BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?
5	A.	I am employed as Director, Integrated Resource Planning, by Duke Energy
6		Shared Services, Inc., a service company affiliate of Duke Energy Kentucky, Inc.
7		("DE-Kentucky," or "Company").
8	Q.	PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL
9		BACKGROUND.
10	Α.	I received a Bachelor of Science Degree in Electrical Engineering from Iowa
11		State University, Ames, Iowa in 1979. Following graduation, I was employed by
12		Public Service Indiana ("PSI"), now known as Duke Energy Indiana, Inc., in the
13		System Planning Department where I held positions of increasing responsibility in
14		the transmission and subtransmission and distribution planning areas. In 1987, I
15		was transferred to the PSI's Power Supply Department as a Senior System
16		Engineer. In 1990, I was promoted and transferred to the Interchange
17		Transactions Department as Principal Engineer. In February of 1992, I assumed
18		the position of Manager, Resource Planning. After the creation of Cinergy Corp.,
19		through the merger of PSI and The Cincinnati Gas & Electric Company, I
20		assumed the position of Supervisor, Resource Planning. In April of 1998, I
21		received a Masters of Business Administration Degree from Indiana Wesleyan
22		University. In May of 1999, I assumed the position of Manager, Asset Planning

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1		and Analysis. After the Duke Energy merger in April of 2006, I assumed the
2		position of Director, Integrated Resource Planning. I am also a licensed
3		Professional Engineer in the State of Indiana.
4	Q.	ARE YOU A MEMBER OF ANY PROFESSIONAL ORGANIZATIONS?
5	A.	Yes. 1 am a Senior Member of the Institute of Electrical and Electronics
6		Engineers ("IEEE").
7	Q.	PLEASE DESCRIBE YOUR RESPONSIBILITIES AS DIRECTOR,
8		INTEGRATED RESOURCE PLANNING.
9	A.	I am responsible for planning for the long-term capacity needs of the DE-Indiana,
10		DE-Carolinas, and DE-Kentucky systems by minimizing the long-run cost of
11		providing reliable, economic, and efficient electrical services to meet the
12		forecasted needs of our customers. My responsibilities include preparing and
1.4		torecased needs of our customers. My responsionnes mende preparing and
13		filing Integrated Resource Plans ("IRPs") in accordance with state regulations.
	Q.	
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13 14 15 16 17 18 19		filing Integrated Resource Plans ("IRPs") in accordance with state regulations. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING? The purpose of my testimony is to explain DE-Kentucky's IRP process and to discuss DE-Kentucky's position regarding three of the recommendations made by Overland Consulting in its "Review of the Incentives for Energy Independence Act of 2007 Section 50" (the "Report"), which directly impact IRP development.
 13 14 15 16 17 18 19 20 		filing Integrated Resource Plans ("IRPs") in accordance with state regulations. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING? The purpose of my testimony is to explain DE-Kentucky's IRP process and to discuss DE-Kentucky's position regarding three of the recommendations made by Overland Consulting in its "Review of the Incentives for Energy Independence Act of 2007 Section 50" (the "Report"), which directly impact IRP development. I also discuss DE-Kentucky's position regarding the use of full cost accounting in

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II. <u>DE-KENTUCKY'S IRP PROCESS</u>

Q. PLEASE GIVE A BRIEF OVERVIEW OF DE-KENTUCKY'S CURRENT
 INTEGRATED RESOURCE PLANNING PROCESS.

4 A. Stated very simply, the IRP process involves taking a myriad of resource options, 5 and, through screening and analysis, methodically funneling down until you reach 6 an optimal combination of feasible and economic alternatives that will reliably 7 meet the anticipated future customer loads. More specifically, the IRP process 8 involves a number of steps: (1) development of planning objectives and 9 assumptions; (2) preparation of an electric load forecast; (3) identification and screening of potential electric demand-side resource options; (4) identification of, 10 11 screening of, and performing sensitivity analysis around the cost-effectiveness of 12 potential electric supply-side resources; (5) identification of, screening of, and 13 performing analysis around the cost-effectiveness of potential environmental 14 compliance options; (6) integration of the demand-side and supply-side and 15 environmental compliance options; (7) performing final sensitivity and scenario 16 analyses on the integrated resource alternatives; and (8) selecting an optimal plan 17 based on quantitative and qualitative factors (such as risk, reliability, technical 18 feasibility, and other qualitative factors).

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Q. WHAT TYPES OF RESOURCE ALTERNATIVES ARE CONSIDERED IN

20

DE-KENTUCKY'S INTEGRATED RESOURCE PLANNING PROCESS?

A. We consider a multitude of options and combinations of options, including
 Energy Efficiency programs (both conservation and demand response programs),
 environmental compliance alternatives (such as baghouses and precipitator

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1		upgrades), and supply-side alternatives (such as peaking units, combined cycle
2		units, coal-fired units, integrated gasification combined cycles ("IGCC"),
3		renewable resources, and purchases) in our IRP process.
4		In determining the final plan, other factors are considered such as
5		flexibility, risk, availability of equipment, constructability, and transmission
6		constraints.
7	II	I. DE-KENTUCKY'S POSITION ON RECOMMENDATIONS MADE BY
8		OVERLAND CONSULTING
9	Q.	DOES DE-KENTUCKY AGREE WITH THE RECOMMENDATION
10		CONTAINED ON PAGE 72 OF THE REPORT REGARDING THE USE
11		OF RFP PROCESSES?
12	A.	No. DE-Kentucky does not agree with the conclusion that "[o]ne of the solutions
1.3		to the renewable market pricing problem could be a KPSC requirement for
14		utilities to use an Request for Proposal ("RFP") process for all resources, based
15		upon IRP, or just renewables, where the contracts signed with the winners would
16		include a capacity component in the remuneration." DE-Kentucky agrees with
17		Overland that the limited opportunity to recover costs impacts the willingness of
18		both utilities and developers to pursue new power renewable projects. However,
19		Overland's RFP recommendation does not address the problem, which is the
20		ability to recover all costs (both demand and energy) associated with any new
21		project. Mandating an RFP process does nothing to solve the cost recovery
22		problem.

1 An RFP process for securing utility resources is one of several tools that a 2 utility can use to benefit its customers. However, DE-Kentucky believes that a 3 formalized Commission requirement to issue RFPs for every new resource 4 addition is unnecessary, and if not appropriately flexible, may have the effect of 5 adding cost rather then reducing cost for customers. Customers are best served by a resource planning process which allows the utilities regulated by the 6 7 Commission to have flexibility in resource acquisitions. A mandatory 8 requirement for the use of RFPs will unnecessarily limit that flexibility and could 9 result in lost opportunities. In addition, the Commission currently has significant 10 regulatory mechanisms in place to oversee the Company's resource planning 11 process and to assess the prudence of the utilities' resource acquisition decisions 12 without a mandatory process.

Q. DOES DE-KENTUCKY AGREE WITH THE RECOMMENDATION ON PAGE 83 OF THE REPORT REGARDING COMMISSION RESPONSIBILITY FOR STATEWIDE PLANNING?

16 Yes. DE-Kentucky agrees with Overland's recommendation and for the precise Α. 17 reasons discussed in its Report. Kentucky's jurisdictional utilities do not jointly 18 engage in state-wide system planning Although Kentucky's utilities are 19 generally cooperative, that does not necessarily mean they are aligned from a strategic planning perspective or business model. Statewide resource planning is 20 21 inefficient and may not necessarily align state priorities with what may be in the 22 best interests of the specific utility or its jurisdictional customers. That being 23 said, DE-Kentucky also agrees with Overland's statement that periodic

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assessments of Kentucky's energy resources remains appropriate from a
 reliability standpoint.

Q. DOES DE-KENTUCKY AGREE WITH THE RECOMMENDATION ON
PAGE 84 OF THE REPORT THAT THE CURRENT CPCN STATUTE
SHOULD BE "MODIFIED TO REQUIRE CONSIDERATION OF
DEMAND AND SUPPLY SIDE ALTERNATIVES INCLUDING: IPP AND
MERCHANT POWER OPTIONS; ENERGY EFFICIENCY AND DSM
PROGRAMS; AND RENEWABLE ALTERNATIVES?"

9 A DE-Kentucky does not believe this recommendation is necessary. DE-Kentucky 10 already does this as part of its resource planning and in determining whether to 11 pursue a CPCN. DE-Kentucky suspects that all jurisdictional utilities perform 12 similar analyses. The current CPCN requirements are sufficient.

13 IV. <u>DE-KENTUCKY'S POSITION ON THE USE OF FULL COST</u>

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ACCOUNTING FOR IRP PLANNING

15 Q. WHAT IS YOUR UNDERSTANDING OF THE TERM "FULL COST

16 ACCOUNTING"?

A. Full cost accounting generally refers to the process of collecting and presenting
information (costs as well as advantages) for each proposed alternative when a
decision is necessary. In the context of this proceeding, full cost accounting
would include, among other things, life-cycle energy, economic, public health,
and environmental costs of various strategies to meet future demand for
electricity.

1 Q. DOES DE-KENTUCKY CONSIDER ANY ENVIRONMENTAL

2 EXTERNAL COSTS AS PART OF ITS RESOURCE PLANNING?

3 Yes. DE-Kentucky does consider projected costs for SO₂, NOx, and Mercury Α. 4 emission allowances as part of its planning process. In addition, in the Duke Energy Kentucky IRP that will be filed on July 1, 2008, the Company will be 5 incorporating the potential for CO₂ regulation into its planning through the 6 7 modeling of a CO₂ tax/emission allowance price. However, it is difficult, if not 8 impossible, to quantify the possible cost impacts of other legislation/regulation or 9 other environmental issues when such legislation/regulation has not even been written or passed. Moreover those factors are more appropriately considered on a 10 11 national level, rather than on the individual utility planning perspective. 12 Certainly, as regulation of such factors arise, and the risks and obligations are 13 more definitive, it would be possible to include such costs. We are not far enough 14 along in the process to be able to comment on the impacts on the timing of future new generation. 15

16 Q. HAVE YOU REVIEWED THE PREFILED TESTIMONY OF SIERRA 17 CLUB WITNESSES WALLACE MCMULLEN AND RICHARD M. 18 CLEWETT JR?

A. Yes. Both witnesses support the use of "full cost accounting" as part of the IRP
process.

Q. DOES DE-KENTUCKY AGREE WITH THE POSITION OF THE SIERRA CLUB ON THE USE OF FULL COST ACCOUNTING?

23 A. No.

Q. WHAT IS DE-KENTUCKY'S POSITION REGARDING THE USE OF "FULL COST ACCOUNTING" AS PART OF ITS STRATEGY FOR MEETING FUTURE ENERGY DEMAND?

4 As indicated in the testimony filed by Witness Lonnie Bellar on behalf of the A. 5 Joint Parties, DE-Kentucky objects to the use of full cost accounting for a number 6 of reasons. As Witness Bellar explains, the concept of full cost accounting 7 includes the consideration of factors that by their very nature are intangible and 8 incapable of objective calculation. In addition, many of these factors are more 9 appropriate to be dealt with on a national policy level than on the state specific 10 level. Moreover, traditional cost accounting presents a fair and understandable 11 methodology to evaluate the true costs of resource planning that has already 12 achieved wide spread industry acceptance.

13 Q. PLEASE EXPLAIN THIS FURTHER.

14 There is no accepted and definitive list of cost categories under a "full cost Α. accounting" paradigm. Conceivably the list would be both obscure and infinite. 15 16 The testimony of Sierra Club Witnesses Wallace McMullen and Richard Clewett 17 are illustrative of the problems associated with employing a full cost accounting 18 methodology as part of the planning process. Many factors suggested by Witness 19 McMullen, such as the impact of coal mining or coal-fired generation on public 20 health, are too nebulous to objectively evaluate. Similarly, the costs associated 21 with increased health care and early mortality as mentioned by Witness 22 McMullen cannot be effectively evaluated from an integrated resource planning 23 perspective.

Q. WHAT OTHER FULL COST ACCOUNTING CATAGORIES SUGGESTED BY WITNESS MCMULLEN DOES DE-KENTUCKY BELIEVE ARE TOO SPECULATIVE TO CONSIDER?

4 Many of the alleged costs contained in Witness McMullen's testimony are too A. 5 speculative to reasonably consider. For example, on page 19 of his testimony, 6 Witness McMullen suggests that environmental costs of strip mining, burying 7 streams with mining waste, pollution of water supplies, and the threat of dam breaks be included in the planning process. On page 20 of his testimony, Witness 8 9 McMullen also suggests that the human costs such as potential injuries to coal 10 miners and "deaths, injuries, and mental anguish resulting from inadequate 11 enforcement of laws regulating the weight, speed, and aggressiveness of coal 12 trucks," should be included. These alleged costs are indeterminable and in the 13 case of overweight speeding trucks, without any nexus to cost accounting for 14 resource planning. Those costs would not be passable to rate payers and should 15 not be included for planning purposes.

Q. DO YOU HAVE OTHER CONCERNS WITH THE SIERRA CLUB'S POSITION THAT THESE COSTS SHOULD BE INCLUDED IN RESOURCE PLANNING DECISION-MAKING?

A. Yes, I have a number of other concerns. First, as the suggestion above from
Witness McMullen aptly illustrates, determining where to draw the line as to what
cost categories to include or exclude, as well as how to calculate such costs, is a
highly subjective and selective process, without clear consensus among
stakeholders or industry-wide support. In addition, as the Sierra Club itself points

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1 out, determination of the proper discount rate to use in the present value 2 calculation is also subject to debate. Undoubtedly, any proceedings dealing with 3 these issues will be highly contentious.

Second, the Sierra Club is not proposing an even-handed approach that 4 5 would include positive impacts of coal-fired generating resources such as economic development, job creation, and improved standard of living. 6 7 Furthermore, they are not advocating the inclusion of adverse environmental impacts from resource choices that they favor, such as renewables. For example, 8 9 windmills have impacts on birds and "scenic views", hydro resources have impacts on fish, and biomass resources can result in additional truck traffic to 10 11 transport the biomass "fuel".

Q. COULD THERE BE UNINTENDED CONSEQUENCES FROM THE SIERRA CLUB'S PROPOSAL TO INCLUDE FULL COST ACCOUNTING IN THE IRP PROCESS?

Absolutely If Kentucky includes such costs in its resource planning decisions, 15 Α. 16 one unintended consequence is that uneconomical supply options could be 17 Investment in uneconomic supply options could result in selected. 18 disproportional and potentially higher electric rates for Kentucky's citizens and businesses in comparison to other jurisdictions that do not employ full cost 19 20 accounting methodologies in the resource planning decisions. This would 21 adversely impact the Commonwealth's economy and ability to compete in the 22 global marketplace.

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1	V. <u>CONCLUSION</u>

2 Q. DOES THIS CONCLUDE YOUR PRE-FILED TESTIMONY?

3 A. Yes.

VERIFICATION

STATE OF INDIANA)	
)	SS:
COUNTY OF HENDRICKS)	

The undersigned, Diane L. Jenner, being duly sworn, deposes and says that she 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 her knowledge, information and belief.

Diane L. Jenner, Affiant

Subscribed and sworn to before me by Diane Jenner on this 25^{+k} day of March, 2008.

Rane J. Homm NOTARY PUBLIC LANA J. HORNER

My Commission Expires: 04/19/2015