

June 8, 2005

HAND DELIVERED

Ms. Beth O'Donnell Executive Director Kentucky Public Service Commission P.O. Box 615 211 Sower Boulevard Frankfort, Kentucky 40601

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JUN 0 8 2005

PUBLIC SERVICE COMMISSION

Re: Administrative Case No. 2005-00090

Dear Ms. O'Donnell:

Please find enclosed for filing with the Commission in the above-referenced case an original and six (6) copies of the testimony of Roy M. Palk pursuant to the Commission's Order of May 11, 2005.

Please contact me if you have any questions about this matter.

Very truly yours,

hear a. Lih

Charles A. Lile Senior Corporate Counsel

Enclosures

Cc: Parties of Record

	COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMI	54 ····	
In the	e Matter of:	PUBLIC SERVICE COMMISSION	
		ADMINISTRATIVE CASE NO. 2005-00090	
	PREPARED TESTIMONY OF ROY M. F ON BEHALF OF EAST KENTUCKY POWER COOPERATIV		
Q.	Please state your name and business address.		
A.	My name is Roy M. Palk and my business address is 4775 Lexington Road, Winchester,		
	Kentucky 40391.		
Q.	By whom are you employed and in what capacity?		
A.	I am employed by East Kentucky Power Cooperative, Inc., ('	'EKPC") as President and	
	Chief Executive Officer.		
Q.	Has EKPC filed information in this case in response to data requests from the		
	Public Service Commission (the "Commission")?		
A.	Yes.		
Q.	Is there any additional information that you believe that t	the Commission should	
	consider in developing the Strategic Blueprint for the use	and development of	
	electric energy in Kentucky?		
A.	EKPC believes that the information previously submitted in	Administrative Case 387 as	
	well as the data request responses submitted in the current Ca	ase 2005-00090 proceeding	
	are comprehensive in nature and responsive to the inquiries f	from the Commission Staff.	

However, the Kentucky Revenue Cabinet's decision to ignore historic practice and
precendent and to apply sales and use tax to certain EKPC-owned equipment and
facilities used in manufacturing electricity, is of immediate concern to EKPC and our
member systems, since these activities have always been considered exempt from such
taxes. This attempted taxation will decrease Kentucky's much envied competitive
advantage in energy costs and is not consistent with the concept of providing reliable,
affordable power to customers in Kentucky.

8 9 Q.

Kentucky over the next 20 years?

A. It's difficult to predict specific issues in such an ever-changing industry, particularly over
the next 20 years. Consider the rise and fall of the deregulation movement in the past
few, short years. Many states – and utilities – were quick to jump on the restructuring
bandwagon. Kentucky, with its historically low rates, thankfully took a "wait and see"
approach. While other states have paid for their mistakes – literally – Kentucky has been
a shining example of excellent public policy, reasonable regulatory oversight, and sound
utility management and investment.

What do you consider to be the top issues facing the electric power industry in

17 Still, there are several emerging matters that will continue to affect our ability to provide 18 reliable, affordable electricity. These can be grouped in three categories:

- Increasing costs due to environmental compliance, rising costs of fuel, and
 meeting Kentucky's growing demand for energy
- Research, development and deployment of advanced clean-coal technologies as
 part of a balanced energy portfolio

1

Building, maintaining and operating a reliable transmission system to serve the families and businesses of Kentucky

3 I will now address these three important subject matters in more detail.

4 **INCREASING COSTS**

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5 <u>Environmental Compliance</u>

Environmental compliance requirements have had significant impact on electricity costs 6 in recent years. A significant portion of EKPC's capital investment since 1995 has been 7 8 devoted to environmental compliance. An additional \$69 million has been spent recently on environmental compliance at the new E.A. Gilbert Generating Unit in Mason County. 9 These costs will no doubt rise as more stringent federal laws and regulations are adopted. 10 As a not-for-profit, consumer-owned electric cooperative, EKPC has strived to minimize 11 costs throughout the years. For example, EKPC's last base rate increase was in 1983. 12 EKPC was also one of the last major electric utilities in Kentucky to apply for and 13 receive approval for an environmental surcharge. This mechanism has helped utilities in 14 this state to effectively manage the increasing costs to meet strict environmental 15 requirements while continuing to use high-sulfur Kentucky coal. The surcharge also will 16 enable utilities to manage future costs as the federal government mandates even more 17 stringent emissions requirements. 18

19 Fuel Cost

Fuel cost is the single largest component of total electricity costs. Kentucky is blessed with abundant coal resources, which produce over 90 percent of its electricity. But the cost and availability of coal has been affected in recent years by consolidation of coal companies, bankruptcies, environmental permitting requirements, increased enforcement

1	of coal transportation, and other factors. In addition, natural gas prices are at an all-time
2	high, resulting in higher fuel costs absorbed by customers during peak demand times.
3	The enactment of the fuel adjustment clause regulation in 1978 has allowed utilities to
4	adjust rates without going through a general rate case – saving administrative and
5	regulatory costs. This mechanism has enabled utilities to weather the recent steep
6	increases in fuel costs by flowing through prudently incurred costs to customers.
7	However, the FAC also has proven to be a valuable mechanism for consumers during
8	periods of lower fuel costs. For example, during the late 1980s and into the 1990s,
9	customers received an immediate, direct benefit of reductions in fuel costs as a result of
10	the mechanism.
11	Growing Demand for Energy
12	There also is increased cost due to system growth and demand for electricity. EKPC's
13	member distribution systems as a group are adding more consumers than any other
14	electric utility in the state – due to the strong growth in our member systems' rural and
15	suburban service territory – and are growing at twice the rate of the national average.
16	Household usage has been growing at a significant rate. Central air conditioning, once
17	seen as a luxury, is now more common. New homes are bigger and armed with more
18	electricity-consuming appliances, like TVs, computers, and heat pumps.
19	Growth, however, comes with a price. EKPC is planning to invest more than \$1.5 billion
20	in generating and transmission facilities by 2010. We have applied for certificates of
21	convenience and public necessity to construct two clean-coal baseload generating units,
22	and we plan to build or upgrade several hundred miles of transmission lines by the end of

the decade. All of this is being built to serve our growing demand for energy within the
 Commonwealth. We expect this trend to continue in the next 20 years.

3

CLEAN-COAL TECHNOLOGIES

Kentucky's low electric rates provide major economic and societal benefits for the
Commonwealth. Low rates are a key competitive advantage in attracting jobs and
industry, while low electric bills help maintain and improve the quality of life for our
people. It is imperative, therefore, that we ensure the Commonwealth a continuing
supply of low-cost, reliable electricity. EKPC believes Kentucky's future depends on the
research, development and deployment of clean-coal technologies.

10

The deployment of advanced clean-coal technologies can have a beneficial impact. 11 Clean-coal technology makes it possible to satisfy environmental objectives while 12 meeting energy needs. An example is the deployment of advanced coal conversion 13 technologies such as circulating fluidized bed (CFB) and integrated gasification 14 combined cycle (IGCC) generation. IGCC and other advanced technologies, while 15 technically sound, face capital and operating cost uncertainties. Kentucky should provide 16 17 initiatives to research and mitigate these uncertainties, such as developing public-private partnerships, to encourage advanced technology deployment. 18

19

Kentucky should look at the possibility of providing seed capital to partner with industry
 in the early high-risk stage of clean-coal project development. This stage involves
 process design, engineering design, capital and operating cost estimation and
 environmental compliance work, all of which determine the feasibility of a project.

1	Kentucky should also consider providing financial support to offset premium or non-
2	competitive energy costs derived from the uncertainty and risk of pioneering these
3	advanced technologies. Such support could take the form of a contribution to capital and
4	could have repayment provisions that are tied to project performance. This financial
5	support could be provided without a drain on the general fund by using a revenue bond
6	that is retired from severance tax revenues generated by the project.
7	Clean-coal technologies also help ensure that coal remains a primary fuel source for the
8	utility industry, by far its largest consumer. This will help Kentucky by maintaining low
9	electric rates, part of the foundation of our standard of living and a key economic
10	development advantage.
11	
12	EKPC is a proven state leader in advancing clean energy from new clean-coal conversion
13	technologies. Three clean-coal plants are in separate phases of development – an
14	investment of more than \$1.3 billion in Kentucky.
15	• In March, EKPC opened the state's first, fully operational clean-coal CFB
16	generator – the E.A. Gilbert Unit at our Spurlock Station in Mason County.
17	• In October 2004, EKPC applied for a certificate of convenience and public
18	necessity for Gilbert's sister unit, called Spurlock Station Unit 4. It is scheduled
19	to begin operation in 2008, when the Warren Rural Electric Cooperative will
20	become a member-owner of the EKPC system. This will add eight counties and
21	more than 56,000 members to the EKPC system.
22	• In January, EKPC applied for a certificate for an identical CFB generator in Clark
23	County – J. K. Smith No.1. It is scheduled to begin operation in 2009.

1	These units will be the cleanest power plants in Kentucky and among the cleanest in the
2	country. The CFB technology also allows for expanded use of Kentucky coals, with each
3	unit capable of burning up to 1.2 million tons a year. Coal is provided by companies in a
4	competitive-bidding process to determine the lowest-cost option.
5	
6	At the same time, EKPC knows it makes good economic and environmental sense to
7	develop clean alternatives to traditional energy sources as part of a balanced energy
8	portfolio.
9	EKPC and its member systems are marketing renewable energy under the voluntary
10	"EnviroWatts – Earth Friendly Energy Alternatives" program. EKPC is the first and only
11	utility in Kentucky that operates landfill gas generation from captured methane. EKPC
12	operates three plants in Boone, Laurel and Greenup counties and is working on
13	development of several others. These plants, while small, generate electricity by using
14	gas that was formerly being flared. In addition to the landfill gas projects, EKPC is also
15	testing the feasibility of wind generation.
16	EKPC believes that Kentucky's energy policy should encourage the production and use
17	of "green" energy from renewable resources. "Green" energy is not necessarily the
18	lowest-cost electricity, and often does not fit a least-cost rate regulatory model.
19	However, from an environmental perspective, it is a desirable alternative for which many
20	consumers are willing to pay.
21	Due to the limited availability and higher cost of renewable energy, EKPC does not
22	believe that Kentucky should mandate a Renewable Portfolio Standard (RPS). Policies
23	that encourage the use of higher-cost renewable energy, such as the voluntary approach

discussed above, should be used, and utilities should manage renewable portfolios in
 response to market demand.

3

A RELIABLE TRANSMISSION SYSTEM

The transmission grid is the lifeline of the electric utility system. Deregulation resulting 4 5 in a restructured wholesale market and surging demand have created tremendous 6 pressures on a transmission grid that was not designed to meet the needs of today's market. The Kentucky transmission grid was originally created as an in-state 7 transportation facility to be used to serve Kentucky customers. The state's transmission 8 9 system faces an increasing need for expansion and upgrade. Demand and reliability require that this be done quickly. While everyone demands an abundant and reliable 10 11 supply of electricity, more and more landowners are increasingly reluctant to allow new 12 transmission facilities on their property.

13

Regulations that govern the right to construct and site transmission lines should be reviewed and streamlined. They must eliminate uncertainty and minimize costs prior to certification. Expeditious decisions that prevent delays and increased costs are essential. It is extremely important that these guidelines do not place regulated utilities that serve Kentuckians at a competitive disadvantage with non-regulated merchant plants that ship power out-of-state.

20

EKPC believes Regional Transmission Organizations, or RTOs, may have operationally
 advantages but cost disadvantages. Kentucky should try to prevent its utilities from being

required to join an RTO, but allow them to join only if it is deemed to be economically
 prudent.

3 The development of RTOs, as well as the August 2003 blackout that struck the Midwest and Northeast, have resulted in changes in the way electric utilities are operating their 4 5 transmission systems. As a result of the August 14, 2003 blackout, the National Electric 6 Reliability Council (NERC) has undertaken an extensive process to rewrite reliability 7 standards for the nation's electric utilities. These new standards, in combination with the opening of the new Midwest Independent System Operator (MISO) energy market, are 8 9 changing the way Kentucky's electric utilities operate. At EKPC, the MISO market and its member companies' systems are affecting daily operations today more than ever 10 11 before. EKPC System Operators are routinely being asked to reconfigure EKPC's 12 transmission system or to redispatch its lower cost generation and economy purchases to higher cost resources to accommodate Transmission Loading Relief (TLR) called for by 13 MISO and its member companies. This type of operation not only compromises the 14 reliability of transmission service to our consumers but also raises their cost of electricity. 15 16 17 As a recent example, the TLR procedure was invoked by MISO to relieve congestion on what MISO defines as the "Northeast Kentucky Interface." This resulted in the closing of 18 19 market interfaces being used by EKPC to make hourly purchases for the sake of economy. Curtailment of these lower cost purchases meant bringing higher cost 20 combustion turbines on-line to replace these transactions. Previously filed responses cite 21 similar scenarios where EKPC economic operation and transmission reliability has been 22 compromised by MISO activities. 23

1		The lack of coordination between MISO and other regions with respect to scheduled	
2		generation outages, and allowing additional North to South flows, has also compounded	
3		problems on Kentucky's transmission system. Without additional investment in	
4		transmission within the MISO and other major market participant's systems to alleviate	
5		market created transmission congestion, EKPC operations will continue to be adversely	
6		impacted.	
7	Q.	What barriers do you believe exist, if any, to meeting the investment needs for	
8		electric industry infrastructure in Kentucky?	
9	А.	Most of the significant barriers have been identified in the discussion above. They	
10		include:	
11		• Ignoring historic precedent concerning application of sales and use taxes on	
12		electric facilities	
13		• Increasing cost of environmental compliance, with additional emissions	
14		requirements under consideration by the federal government	
15		• Rising cost of fuels, including coal and natural gas	
16		• Financial and operating risks associated with deployment of the next generation	
17		of clean-coal technologies, specifically Integrated Gasification Combined Cycle	
18		(IGCC)	
19		• Timely construction of transmission lines to serve Kentucky customers	
20		• Development and impact of RTOs on Kentucky's transmission grid	
21	Q.	Do you have any other advice to offer the Commission in its development of the	
22		electric energy Strategic Blueprint for Kentucky?	

A comprehensive and robust energy policy is necessary as Kentucky moves to build a 1 Α. stronger and healthier economy, while supporting and enhancing the quality of life for its 2 families and businesses. We applaud the governor in his efforts to develop Kentucky's 3 first comprehensive energy policy, and the formation of the new Office of Energy Policy, 4 which EKPC has recommended. 5 6 As noted herein, EKPC has a critical interest in Kentucky's energy future. EKPC is the 7 only regulated utility with an advanced clean-coal facility in operation, with two more in 8 development. Our environmental leadership and renewable energy efforts are second to 9 none. And, as a locally owned cooperative, our mission is to ensure that Kentucky families and businesses have enough reliable, affordable power. EKPC believes that the 10 State of Kentucky shares that mission and would like to work with the State to 11 accomplish it. 12 We appreciate the opportunity for input and look forward to working with the new Office 13 of Energy Policy, the Public Service Commission and the Governor in answering further 14 questions or providing any additional information. 15 Does this conclude your testimony? Q. 16

17 A. Yes.

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN ASSESSMENT OF KENTUCKY'S **ELECTRIC GENERATION, TRANSMISSION,** AND DISTRIBUTION NEEDS

) ADMINISTRATIVE) CASE NO. 2005-00090

PREPARED TESTIMONY OF ROY M. PALK **ON BEHALF OF** EAST KENTUCKY POWER COOPERATIVE, INC.

AFFIDAVIT

STATE OF KENTUCKY) **COUNTY OF CLARK**)

Roy M. Palk, being duly sworn, states that he has read the foregoing prepared testimony and that he would respond in the same manner to the questions if so asked upon taking the stand, and that the matters and things set forth therein are true and correct to the best of his knowledge, information and belief.

Subscribed and sworn before me on this 7th day of June, 2005.

Sinda Meavill Notary Public January 27, 2008

My Commission expires: