

RECEIVED

MAY 03 2012

PUBLIC SERVICE  
COMMISSION

 **Frost  
Brown Todd** LLC  
ATTORNEYS

**Mark David Goss**  
Member  
859.244.3232  
mgoss@fbtlaw.com

May 3, 2012

*Via Hand-Delivery*

Mr. Jeffrey Derouen  
Executive Director  
Kentucky Public Service Commission  
211 Sower Boulevard  
P. O. Box 615  
Frankfort, Kentucky 40602-0615

Re: In the Matter of: The Application of East Kentucky Power  
Cooperative, Inc. to Transfer Functional Control of Certain  
Transmission Facilities to PJM Interconnection, L.L.C.  
PSC Case No. 2012-\_\_\_\_\_

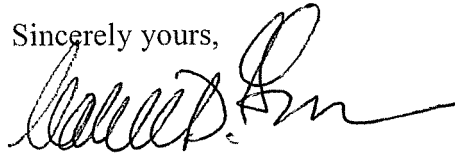
Dear Mr. Derouen:

Attached herewith you will please find an original and ten (10) copies of East Kentucky Power Cooperative, Inc.'s Application to Transfer Functional Control of Certain Transmission Facilities to PJM Interconnection, L.L.C.

I hereby request that this Application and copies be filed immediately.

Please advise should you have any questions concerning this filing.

Sincerely yours,



Mark David Goss

Enclosures

cc: Hon. Mike Kurtz, Counsel for Gallatin Steel  
Hon. Dennis G. Howard, II, Hon. Lawrence Cook,  
Hon. Jennifer Hans (Office of the Kentucky Attorney General  
Utility Rate Intervention Division)

LEXLibrary 0000191.0588764 509671v1

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

RECEIVED

MAY 03 2012

PUBLIC SERVICE  
COMMISSION

IN THE MATTER OF:

THE APPLICATION OF EAST KENTUCKY )  
POWER COOPERATIVE, INC. TO )  
TRANSFER FUNCTIONAL CONTROL OF )  
CERTAIN TRANSMISSION FACILITIES )  
TO PJM INTERCONNECTION, L.L.C. )

CASE NO. 2012-\_\_\_\_\_

APPLICATION

Comes now East Kentucky Power Cooperative, Inc. ("EKPC"), by and through counsel, pursuant to KRS 278.218, 807 KAR 5:001, Section 8 and other applicable law, and for its Application requesting that the Kentucky Public Service Commission ("Commission") enter an Order approving the transfer of functional control of certain Transmission Facilities<sup>1</sup> to the PJM Interconnection, L.L.C. ("PJM") effective June 1, 2013, respectfully states as follows:

**I. Regulatory Filing Requirements**

1. EKPC's mailing address is P.O. Box 707, Winchester, Kentucky 40392-0707.
2. Pursuant to 807 KAR 5:001, Section 8(3) a certified copy of EKPC's restated Articles of Incorporation and all amendments thereto have previously been filed of record in Case No. 90-197, the *Application of East Kentucky Power Cooperative for a*

<sup>1</sup> The term "Transmission Facilities" is consistently defined in both Section 1.27 of the PJM Transmission Owners Agreement and Section 1.44 of the PJM Operating Agreement. A schedule of the Transmission Facilities at issue herein is attached as Exhibit DM-1 to the testimony of Mr. Don Mosier.

*Certificate of Public Convenience and Necessity to Construct Certain Steam Service Facilities in Mason County, Kentucky.*

3. EKPC makes this Application pursuant to KRS 278.218, which requires Commission approval prior to the transfer of ownership or control of a utility's assets with a value of \$1,000,000 or greater when the assets will continue to be used to provide service to the utility or its customers.

4. EKPC is an electric cooperative formed under Chapter 279 of the Kentucky Revised Statutes. It has approximately \$3.1 billion in assets and currently serves approximately 521,000 customers in 87 Kentucky counties through its sixteen member distribution cooperatives. EKPC owns and/or purchases nearly 3,100 megawatts ("MW") of electric generation capacity and approximately 2,800 miles of electric transmission lines. EKPC is already a member of PJM by virtue of the fact that membership is required in order to participate in PJM's energy market and to reserve transmission service within the PJM region. EKPC became a signatory to the PJM Operating Agreement in 2005 in its capacity as an Other Supplier under the PJM Operating Agreement and as an Electric Utility under the terms of PJM's Open Access Transmission Tariff,<sup>2</sup> however, EKPC is not a signatory to either the PJM Transmission Owners Agreement or the PJM Reliability Assurance Agreement.<sup>3</sup> EKPC may only become fully integrated into PJM upon the transfer of functional control of its

---

<sup>2</sup> Since 2005, EKPC has also been a Market Participant within the Midwest ISO ("MISO"). Due to the loss of a direct interconnection with MISO following the transition of Duke Energy Kentucky, Inc. ("Duke") from MISO to PJM in 2012, EKPC will be terminating its membership as a Market Participant in MISO as it fully integrates into PJM. EKPC's was also a part of the MISO reserve sharing group until its discontinuation on December 31, 2009.

<sup>3</sup> EKPC is also a signatory to a PJM Service Agreement for Firm Point-to-Point Transmission Service, a PJM Service Agreement for Non-Firm Point-to-Point Transmission Service, a PJM Service Agreement for Network Integration Transmission Service and other forms and disclosures.

Transmission Facilities to PJM and the execution of the two aforementioned agreements.<sup>4</sup> EKPC will also have the option to change its membership status to that of a Transmission Owner or Generation Owner in PJM.

5. The names and addresses of EKPC's attorneys and representatives who are authorized to receive notices and communications regarding this Application are as follows:

Mark David Goss  
David S. Samford  
Frost Brown Todd LLC  
250 West Main Street, Suite 2800  
Lexington, KY 40507-1749  
Telephone: (859) 231-0000

Ann Wood  
East Kentucky Power Cooperative  
4775 Lexington Road  
P.O. Box 707  
Winchester, KY 40395-0707  
Telephone: (859) 744-4812

6. In further support of this Application, EKPC has included the following prepared testimony and exhibits:

- Anthony S. Campbell, President and Chief Executive Officer, will broadly cover the background of EKPC's involvement with regional transmission organizations ("RTOs"), the role of EKPC's Board of Directors in deciding to seek full integration into PJM, the transaction itself and the other approvals or consents that must be obtained. (Exhibit 1);

---

<sup>4</sup> Section 4.1.2 of the Transmission Owners Agreement provides, "[e]ach Party shall transfer to PJM, pursuant to this Agreement and in accordance with the Operating Agreement, the responsibility to direct the operation of its Transmission Facilities provided that such transfer is not intended to require any change in the physical operations or control over Transmission Facilities."

- Don Mosier, Chief Operating Officer, will describe the internal deliberative process leading to the decision to fully integrate with PJM as well as the operational aspects, benefits and timing of becoming fully integrated (Exhibit 2);
- Michael A. McNalley, will discuss rate and financial impacts (Exhibit 3);
- Ralph Luciani, Vice President, CRA, will describe the results of the economic analysis and the methodology employed as part of that analysis (Exhibit 4);
- PJM Transmission Owners Agreement (Exhibit 5);
- PJM Reliability Assurance Agreement (Exhibit 6); and
- PJM Operating Agreement (Exhibit 7).

## **II. Overview of the Transfer of Functional Control**

### **A. Background**

7. EKPC first considered transferring functional control of its Transmission Facilities to an RTO one decade ago. However, the nature and function of RTOs was still evolving at the time and EKPC ultimately concluded that joining an RTO was not likely to be cost effective.<sup>5</sup>

8. As RTOs continued to develop and mature under the oversight of the Federal Energy Regulatory Commission (“FERC”), EKPC periodically assessed whether membership in an RTO would be cost effective and beneficial for its members. The

---

<sup>5</sup> See *Application of East Kentucky Power Cooperative, Inc. for Approval of the Transfer of Operational Control of Certain Transmission Facilities to the Midwest Independent System Operator*, Final Order, Case No. 2002-00327, p. 1 (Ky. P.S.C. Sept. 17, 2003).

advisability of reconsidering whether to join an RTO was also highlighted in the Focused Management and Operations Audit of EKPC as conducted by the Liberty Consulting Group (“Liberty”). Liberty concluded, “[t]he benefits of membership [in an RTO] may now exceed the costs; therefore, EKPC should place a high priority on performing an evaluation as soon as possible.”<sup>6</sup> In addition, Liberty recommended that, “EKPC should hire an independent consultant to determine the costs and benefits of ISO membership.”<sup>7</sup>

9. In 2010, a preliminary directional analysis was conducted by ACES Power Marketing (“ACES”), EKPC’s energy marketing agent, which demonstrated that fully integrating into PJM was economically advantageous. To get a second assessment, and after conducting a competitive bidding process, EKPC selected and engaged Charles River Associates (“CRA”) to conduct an independent evaluation of the costs and benefits of fully participating in an RTO in 2011. Throughout the evaluation process, EKPC’s management was active and involved in providing the information necessary for CRA to formulate its analytical model as well as to assess various scenarios involving variations of the base case used for the analysis. The CRA report concluded that there are numerous qualitative and quantitative benefits to joining PJM.<sup>8</sup> The three key sources of benefits of EKPC joining PJM are:

- More efficient commitment and dispatch of EKPC’s generating resources leading to lower “adjusted production costs” for EKPC, as a result of:
  - Elimination of EKPC-PJM transmission charges (de-pancaking); and,

---

<sup>6</sup> Final Report, Liberty Consulting Group, p. 33 (Apr. 20, 2010).

<sup>7</sup> *Id.*, p. 61.

<sup>8</sup> The CRA Report, in its entirety, is attached at Exhibit RL-2 to the testimony of Ralph Luciani (Exhibit 4 to this Application). CRA also considered whether EKPC should give serious consideration to integrating into MISO. However, the lack of a direct interconnection with MISO made this option cost prohibitive.

- EKPC's participation in a fully integrated regional energy market;
- Advantageous peak load diversity relative to PJM as a whole, which results in carrying significantly lower planning reserves; and
- Avoided long-term firm point-to-point transmission charges that are currently being incurred to ensure that EKPC has the ability to import and export power throughout the year.

10. In sum, CRA determined the economic benefit of joining PJM, based on a 10-year present value, to be approximately \$142 million. This benefit would serve to reduce the total power cost to EKPC's 16 member distribution cooperatives by between \$1 and \$3 per MWh.

11. In addition to CRA's evaluation, EKPC's management also engaged in a parallel due diligence process. EKPC commissioned a legal review of the various agreements that it would be required to execute upon its entry into PJM. EKPC thereafter tendered written questions to PJM that touched upon organizational, operational and financial aspects of the integration process and subsequent participation in PJM. EKPC's managers met with PJM in person and held several conference calls to discuss the details and timeframes associated with fully-integrated membership in PJM.

12. EKPC's Board of Directors was kept abreast of the work of Management and CRA throughout the evaluation process through a series of briefings, updates and presentations by EKPC's Management as well as meetings with managers from PJM and other cooperatives that are currently members of RTOs. The Board was given a copy of CRA's final report and listened to a presentation from Ralph Luciani, the leader of the CRA team, at its March 13, 2012 regular meeting. At a special meeting held on March

22, 2012, EKPC's Board unanimously approved a resolution to take the steps necessary – including seeking appropriate regulatory approvals – to become a fully-integrated member of PJM.

## **B. Overview of PJM**

13. PJM operates as a not-for-profit, federally regulated RTO, headquartered in Valley Forge, Pennsylvania, that coordinates the movement of wholesale electricity in all or parts of 13 states and the District of Columbia. PJM acts independently and impartially in managing the regional transmission system and the wholesale electricity market, ensuring the reliability of the largest centrally dispatched electric grid in North America. PJM's members, totaling more than 750, include power generators, transmission owners, electricity distributors, power marketers and large consumers.

14. In terms of operations, PJM's staff monitors the high-voltage transmission grid 24 hours a day, seven days a week. PJM keeps the electricity supply and demand in balance by telling power producers how much energy should be generated and by adjusting import and export transactions. PJM dispatches approximately 185,600 MW of generating capacity over 62,591 miles of transmission lines by relying upon telemetric data from approximately 74,000 points on the electric grid. More than 60.1 million people live in the PJM region.

15. PJM also provides an important function within the energy markets by coordinating the continuous buying, selling and delivery of wholesale electricity through its robust, open and competitive Interchange Energy Market ("Energy Market"). PJM's Energy Market establishes a market price for electricity by matching supply with demand using online interfaces to make trading easy for members/customers with continuous

real-time data. The Energy Market is a two-settlement (day-ahead and real-time) market using hourly locational marginal prices and financial transmission rights. As set forth in Section 13.2 of the Operating Agreement, PJM will schedule in advance and dispatch generation on the basis of least-cost, security-constrained dispatch and the prices and operating characteristics offered by sellers within and into the PJM region, continuing until sufficient generation is dispatched to serve the energy requirements of the region and buyers out of the region, as well as the requirements of the PJM Region for ancillary services provided by available generation. Scheduling and dispatch is conducted in accordance with applicable schedules to the PJM Tariff and Operating Agreement. Market participants, such as EKPC, can closely follow energy market fluctuations as they occur and quickly respond to price signals bringing supply resources to the region when demand is high. PJM advertises that it has administered more than \$103 billion in energy and energy-service trades since the regional markets opened in 1997.

16. Finally, PJM also manages a sophisticated regional planning process for transmission expansion to ensure the continued reliability of the electric system. PJM is responsible for maintaining the integrity of the regional power grid and for managing changes and additions to the grid to accommodate new generating plants, substations and transmission lines. PJM analyzes and forecasts the future electricity needs of the region so that its planning process ensures that the growth of the electric system takes place efficiently, in an orderly fashion, and that reliability is maintained. PJM also administers various demand response initiatives and other efforts to support renewable energy, to help expand supply options and keep prices competitive.

17. The Commission has previously authorized two other jurisdictional utilities – Duke Energy Kentucky, Inc. and Kentucky Power Company – to become members of PJM.<sup>9</sup>

**C. The Proposed Transfer of Functional Control of Transmission Facilities**

18. EKPC seeks approval to transfer the functional control of its Transmission Facilities to PJM effective June 1, 2013. As part of the transfer of functional control of its Transmission Facilities to PJM, EKPC will be required to execute two new agreements: a) the PJM Transmission Owners Agreement; and b) the PJM Reliability Assurance Agreement.

19. Becoming a signatory to the Transmission Owners Agreement and the Reliability Assurance Agreement will allow EKPC to immediately cancel a firm transmission reservation currently in effect with PJM for 400 MW of transmission rights that is set to expire on December 31, 2016 and resulting in a savings of more than \$7 million per year, through that date. This will also permit more efficient sales of EKPC's excess energy due to less frequent transmission constraints and a significantly reduced capacity reserve margin of approximately 70 MW.

20. The Transmission Owners Agreement grants PJM the right and authorization to use the transmission capacity of EKPC's transmission system that is required to provide service under the PJM Tariff and to resell transmission service using such capacity on the transmission system. PJM will compensate EKPC for the use of its

---

<sup>9</sup> See *Application of Duke Energy Kentucky, Inc. for Approval to Transfer Functional Control of its Transmission Assets from the Midwest Independent Transmission System Operator to the PJM Interconnection Regional Transmission Organization*, Final Order, Case No. 2010-00203 (Ky. PSC Dec. 22, 2010); *Application of Kentucky Power Company d/b/a American Electric Power, for Approval, to the Extent Necessary, to Transfer Functional Control of Transmission Facilities Located in Kentucky to PJM Interconnection, L.L.C. Pursuant to KRS 278.218*, Final Order, Case No. 2002-00475 (Ky. PSC Aug. 25, 2003).

transmission capacity by distributing certain revenues to EKPC as set forth in the PJM Tariff and the Transmission Owners Agreement.<sup>10</sup>

21. In order to maximize the benefit to EKPC and its Members of becoming fully integrated into PJM, EKPC's existing interruptible load and Direct Load Control resources must be enrolled in PJM's Limited Demand Response Program. As a result, some changes will be required to EKPC's special contracts with interruptible load end-users and EKPC's Direct Load Control tariff to conform them to PJM's Limited Demand Response Program. EKPC and its Members will tender appropriate tariff and contract revisions to the Commission for its review once the Application is approved, but well before the targeted integration date of June 1, 2013.

22. In order for EKPC to participate in the May 2013 Base Residual Auction for the 2016/17 delivery year and to complete the integration by June 1, 2013, the Commission would need to issue a final order approving the transfer of functional control on or before December 31, 2012.

### **III. Governing Law**

23. The transfer of control of a jurisdictional utility's assets is governed by KRS 278.218, which provides:

- (1) No person shall acquire or transfer ownership of or control, or the right to control, any assets that are owned by a utility as defined under KRS 278.010(3)(a) without prior approval of the commission, if the assets have an original book value of one million dollars (\$1,000,000) or more and:
  - (a) The assets are to be transferred by the utility for reasons other than obsolescence; or

---

<sup>10</sup> See PJM Transmission Owners Agreement, Section 3.3(d).

- (b) The assets will continue to be used to provide the same or similar service to the utility or its customers.
- (2) The commission shall grant its approval if the transaction is for a proper purpose and is consistent with the public interest.

24. Thus, a two-prong test for approving the Application is to be applied and must consider: (a) whether the transfer is for a proper purpose; and (b) whether the transfer is consistent with the public interest. Generally speaking, any act taken within the lawful purposes of a corporation may constitute a “proper purpose.”<sup>11</sup> With regard to what constitutes the “public interest,” Commission precedent provides a sufficient interpretation in the absence of a statutory definition. On this point, the Commission has stated:

[A]ny party seeking approval of a transfer of control must show that the proposed transfer will not adversely affect the existing level of utility service or rates or that any potentially adverse effects can be avoided through the Commission’s imposition of reasonable conditions on the acquiring party. The acquiring party should also demonstrate that the proposed transfer is likely to benefit the public through improved service quality, enhanced service reliability, the availability of additional services, lower rates or a reduction in utility expenses to provide present services. Such benefits, however, need not be immediate or readily quantifiable.<sup>12</sup>

25. While the application in this case involves the transfer of functional control of utility assets under KRS 278.218, rather than a transfer of ownership of the

---

<sup>11</sup> See e.g. *In re Pacific Gas and Electric Company*, Order, 2004 WL 2533627, n. 20 (Cal. P.U.C. Oct. 28, 2004) citing *Webster Mfg. Co. v. Byrnes*, 280 P. 101, 638-39 (Cal. 1929) (“We therefore conclude that, in the absence of a plain declaration to the contrary, ‘proper purposes’ means any outlay necessary or proper to promote the legitimate objects of a public utility.”).

<sup>12</sup> See *Application for Approval of the Transfer of Control of Kentucky-American Water Company to RWE Aktiengesellschaft and Thames Water Aqua Holdings GmgH*, Order, Case No. 2002-00018, p. 7 (Ky. PSC May 30, 2002).

utility under KRS 278.020, the same criteria apply in determining whether the proposed transfer satisfies the “public interest” standard.<sup>13</sup> In the context of the transfer of functional control of a utility’s transmission assets, the Commission has held that the inquiry “encompasses both network reliability and the cost of electric service...”<sup>14</sup>

#### **IV. Facts Supporting the Application**

26. EKPC currently operates as its own dispatch control area and balancing authority, where it is charged with matching generation to its load in a reliable and economic manner. Ever increasing transmission constraints between EKPC and potential counterparties and more stringent regulatory requirements continue to place additional economic pressure on EKPC’s ability to operate independently.

27. EKPC faces several other specific operating concerns by continuing to operate as an independent control area and balancing authority. EKPC has a firm transmission reservation with PJM for 400 MW of transmission rights for five years, expiring December 31, 2016, to ensure EKPC can purchase energy from the PJM market; this transmission costs more than \$7 million per year. The future availability and the cost of this transmission reservation are uncertain. Sales of EKPC’s excess energy are frequently constrained because of limited transmission availability into PJM.

---

<sup>13</sup> See *Application of Duke Energy Kentucky, Inc. for Approval to Transfer Functional Control of its Transmission Assets from the Midwest Independent Transmission System Operator to the PJM Interconnection Regional Transmission Organization*, Final Order, Case No. 2010-00203, pp. 14-15 (Ky. PSC Dec. 22, 2010); *Application of Kentucky Power Company d/b/a American Electric Power, for Approval, to the Extent Necessary, to Transfer Functional Control of Transmission Facilities Located in Kentucky to PJM Interconnection, L.L.C. Pursuant to KRS 278.218*, Final Order, Case No. 2002-00475 (Ky. PSC Aug. 25, 2003).

<sup>14</sup> *Application of Louisville Gas and Electric Company and Kentucky Utilities Company to Transfer Functional Control of their Transmission Facilities*, Final Order, Case No. 2005-00471, p. 5 (Ky. PSC July 6, 2006).

28. Additionally, EKPC currently targets a 12 percent capacity reserve margin of approximately 360 MW on its winter peak load to accommodate extreme operating conditions. This reserve margin is significantly higher than the 2.8 percent capacity reserves based on summer peak loads, or approximately 70 MW, that would be required in PJM.

**A. Transferring Functional Control of EKPC’s Transmission Facilities is for a Proper Purpose**

29. While EKPC is unaware of any Commission precedent specifically and narrowly defining a utility’s “proper purpose” in the context of applying KRS 278.218, the term has been broadly construed in the scope of utility regulation to refer to any act necessary or proper to promote the legitimate objects of a public utility.<sup>15</sup>

30. As a rural electric cooperative corporation formed under KRS Chapter 279, the legitimate objects of EKPC’s enterprise are expressed in its enabling statutes. These include: forming for the “[p]rimary purpose of generating, purchasing, selling, transmitting, or distributing electric energy to any individual or entity...;”<sup>16</sup> and acting to “[c]onstruct, own, lease, operate, and control any facilities across, along, or under any street or public highway, and over any lands belonging to this state or to any county, city, or political subdivision of this state...;”<sup>17</sup> and “mak[ing] any contract necessary or convenient for the full exercise of the powers granted by this chapter, or for any other

---

<sup>15</sup> See e.g. *In re Pacific Gas and Electric Company*, Order, 2004 WL 2533627, n. 20 (Cal. P.U.C. Oct. 28, 2004) citing *Webster Mfg. Co. v. Byrnes*, 280 P. 101, 638-39 (Cal. 1929) (“We therefore conclude that, in the absence of a plain declaration to the contrary, ‘proper purposes’ means any outlay necessary or proper to promote the legitimate objects of a public utility.”).

<sup>16</sup> KRS 279.020(1).

<sup>17</sup> KRS 279.110(5).

corporate purpose, subject to any limitations imposed by this chapter...”<sup>18</sup> In addition, EKPC may “[d]o anything not specifically set forth in this section that is reasonably deemed necessary, proper, or convenient for the accomplishment of the purposes of the corporation and is not prohibited by law.”<sup>19</sup>

31. Based upon the broad scope of lawful and legitimate purposes set forth in KRS Chapter 279, the transfer of functional control of EKPC’s Transmission Facilities is for a proper purpose under Kentucky law.

**B. Transferring Functional Control of EKPC’s Transmission Facilities is Consistent with the Public Interest**

32. The transfer of functional control of EKPC’s Transmission Facilities is also consistent with the public interest in that it will preserve or improve network reliability and yield a long-term benefit in the costs of electric service paid by EKPC’s members. The transfer will enable EKPC to realize, on a present value basis, approximately \$142 million in net savings in the first ten years following integration. Moreover, EKPC will continue as a member of the TEE Contingency Reserve Sharing Group (“TCRSG”) which assures that no harm comes to any ratepayers of the other members of the TCRSG.<sup>20</sup> Participation in PJM through the rights and benefits afforded to transmission owners and generation owners will allow EKPC to position itself to efficiently comply with existing and anticipated federal obligations imposed by the U.S. Environmental Protection Agency (“EPA”) and the Federal Energy Regulatory

---

<sup>18</sup> KRS 279.110(7).

<sup>19</sup> KRS 279.110(13).

<sup>20</sup> The utilities which are members of the TCRSG are the Tennessee Valley Authority (“TVA”), Kentucky Utilities Company (“KU”) and Louisville Gas and Electric Company (“LG&E”). “TEE” is an abbreviation for TVA, EKPC and E.On (n/k/a KU and LG&E).

Commission (“FERC”). Moreover, transferring functional control of EKPC’s Transmission Facilities will have no adverse effect upon the Commission’s jurisdiction.

**1. The Net Benefit to EKPC of Transferring Functional Control of Its Transmission Assets is Consistent with the Public Interest**

33. As set forth in the CRA Report, EKPC expects to realize, on a present value basis, net benefits of \$142 million over the first ten years after it transfers functional control of its Transmission Facilities and participates in PJM under the Transmission Owners Agreement and the Reliability Assurance Agreement. While there are administrative and transmission costs associated with these activities, they are more than offset by trade benefits, capacity market benefits and avoided long-term firm point-to-point transmission costs that will be realized, as the following chart demonstrates:

<b>Benefits (Costs) to EKPC Joining PJM (in millions of dollars)</b>	<b>2013-22 (Present Value)</b>
Decrease in Adjusted Production Costs (Trade Benefits)	52.7
Administrative Costs	(48.3)
Transmission Costs	(66.4)
PJM Capacity Market Impacts	147.8
Subtotal Net Benefits (Costs):	85.9
Avoided Long-Term Firm PTP Transmission Charges	56.1
<b>Net Benefits (Costs):</b>	<b>142.0</b>

34. CRA concluded that EKPC would be able to generate less power (thereby decreasing production costs) while at the same time increasing its economic off-system purchases.<sup>21</sup> This co-optimization yields a more economic dispatch of generating resources and approximately \$52.7 million in net savings over the ten years of the study.

---

<sup>21</sup> EKPC will assume no new market volatility risk arising from its market transactions. While EKPC’s members will have the benefit of being able to realize savings from economic purchases of energy, they will be protected from market volatility by EKPC’s ability to always purchase energy at a cost equal to its own avoided cost. Thus, the risks associated with joining PJM are no greater for EKPC’s members than what they already assume and, in all likelihood, will be less.

35. CRA also evaluated the estimated administrative costs that EKPC will likely incur upon its participation in PJM as a transmission owner and capacity supplier to be \$48.3 million over the ten years of the study. These costs generally arise from administrative costs imposed by PJM (\$35 million) and by FERC (\$7.7 million) as well as those required for EKPC to internally complete the integration and ongoing administration of the commercial relationship with PJM (\$5.6 million). The internal cost estimate specifically includes the additional costs associated with continuing to use ACES to assist and facilitate interactions with PJM in its energy and capacity markets and planning functions.

36. CRA estimates that EKPC will incur costs of approximately \$66.4 million over the study period as part of PJM's Regional Transmission Expansion Planning ("RTEP") program, which allocates the total cost of "backbone" transmission line projects for lines rated at 500 kV and above. EKPC will have the opportunity, however, to have the costs of any of its own transmission projects allocated to other utilities to the extent that such utilities would benefit from the addition of the new transmission infrastructure.

37. The highest category of cost savings accrue in the context of EKPC's full participation in PJM's capacity market. Due to the fact that EKPC is a winter peaking system and PJM as a whole is summer peaking, EKPC has the unique opportunity to monetize this diversity through the reduction of its own peak reserve requirements to match those of PJM. Thus, instead of maintaining the current 12% planning reserve requirement in both the winter and summer seasons, EKPC would only be required to maintain a 2.8% installed planning reserve for EKPC's summer peak as a fully

participating member of PJM's Reliability Pricing Model ("RPM").<sup>22</sup> Although CRA's detailed analysis demonstrates that this benefit would be diminished by \$3 million to \$9 million per year if EKPC was not permitted to participate in PJM on an RPM basis beginning with the Base Residual Auction for delivery year 2016/17, the savings remain substantial. Moreover, EKPC will only be able to maximize its capacity benefits if it is permitted to enroll its interruptible load and Direct Load Control resources in PJM's Limited Demand Response Program. The net savings for EKPC to participate fully in PJM through the RPM equates to \$147.8 million over the ten year term of the study.

38. Finally, the CRA Report concludes that upon joining PJM as a transmission owner, EKPC will immediately be able to realize savings associated with the cancellation of the five year 400 MW firm point-to-point transmission service agreement that it currently utilizes. EKPC's members will save approximately \$56.1 million in transmission costs over the ten year study period for which they are currently obligated without suffering any detrimental impact to service reliability and access to the PJM market.

39. The CRA Report also sets forth several qualitative considerations which have been taken into account as part of EKPC's decision to seek full integration into PJM. Among the most significant of these considerations is the difficulty associated with predicting EKPC's future costs arising from PJM's RTEP;<sup>23</sup> the effects of future variations in fuel costs and load growth; and exit obligations. While EKPC takes each of

---

<sup>22</sup> The alternative to participating in PJM's RPM is to participate on a Fixed Resource Requirement ("FRR") basis. As CRA's analysis demonstrates, participation on an FRR basis means EKPC must hold back an additional 3% of generation capacity in reserve and would therefore forfeit a significant portion of the benefit available to its members.

<sup>23</sup> RTEP is the subject of Schedule 6 of the PJM Operating Agreement.

these issues seriously, its analysis confirms that CRA's bottom line conclusion is reasonable: "EKPC joining PJM will yield significant economic benefits to EKPC," and "[t]he net benefits to EKPC are relatively robust."<sup>24</sup>

40. In addition to the net benefits calculation performed by CRA, the structure of PJM's energy and capacity markets assure that EKPC's members will not be exposed to volatility in the markets to any extent greater than what they currently face. As set forth in Mr. Mosier's testimony, EKPC will assume no new significant risks arising from its market transactions upon transferring functional control of its Transmission Facilities and operating under the Transmission Owners Agreement and Reliability Assurance Agreement. Moreover, PJM's operations are constantly monitored by an independent firm engaged to assure transparency and integrity in the Energy Market and PJM has several credit protections in place to minimize the risks of member defaults. These structural protections help assure that PJM's markets have the requisite financial integrity and stability to benefit and protect its members. While the benefits of these market structures are difficult to precisely quantify, they are nevertheless real and tangible safeguards which will ultimately benefit EKPC's Members.

**2. The Positive Impact to EKPC's Ratepayers Arising from the Net Benefit of Transferring the Functional Control of its Transmission Facilities is Consistent with the Public Interest**

41. Transferring functional control of its Transmission Facilities and participating in PJM under the Transmission Owners Agreement and Reliability Assurance Agreement will have a positive impact upon ratepayers within the EKPC system. With unconstrained access to PJM, EKPC's network reliability will not be harmed and will most certainly be improved.

---

<sup>24</sup> CRA Report, p. 7.

42. Moreover, the ratepayers within the EKPC system will benefit from avoided costs, (arising from reduced production costs and cancellation of the 400 MW firm point-to-point transmission service agreement), reduced reserve requirements resulting in the more efficient dispatch of capacity resources and a general ability to sell and purchase energy in a larger, more efficient marketplace. Some of the rate benefits of EKPC's full participation in PJM will be felt in the short-term, while others will be demonstrated over the longer term.

43. As set forth above, immediately upon entering into the Transmission Owners Agreement and the Reliability Assurance Agreement, EKPC will be able to cancel the 400 MW firm point-to-point transmission service agreement that it currently has in place through PJM. Cancellation of this transmission agreement in combination with eliminating the need to replace the current agreement with a new one at the expiration of its term is anticipated to save EKPC \$56.1 million over the ten year study period set forth in the CRA Report.<sup>25</sup>

44. The remaining favorable rate impacts will be realized primarily through EKPC's avoided costs and economic energy purchases. As such, the ability to specifically track these benefits is much more difficult and not susceptible to any particular tracking mechanism. However, EKPC's estimates suggest that the total avoided costs will range from \$1 to \$3 per MWh during the first ten years following EKPC's integration into PJM.<sup>26</sup> Some of these savings would begin to immediately flow to ratepayers through EKPC's fuel adjustment clause ("FAC"). These savings would

---

<sup>25</sup> In addition to cancelling the 400 MW transmission reservation, EKPC will also be able to terminate its membership as a Market Participant in MISO, which will offer additional savings.

<sup>26</sup> A schedule setting forth the details on this estimation is included as Exhibit MM-2 to Mr. McNalley's testimony (Exhibit 3 to Application).

result from being able to reduce the purchased power element of EKPC's FAC through more economic purchases as well as a reduction in fuel costs as fuel used for increased off-system sales reduces EKPC's jurisdictional fuel costs. The cumulative impact of these avoided costs and economic energy purchases is most likely to also directly manifest itself in a variety of other ways including: offset increasing costs in other areas of EKPC's business (particularly environmental costs); increased equity for EKPC's ratepayers with attendant benefits derived from increased financial strength; deferred future rate increases; and possible future rate reductions. Obviously, it would be premature and imprudent to commit to a particular rate treatment of the net benefits anticipated to be derived from the transfer of functional control of the Transmission Facilities, however, as circumstances and business prudence allow, EKPC's ratepayers will realize long-term benefits in the form of one or more of these ratemaking treatments.

### **3. Other Considerations Demonstrate that Transferring Functional Control of the Transmission Facilities is Consistent with the Public Interest**

45. The transfer of functional control of EKPC's Transmission Facilities is also consistent with the public interest because it will not harm any utilities operating adjacent to EKPC and will position EKPC to better navigate through the increasingly complex labyrinth of federal environmental and energy rules and policies. Moreover, the Commission's jurisdiction will not be affected by the transfer of functional control as the Commission will continue to exercise jurisdiction in accordance with Kentucky law.

46. EKPC established the TCRSG in November 2009 in order to comply with North American Electric Reliability Council ("NERC") rules regarding reserve requirements. Although EKPC will not need to remain a member of the TCRSG following its integration into PJM, it plans to remain a member. This will prevent any

possible harm to the other members of the TCRSG while at the same time not imposing any substantial cost to EKPC. PJM has been advised of EKPC's intentions in this respect and is willing to administer EKPC's participation in the TCRSG as necessary. EKPC has been advised by TVA, KU and LG&E that each of them agrees with this arrangement.

47. Additionally, EKPC is working diligently to comply with EPA rules and the Consent Decree to operate its system in the most efficient manner. Joining PJM will allow EKPC more flexibility in satisfying environmental requirements. Moreover, as FERC appears poised to move towards imposing the costs of high voltage transmission expansion projects upon a broader spectrum of utilities under FERC Order 1000, joining PJM will allow EKPC to avoid the uncertainty of future FERC actions through participation in the established RTEP process. Thus, joining PJM on a fully integrated basis will position EKPC to better adjust to changing federal regulatory standards.

48. Finally, the Commission's jurisdiction will not change by granting EKPC permission to transfer functional control of its Transmission Facilities to PJM. The Commission will retain its full jurisdiction and authority over the rates and services of EKPC, including, but not limited to: EKPC's rates to its Members and the pass-through of those rates to retail customers; integrated resource plan proceedings; demand side management programs, and certificate of public convenience and necessity requirements.

49. Although EKPC believes that the foregoing circumstances and considerations amply demonstrate that the proposed transfer is consistent with the public interest, EKPC is also aware that the Commission has approved prior cases involving the transfer of functional control of a jurisdictional utility's Transmission Facilities to an

RTO on a conditional basis. EKPC has examined these prior cases,<sup>27</sup> and stipulates that it will agree to and accept the following conditions:

- a) No customer of EKPC will be allowed to participate in any PJM Demand Response Program until that customer has entered into a special contract with EKPC that has been approved by the Commission,<sup>28</sup>
- b) Approval of the application will not diminish the Commission's jurisdiction or authority with respect to its review and prescription of rates for EKPC based upon the value of its property used to provide electric service; the obligation of EKPC to file integrated resource plans; the obligation of EKPC to provide bundled generation and transmission service to its members; and EKPC's obligation to obtain a certificate of public convenience and necessity prior to commencing construction of any electric generation or transmission facility.

50. EKPC will also seek the approval of FERC and the consent of the Rural Utilities Service to fully integrate into PJM.

## **V. Conclusion**

51. EKPC has commissioned and conducted a comprehensive and detailed analysis regarding the net benefits to be afforded from transferring functional control of

---

<sup>27</sup> Due to EKPC's unique equity capital characteristics, many of the conditions imposed upon other utilities in similar proceedings do not readily apply to EKPC or its Members.

<sup>28</sup> As set forth above and in Mr. Mosier's testimony, EKPC anticipates that it would file amendments to its existing interruptible load contracts and its Direct Load Control tariff within a few weeks of the Commission's issuance of a Final Order granting permission for EKPC to fully integrate into PJM.

its Transmission Facilities to PJM and entering into the Transmission Owners Agreement and Reliability Assurance Agreement. That analysis clearly demonstrates that EKPC and its ratepayers will realize favorable material benefits from the transfer of functional control of the Transmission Facilities and full integration into PJM.

WHEREFORE, on the basis of the foregoing, EKPC respectfully requests that:

1) the Commission determine and find that the transfer of functional control of Transmission Facilities requested herein is for a proper purpose and consistent with the public interest;

2) the Commission enter an Order authorizing the transfer of functional control of EKPC's Transmission Facilities to the PJM Interconnection L.L.C. effective June 1, 2013 or as soon thereafter as integration may be reasonably completed;

3) the Commission enter an Order authorizing the enrollment of EKPC's interruptible load and Direct Load Control resources in PJM's Demand Response Program as set forth herein and giving EKPC thirty days following entry of its Final Order in which to file conforming tariffs or contracts; and

4) the Commission enter its Final Order adjudicating this Application on or before December 31, 2012.

Dated this 3<sup>rd</sup> day of May 2012.

VERIFICATION

The undersigned, pursuant to KRS 278.218, hereby verifies that all of the information contained in the foregoing Application is true and correct to the best of my knowledge, opinion and belief.

East Kentucky Power Cooperative, Inc.

BY: Anthony S. Campbell

ITS: President & CEO

COMMONWEALTH OF KENTUCKY

COUNTY OF CLARK

The foregoing Verification was signed, acknowledged and sworn to before me this 3<sup>rd</sup> of May 2012 by Anthony S. Campbell of East Kentucky Power Cooperative, Inc., a Kentucky corporation, on behalf of the corporation.

Devin M. Willoughby  
NOTARY PUBLIC

MY COMMISSION EXPIRES NOVEMBER 30, 2013  
NOTARY ID #409352

Respectfully Submitted,

Mark David Goss

MARK DAVID GOSS  
DAVID S. SAMFORD  
Frost Brown Todd LLC  
250 West Main Street, Suite 2800  
Lexington, Kentucky 40507  
(859) 231-0000 – telephone  
(859) 231-0011 – fax

*Counsel for East Kentucky Power Cooperative, Inc.*

# Exhibit 1

**COMMONWEALTH OF KENTUCKY**  
**BEFORE THE PUBLIC SERVICE COMMISSION**

**In the Matter of:**

**THE APPLICATION OF EAST KENTUCKY )  
POWER COOPERATIVE, INC. TO )  
TRANSFER FUNCTIONAL CONTROL OF )  
CERTAIN TRANSMISSION FACILITIES )  
TO PJM INTERCONNECTION, L.L.C. )      CASE NO. 2012-\_\_\_\_\_**

**TESTIMONY OF  
ANTHONY S. CAMPBELL  
PRESIDENT AND CHIEF EXECUTIVE OFFICER  
EAST KENTUCKY POWER COOPERATIVE, INC.**

**Filed: May 3, 2012**

1 **Q. Please state your name, business address and occupation.**

2 A. My name is Anthony S. Campbell and my business address is East Kentucky Power  
3 Cooperative, Inc. (“EKPC”), 4775 Lexington Road, Winchester, Kentucky 40391. I  
4 am President and Chief Executive Officer of EKPC.

5 **Q. How long have you been employed by East Kentucky Power Cooperative, Inc.?**

6 A. I have been employed by EKPC since June 2009.

7 **Q. Please state your education and professional experience.**

8 A. I received a Bachelor of Science degree in electrical engineering from the Southern  
9 Illinois University at Carbondale and a Masters of Business Administration from the  
10 University of Illinois at Champaign. Prior to joining EKPC, I served as CEO of  
11 Citizens Electric Corporation, a transmission and distribution company located in  
12 southeast Missouri.

13 **Q. Please provide a brief description of your duties at EKPC.**

14 A. The Board of Directors has given me, as CEO, the responsibility for managing the  
15 Cooperative’s business on a day-to-day basis. I carry out the Board’s strategic goals  
16 within the guidelines and policies developed by the Board.

17 **Q. What is the purpose of your testimony?**

18 A. The purpose of my testimony is to broadly cover the background of EKPC’s  
19 involvement with regional transmission organizations (“RTOs”) to date, the role of  
20 the EKPC’s Board of Directors in deciding to seek full integration into PJM, the  
21 transaction itself and the other approvals or consents that must be obtained. In

1 addition, I will discuss the general benefits that full integration into PJM  
2 Interconnection, LLC (“PJM”) will bring to EKPC and how that integration is for a  
3 proper purpose and consistent with the public interest.

4 **I. BACKGROUND**

5 **Q. Let us begin by talking about EKPC’s involvement in RTOs up till now. Is this**  
6 **the first time that EKPC has considered joining an RTO on a fully integrated**  
7 **basis?**

8 A. No. EKPC first considered transferring functional control of its Transmission  
9 Facilities to an RTO one decade ago. In Commission Case No. 2002-00327, EKPC  
10 proposed to join the Midwest ISO (“MISO”).

11 **Q. What was the result of that case?**

12 A. The nature and functions of RTOs were still evolving and EKPC ultimately concluded  
13 that joining MISO was not likely to be cost effective at that time. Accordingly, the  
14 application was withdrawn.

15 **Q. What happened after that initial application was withdrawn?**

16 A. EKPC became a member of PJM in 2005 for the limited purposes of having access to  
17 purchase and sell power in PJM’s Energy Market and to secure transmission rights as  
18 necessary. EKPC became a registered market participant of MISO in 2005 for similar  
19 reasons. Neither of these actions involved transferring functional control of any of  
20 our transmission assets or formal integration into either RTO’s system. In addition,  
21 EKPC was a member of MISO’s reserve sharing group until it was discontinued on

1 December 31, 2009. Thus, since the withdrawal of our application to join MISO in  
2 2003 and the filing of the Application in this proceeding, we have had peripheral  
3 involvement in PJM and MISO, but we have never sought to become fully integrated  
4 into either RTO.

5 **Q. What has changed?**

6 A. As RTOs continued to develop and mature under the oversight of the Federal Energy  
7 Regulatory Commission (“FERC”), EKPC periodically reassessed whether  
8 membership in an RTO would be cost effective and beneficial for its members. The  
9 advisability of reconsidering whether to join an RTO was also highlighted in the  
10 Focused Management and Operations Audit of EKPC conducted by the Liberty  
11 Consulting Group (“Liberty”). As part of its report, Liberty concluded, “[t]he benefits  
12 of membership [in an RTO] may now exceed the costs; therefore, EKPC should place  
13 a high priority on performing an evaluation as soon as possible.” In addition, Liberty  
14 recommended that, “EKPC should hire an independent consultant to determine the  
15 costs and benefits of ISO membership.”

16 **Q. Did EKPC take action after Liberty issued its report?**

17 A. Yes. EKPC originally engaged ACES Power Marketing (“ACES”) – our energy  
18 marketing agent – to conduct a preliminary survey and analysis of EKPC’s market  
19 interactions and positions.

20 **Q. What did ACES conclude?**

21 A. ACES conducted a directional study that looked at several options before ultimately

1 concluding that joining PJM made the most economic sense for EKPC.

2 **Q. Is ACES affiliated with EKPC in any way?**

3 A. Yes. EKPC is one of the owners of ACES. Liberty expressed some concern in its  
4 report that ACES may not be sufficiently independent. While I did not necessarily  
5 share this concern, in light of the long-term nature of a decision to join an RTO, it did  
6 make sense for EKPC to engage another consultant to provide a more detailed  
7 analysis about the relative benefits of joining an RTO.

8 **Q. How did EKPC select which consultant to engage?**

9 A. EKPC conducted a competitive bidding process and ultimately selected and engaged  
10 Charles River Associates (“CRA”) to conduct an additional assessment of the costs  
11 and benefits of joining an RTO.

12 **Q. Why was CRA selected?**

13 A. We were very impressed with the scope and scale of CRA’s prior involvement in  
14 conducting cost-benefit analysis for various utilities contemplating membership in an  
15 RTO or similar arrangement. The CRA team was very professional and thorough  
16 throughout the course of the study.

17 **Q. Please describe EKPC’s interactions with CRA.**

18 A. CRA completed its initial evaluation of EKPC’s potential membership in a specific  
19 RTO on June 29, 2011. The results indicated that it would be economically beneficial  
20 for EKPC to join PJM, based on net present value over a 5 year period beginning in  
21 2013. Various sensitivity analyses were performed with all scenarios resulting in

1 positive savings. EKPC subsequently requested that CRA develop an additional  
2 sensitivity which would reflect the recent Cross State Air Pollution Rules issued by  
3 the EPA. On September 12, 2011 CRA issued a modified report that also showed a  
4 net positive benefit over the 5 year time period. In order to review all other  
5 reasonable options, EKPC also asked CRA to evaluate EKPC's potential membership  
6 in MISO. This update was issued on November 9, 2011. The results again indicated  
7 that it was more beneficial for EKPC to join PJM.

8 To make absolutely certain that the benefits of fully integrating into PJM were  
9 clear, we then asked CRA to take a longer look than the 5 year period evaluated.  
10 CRA expanded its analysis to cover a 10 year period. This proved to be very  
11 fortuitous timing because, around this same time, natural gas prices declined sharply.  
12 CRA was able to take this into account and we found that the benefits continued long-  
13 term even when considering the declining natural gas prices. CRA completed its  
14 analysis and issued its final report on March 20, 2012.

15 **Q. Ultimately, what did CRA conclude?**

16 A. CRA's Report speaks for itself, but in broad strokes, CRA concluded that there are  
17 numerous qualitative and quantitative benefits to joining PJM. The three key sources  
18 of benefits of EKPC joining PJM derive from more economically efficient  
19 dispatching of our generation units and purchases of power, advantages afforded by  
20 having peak load diversity in comparison to PJM as a whole and the elimination of a  
21 long-standing need of EKPC to secure firm, point-to-point transmission service.

1 Although there are new costs associated with PJM's regional transmission expansion  
2 planning ("RTEP") and various new administrative fees, the estimated net benefit of  
3 fully integrating into PJM is \$142 million in present value dollars over the first ten  
4 years.

5 **Q. Do you have any reservations about the conclusions contained in CRA's report?**

6 A. No. I have read the report several times and I believe it is an accurate depiction of  
7 EKPC's current situation and a reasonable forecast of what we should expect to see  
8 happen when we fully integrate into PJM.

9 **Q. In addition to the analysis carried out by ACES and CRA, did EKPC undertake**  
10 **any other steps to determine whether full integration into PJM would be**  
11 **beneficial to its members?**

12 A. Yes. In addition to ACES's and CRA's evaluations, EKPC's management engaged in  
13 a parallel due diligence process. Mr. Mosier elaborates on the nature of these efforts  
14 in greater detail, but I am personally satisfied that we have spent the time necessary to  
15 make certain that we are entering into this new and long-term relationship with PJM  
16 well-informed of the benefits and obligations that will result.

17 **Q. As President and Chief Executive Officer, are you the person that kept EKPC's**  
18 **Board of Directors informed of the due diligence efforts?**

19 A. Yes. Working with our Board is one of the most important aspects of my position  
20 and I made certain that the Board was kept apprised of the work of management and  
21 our consultants throughout the process.

1 **Q. Can you give us an idea of the scope and extent of the Board's involvement in**  
2 **the deliberative process?**

3 A. Certainly. The Board of Directors has been substantively involved in the  
4 process from the beginning. All told, the topic of RTO membership has been an item  
5 on the Board's agenda at twelve of its meetings between May 2010 and March 2012.  
6 ACES provided an initial presentation to the Board about PJM on May 11, 2010.  
7 That was followed-up by a series of discussions and presentations led by myself and  
8 Mr. Mosier throughout the summer and autumn of last year. As part of that early  
9 information sharing process, senior representatives from PJM met with the Board of  
10 Directors for a question and answer session in connection with its October 2011  
11 meeting. The Board Risk Oversight Committee specifically considered the topic as  
12 part of its November 2011 Committee meeting and, the following month,  
13 representatives from two G&Ts that are current members of RTOs – including one  
14 that is currently a member of PJM – met with the Board to discuss their experiences  
15 and what they perceived to be the pros and cons for them operating inside of an RTO.

16 On December 6, 2011, based upon the results of the above noted reports,  
17 presentations and information gained from other parties, EKPC's Board authorized  
18 Management to begin substantive discussions and negotiations with PJM regarding  
19 the terms of integrating EKPC into its system. In response to that authorization,  
20 myself, Mr. Mosier and Mr. McNalley all made separate presentations or reports to  
21 the Board regarding various aspects of the negotiations and updates on the evaluative

1 effort in January and February of this year. The Board was given a copy of CRA's  
2 report and received a presentation from Mr. Luciani, the leader of the CRA team, at  
3 its March 13, 2012 regular meeting. Mr. Amadou Fall of ACES also appeared before  
4 the Board on that same date. At a special meeting held on March 22, 2012, EKPC's  
5 Board approved a resolution to take the necessary steps – including seeking  
6 appropriate regulatory approvals – to become a fully integrated member of PJM.  
7 Thus, as you can see, the Board has been closely involved in the process of evaluating  
8 full integration into PJM from the outset.

9 **Q. Can you provide a copy of the Board's resolution authorizing EKPC to seek full**  
10 **integration into PJM?**

11 A. Yes. A copy of the resolution is attached to my testimony as Exhibit ASC-1.

12 **Q. How does fully integrating into PJM align with EKPC's strategic plan?**

13 A. Fully integrating into PJM is consistent with EKPC's strategic plan. One of EKPC's  
14 strategic objectives is to use its generation and transmission assets to deliver reliable  
15 and affordable energy. Integrating into PJM supports this initiative as we will be able  
16 to maximize the value of our existing resources, purchase power and dispatch units  
17 more economically and avoid costs associated with firm, point-to-point transmission  
18 service. In addition, as Mr. McNalley explains in his testimony, participating fully in  
19 PJM will help us in our strategic goal of building financial strength and stability.

1 **II. OVERVIEW OF THE TRANSACTION**

2 **Q. Let us now talk more specifically about what EKPC is requesting approval to**  
3 **actually do in this proceeding. Can you give us a general description of what**  
4 **EKPC proposes?**

5 A. Yes. EKPC desires to become fully integrated into PJM for the purpose of being able  
6 to participate in PJM's Energy Market and RPM capacity market. To do this, we  
7 must become signatories to the PJM Transmission Owners Agreement and the PJM  
8 Reliability Assurance Agreement and transfer functional control of our Transmission  
9 Facilities – a term which is defined in the agreements and specified with particularity  
10 in the exhibit to Mr. Mosier's testimony – to PJM in its capacity as system operator.  
11 As a fully integrated member of PJM, we will also participate in RTEP and other  
12 administrative committees and task forces established by PJM. In short, we intend to  
13 work within the PJM construct to achieve the maximum possible benefits for our  
14 Members.

15 **Q. Why is Commission approval necessary in this case?**

16 A. Transferring functional control of our Transmission Facilities is covered by KRS  
17 278.218 which requires the Commission to pre-approve the transfer of control of  
18 assets that have an original book value of \$1 million or more when the assets will  
19 continue to be used to provide the same or similar service to EKPC and its Members.

20 **Q. The statute you have referenced includes a two step analysis. First, the**  
21 **Commission must determine whether the transfer of control is for a proper**

1           **purpose. Second, it must determine whether the transfer is consistent with the**  
2           **public interest. I understand that you are not an attorney, but can you tell us**  
3           **whether you believe this transfer of functional control of Transmission Facilities**  
4           **is for a proper purpose?**

5    A.    Transferring functional control of the Transmission Facilities is clearly for a proper  
6           purpose. The Application points out that a “proper purpose” is anything within the  
7           legitimate objects of a public utility. As a rural electric cooperative corporation  
8           established under KRS Chapter 279, EKPC has a very broad purpose to provide  
9           electric service to its members. Fully integrating into PJM will allow us to provide  
10          the same, or better, service to our customers at more affordable rates. Therefore, the  
11          proposed transfer of functional control of the Transmission Facilities is clearly for a  
12          proper purpose under the statute.

13   **Q.    The second step of the analysis is to determine whether a transfer of control is**  
14          **consistent with the public interest. This has been interpreted to mean that the**  
15          **proposed transfer will not adversely affect the existing level of utility service or**  
16          **rates or that any potentially adverse effects can be avoided through the**  
17          **Commission’s imposition of reasonable conditions. Do you believe that EKPC’s**  
18          **existing utility service or rates will be adversely affected by this transfer of**  
19          **functional control of Transmission Facilities?**

20    A.    The transfer of functional control of our Transmission Facilities will have no adverse  
21          affect on the existing level of EKPC’s utility service or rates. To the contrary,

1 EKPC's service will be enhanced and the rate impact should be positive to our  
2 Members. Mr. Mosier describes the operational aspects of the transfer of functional  
3 control in his testimony and Mr. McNalley describes the rate impact in his testimony.

4 **Q. The Commission has also held that it should be demonstrated that a proposed**  
5 **transfer is likely to benefit the public through improved service quality,**  
6 **enhanced service reliability, the availability of additional services, lower rates or**  
7 **a reduction in utility expenses to provide present services. Such benefits,**  
8 **however, need not be immediate or readily quantifiable. Will this transfer of**  
9 **functional control satisfy any of those requirements?**

10 A. Yes. Becoming fully integrated into PJM will help with our service quality and  
11 reliability as Mr. Mosier explains. The CRA report also details how we will be able  
12 to enjoy significant avoided costs and expenses upon our full integration. Mr.  
13 McNalley, in his testimony, quantifies that the total estimated savings to Members is  
14 between \$1 and \$3 per MWh. Some of these benefits are immediately quantifiable,  
15 while others will be reflected in margins over the long-term. On whole, transferring  
16 functional control of our Transmission Facilities to PJM will enhance network  
17 reliability and lower the total cost of electric service to EKPC's Members. The  
18 transfer of functional control of EKPC's Transmission Facilities is therefore  
19 consistent with the public interest.

20 **Q. Are you aware that the Commission has imposed conditions on its approval of**  
21 **similar applications made by other utilities?**

1 A. Yes. As part of our due diligence, we reviewed each of the Commission cases  
2 involving the transfer of functional control of transmission assets to or from an RTO.

3 **Q. Is EKPC willing to agree to any of the conditions that the Commission has**  
4 **imposed in the past?**

5 A. Yes. EKPC is willing to agree to two conditions. First, the Commission has required  
6 that any demand response programs entered into between PJM and a customer of a  
7 jurisdictional utility must be the subject of a special contract between the utility and  
8 the customer and that this contract be preapproved by the Commission. We  
9 understand the Commission's position on this issue and agree with it. Accordingly,  
10 we would agree to a condition that states something along the lines of: "No customer  
11 of EKPC will be allowed to participate in any PJM demand response program until  
12 that customer has entered into a special contract with EKPC that has been approved  
13 by the Commission." Second, the Commission has required utilities to agree that  
14 granting approval of the transfer of functional control of transmission assets does not  
15 impair or adversely affect the Commission's jurisdiction in any respect. We also  
16 agree with that position and therefore would accept a condition which said something  
17 along the lines of: "Approval of the Application will not diminish the Commission's  
18 jurisdiction or authority with respect to its review and prescription of rates for EKPC  
19 based upon the value of its property used to provide electric service; the obligation of  
20 EKPC to file integrated resource plans; the obligation of EKPC to provide bundled  
21 generation and transmission service to its members; and EKPC's obligation to obtain

1 a certificate of public convenience and necessity prior to commencing construction of  
2 any electric generation or transmission facility.”

3 **Q. Are there any other conditions which the Commission has imposed in the past**  
4 **which EKPC does not believe should not apply in this particular case?**

5 A. Yes. The Commission has imposed other types of conditions upon investor owned  
6 utilities such as cost sharing mechanisms for off-system sales and limitations upon the  
7 ability to participate fully in the RPM capacity market. The first type of condition  
8 does not apply to EKPC as our equity owners are also our ratepayers. The second  
9 type of condition would significantly and materially lessen the value of PJM  
10 integration for EKPC and its Members as Mr. Mosier and Mr. McNalley explain in  
11 their testimonies. We don’t believe that either of these types of conditions should  
12 apply in this proceeding.

13 **III. OTHER REGULATORY APPROVALS**

14 **Q. Are any other regulatory approvals required for EKPC to become fully**  
15 **integrated into PJM?**

16 A. Yes. We must also receive approval from FERC. In addition, though it is not strictly  
17 a regulatory approval, we will seek the consent of the Rural Utilities Service (“RUS”)  
18 as our largest lender.

19 **Q. What filings are required at FERC?**

20 A. EKPC will be required to make two filings with FERC. First, EKPC will make an  
21 initial integration filing which will request FERC approval to reduce the term of the

1 Fixed Resource Requirement (“FRR”) from five years to three years. This reduction  
2 will allow EKPC to move to the RPM sooner, subject to Commission approval.  
3 FERC has granted this type of relief in prior cases involving other utilities integrating  
4 into PJM. The initial integration filing will also be the vehicle for EKPC to have its  
5 transmission lines classified for FERC’s purposes as either serving a transmission or  
6 distribution function. Second, EKPC will file an application to conform PJM’s tariff  
7 to the fact of EKPC’s participation in PJM as a fully integrated member. One of the  
8 more significant aspects of this filing will be the updating of EKPC’s transmission  
9 revenue requirements for purposes of determining EKPC’s allocation of transmission  
10 revenues within PJM. We do not anticipate any difficulties in obtaining FERC  
11 approval. Since both of these filings are non-adversarial in nature, it is likely that  
12 they will not be made until the fourth quarter of 2012.

13 **Q. What does RUS require?**

14 Based upon review of the RUS Loan and Mortgage Agreements, we found no explicit  
15 requirement for EKPC to seek RUS approval prior to joining PJM. However, since  
16 these documents were drafted prior to the contemplation of any RTO membership,  
17 EKPC contacted a representative at RUS who confirmed that EKPC should seek the  
18 consent of RUS prior to joining. This request will be made in the form of a letter and  
19 will contain the economic and operational justification for joining PJM. EKPC does  
20 not anticipate any obstacles in receiving RUS’s consent.

21 **IV. SUMMARY**

1 **Q. Would you like to summarize your testimony?**

2 A. Yes. EKPC has been proactive and diligent in continually assessing the relative costs  
3 and benefits of joining an RTO since the idea first arose a decade ago. With the  
4 assistance of very capable consultants, we have evaluated alternatives and have settled  
5 upon the option that will bring the most value to EKPC and its Members. Our Board  
6 has undertaken an extensive and comprehensive effort to understand and evaluate the  
7 various issues which come into play as part of a decision of this nature and has  
8 strongly endorsed the decision to seek full integration into PJM. This will result in  
9 material benefits for our Members and there will most certainly be no adverse service  
10 or rate impact as a result. We are willing to agree to the conditions the Commission  
11 has imposed in the past which fit our situation and we are working diligently to secure  
12 the requisite approval and consent from FERC and RUS. Accordingly, we would  
13 respectfully request the Commission to approve the Application.

14 **Q. Based upon your testimony here today, is it your personal and professional  
15 opinion that EKPC becoming fully integrated into PJM is for a proper purpose?**

16 A. Yes.

17 **Q. Based upon your testimony here today, is it your personal and professional  
18 opinion that EKPC becoming fully integrated into PJM is also in the public  
19 interest?**

20 A. Yes.

21 **Q. You are sponsoring one exhibit, the Resolution of the Board of Directors**

1           **identified as ASC-1, and incorporating it by reference into your testimony. Can**  
2           **you state whether this exhibit was either prepared directly by you or by someone**  
3           **working under your supervision and direction?**

4    A.    Yes. The resolution was prepared by someone working directly under my supervision  
5           and direction. I also helped lead the Board meeting in which it was adopted.

6    **Q.    Does this conclude your testimony?**

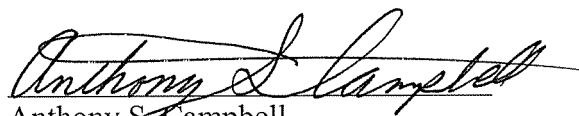
7    A.    Yes.

**VERIFICATION**

COMMONWEALTH OF KENTUCKY

COUNTY OF CLARK

The undersigned, Anthony S. Campbell, after being duly sworn, deposes and says that he is the President and Chief Executive Officer of East Kentucky Power Cooperative, Inc., and that the matters set forth in the foregoing testimony are true and correct to the best of his knowledge, information and belief.

  
Anthony S. Campbell

Subscribed and sworn to before me by Anthony S. Campbell on this 3<sup>rd</sup> day of May, 2012.

  
NOTARY PUBLIC

My Commission expires: MY COMMISSION EXPIRES NOVEMBER 30, 2013  
NOTARY ID #409352

# **Exhibit ASC-1**

## **Board of Directors Resolution**

**FROM THE MINUTE BOOK OF PROCEEDINGS  
OF THE BOARD OF DIRECTORS OF  
EAST KENTUCKY POWER COOPERATIVE, INC.**

At a special meeting of the Board of Directors of East Kentucky Power Cooperative, Inc. held via teleconference at the Headquarters Building, 4775 Lexington Road, located in Winchester, Kentucky, on Thursday, March 22, 2012 at 1:00 p.m., EDT, the following business was transacted:

Approval for EKPC to Pursue Membership in the PJM RTO

After review of the applicable information, a motion to approve for EKPC to pursue membership in the PJM RTO was made by Wayne Stratton, seconded by Tom Estes, and passed by the full Board to approve the following:

**Whereas**, the Board of Directors ("Board") of East Kentucky Power Cooperative, Inc. ("EKPC"), by and through its Strategic Issues Committee, has performed a complete and thorough analysis of the risks and benefits related to membership in a regional transmission organization ("RTO") generally and more specifically related to membership in either the Midwest Independent System Operator (MISO") or the PJM Interconnection, LLC ("PJM");

**Whereas**, the Strategic Issues Committee recommended and the Board at its December meeting authorized EKPC's management to commence negotiations with PJM for membership in PJM;

**Whereas**, EKPC management has conducted those negotiations with PJM with the parties developing a final set of terms and conditions that reasonably address EKPC's interests and issues; and

**Whereas**, EKPC and its agents and consultants have conducted further analyses and due diligence the results of which, consistent with earlier analyses, indicate that it is in the best interests of EKPC and its members that EKPC become a member transmission owner in PJM; NOW, THEREFORE, BE IT

**Resolved**, that the Board of Directors hereby approves (1) the delegation of authority to EKPC management to develop terms and conditions of EKPC membership in PJM with integration beginning on or after June 1, 2013, and the execution of any and all contracts, agreements or other documents necessary to accomplish such membership and integration; (2) the authorization of EKPC management to expend reasonable sums of money to

train EKPC staff and to put in place processes, programs and controls meant to ensure a successful integration into PJM; and (3) the authorization of EKPC management to seek regulatory approvals of membership from the Kentucky Public Service Commission, FERC, and any other required regulatory bodies.

The foregoing is a true and exact copy of a resolution passed at a meeting called pursuant to proper notice at which a quorum was present and which now appears in the Minute Book of Proceedings of the Board of Directors of the Cooperative, and said resolution has not been rescinded or modified.

Witness my hand and seal this 22nd day of March 2012.



---

A. L. Rosenberger, Secretary

Corporate Seal

# Exhibit 2

**COMMONWEALTH OF KENTUCKY**  
**BEFORE THE PUBLIC SERVICE COMMISSION**

**In the Matter of:**

**THE APPLICATION OF EAST KENTUCKY )  
POWER COOPERATIVE, INC. TO )  
TRANSFER FUNCTIONAL CONTROL OF )  
CERTAIN TRANSMISSION FACILITIES )  
TO PJM INTERCONNECTION, L.L.C. )      CASE NO. 2012-\_\_\_\_\_**

**DIRECT TESTIMONY OF**  
**DON MOSIER**  
**EXECUTIVE VICE PRESIDENT/CHIEF OPERATING OFFICER**  
**EAST KENTUCKY POWER COOPERATIVE, INC.**

**Filed: May 3, 2012**

1 **I. INTRODUCTION**

2 **Q. Please state your name, business address and occupation.**

3 A. My name is Don Mosier and my business address is East Kentucky Power  
4 Cooperative, Inc. (“EKPC”), 4775 Lexington Road, Winchester, Kentucky 40391. I  
5 am Executive Vice President and Chief Operating Officer at EKPC.

6 **Q. How long have you been employed by EKPC?**

7 A. I have been employed by EKPC since October 2010.

8 **Q. Please state your education and professional experience.**

9 A. I obtained my Bachelor of Science degree in civil engineering from the University of  
10 Virginia and my Master of Business Administration degree from the Kenan-Flagler  
11 Business School at the University of North Carolina. My professional experience  
12 includes work at Carolina Power & Light (now Progress Energy) in Raleigh, North  
13 Carolina, developing merchant generation projects and marketing activities,  
14 regulatory affairs, and nuclear power plant engineering and operations. I also was an  
15 engineering manager of U.S. Operations for Canatom Corp., a Toronto-based  
16 engineering firm that provides nuclear plant engineering and construction services.  
17 Immediately prior to joining EKPC, I was Vice President of St. Louis-based Ameren  
18 Energy Marketing (“AEM”), a subsidiary of Ameren Corp. At AEM, I managed  
19 wholesale power trading, plant dispatch, NERC and SERC compliance, transmission  
20 and congestion management activities, and customer account management for  
21 Ameren Corporation’s unregulated merchant generation fleet located in the Midwest

1 ISO and PJM RTO.

2 **Q. Please provide a brief description of your duties at EKPC.**

3 A. I manage the day-to-day operations of power production and construction, power  
4 delivery, power supply, and system operations. I report directly to Mr. Campbell.

5 **Q. What is the purpose of your testimony?**

6 A. The purpose of my testimony is to discuss the internal deliberative process that EKPC  
7 underwent leading to its decision to seek full integration into PJM as well as to  
8 provide an overview of the operational aspects and benefits of joining PJM, and the  
9 proposed timing of fully integrating into PJM.

10 **II. EKPC'S DECISION TO FULLY INTEGRATE INTO PJM**

11 **A. CHALLENGES FACING EKPC**

12 **Q. Let us begin with the process that EKPC went through leading up to its decision**  
13 **to seek full integration into PJM. First off, please describe the EKPC system as**  
14 **it currently exists.**

15 A. EKPC has approximately \$3.1 billion in assets and currently serves approximately  
16 521,000 customers in 87 Kentucky counties through its 16 member distribution  
17 cooperatives. EKPC owns and/or purchases nearly 3,100 megawatts ("MW") of  
18 electric generation capacity and approximately 2,800 miles of electric transmission  
19 lines.

20 **Q. Is EKPC currently a fully integrated member of any regional transmission**  
21 **organization ("RTO")?**

1 A. No.

2 **Q. What are some of the challenges that face EKPC as a result of not being a fully**  
3 **integrated member of an RTO?**

4 A. There are three growing challenges that EKPC faces as a result of not being fully  
5 integrated into an RTO. The first is its continued ability to efficiently operate as its own  
6 dispatch control area and balancing authority. The second, which is closely related, is the  
7 increasing cost of securing firm transmission access to regional energy markets. The  
8 third challenge arises from the amount of reserves that EKPC must maintain in order to  
9 safely and reliably operate its system and the economic inefficiency that results.

10 **Q. Explain why operating as a stand-alone dispatch control area and balancing**  
11 **authority is becoming increasingly challenging for EKPC.**

12 A. EKPC currently operates as its own dispatch control area and balancing authority, so  
13 it must match generation to its load in a reliable and economic manner. Generally  
14 speaking, a larger dispatch control area and balancing authority can more easily  
15 maintain stability as individual variations in load become less significant in relation to  
16 the total system load. EKPC is somewhat of an island, however, as it is surrounded  
17 by PJM to the north and east, Kentucky Utilities Company (“KU”) and Louisville Gas  
18 & Electric Company (“LG&E”) to the west, and the Tennessee Valley Authority  
19 (“TVA”) to the south. That means we have to rely only upon our own resources or  
20 those which are readily available and on a firm transmission path from our neighbors  
21 to match generation to load which is not always the most economic choice.

1 Transmission constraints often prevent us from being able to work with our  
2 neighbors. Operating on a stand-alone basis forces EKPC to forego some economic  
3 opportunity with respect to efficiently dispatching capacity to meet load and reduces  
4 our ability to sell available reserve capacity, especially as a winter-peaking utility.

5 **Q. You mentioned that the second challenge facing EKPC – increasing costs of**  
6 **securing firm transmission access – is closely related to its operation as its own**  
7 **dispatch control area and balancing authority. Please explain that connection.**

8 A. EKPC cannot sell excess energy or make economic energy purchases without having  
9 a reliable transmission path from the market to the EKPC system, and sales of  
10 EKPC’s excess energy are frequently constrained because of limited transmission  
11 availability. To assure that such a path is available, EKPC purchased 400 MW of  
12 long-term, firm point-to-point transmission service to facilitate importing power to  
13 meet EKPC’s reserve and economic purchase needs. The purchase was originally  
14 made from the Midwest ISO (“MISO”) through EKPC’s interconnection with Duke  
15 Energy Kentucky, Inc. (“Duke”) in late 2010. When Duke integrated into PJM  
16 effective January 1, 2012, EKPC lost its transmission interconnection with MISO and  
17 this long-term transmission has now transferred to PJM. Maintaining this  
18 transmission path costs EKPC approximately \$7 million annually.

19 **Q. The third challenge you mentioned was meeting EKPC’s current reserve**  
20 **requirement. How is this a challenge to EKPC?**

21 A. EKPC currently has an internal target to maintain a 12% capacity reserve margin – which

1 equals approximately 360 MW – on its winter peak load. In addition to this capacity  
2 reserve margin, which is used for planning purposes, EKPC must carry operating  
3 reserves during all periods of time. EKPC relies heavily on the TEE Contingency  
4 Reserve Sharing Group (“TCRSG”) along with TVA, KU and LG&E to meet the North  
5 American Electric Reliability Council (“NERC”) imposed contingency reserve standards.

6 In this current reserve sharing arrangement, EKPC must hold back 94 MW of reserves it  
7 could otherwise sell on the market.

8 **Q. Would you characterize these three challenges as being material to the efficient and**  
9 **economic operation of the EKPC system?**

10 A. Yes. Both islanding and reserve sharing limit fleet-wide plant optimization, making  
11 dispatch less optimal. The ever increasing transmission constraints between EKPC and  
12 potential counterparties and more stringent regulatory requirements we foresee in the  
13 future continue to place additional economic pressure on EKPC’s ability to operate  
14 independently. Moreover, our long-term transmission options are limited. Transmission  
15 paths sourcing in TVA and KU/LG&E are limited because of a lack of available long-  
16 term firm transmission with those utilities. Also, the TCRSG reserve sharing agreement  
17 could be cancelled at any time with six month’s notice from any of the parties to the  
18 agreement. If that happened, we would find ourselves in a position similar to that which  
19 faced Big Rivers Electric Corporation when MISO limited access to its reserve sharing  
20 agreement to MISO members. Viewed independently, each of these challenges is

1 significant. When you view them together, business prudence dictates that EKPC should  
2 proactively consider options to mitigate these material risks.

3 **Q. Earlier you were asked if EKPC was a fully integrated member of any RTO, but**  
4 **now let me ask you if EKPC is currently a member of an RTO in any capacity?**

5 A. EKPC became a member of PJM in 2005 for the limited purpose of being able to  
6 purchase and sell energy and to reserve transmission service. At that time, EKPC  
7 became a signatory to the PJM Operating Agreement, a Service Agreement for Firm  
8 Point-to-Point Transmission Service, a Service Agreement for Non-Firm Point-to-  
9 Point Transmission Service, a Service Agreement for Network Integration  
10 Transmission Service and other forms and disclosures. EKPC joined PJM in its  
11 capacity as an Other Supplier under the PJM Operating Agreement and as an Electric  
12 Utility under the terms of PJM's Open Access Transmission Tariff. However, EKPC  
13 is not currently a signatory to either the PJM Transmission Owners Agreement or the  
14 PJM Reliability Assurance Agreement. EKPC may only become fully integrated into  
15 PJM upon the execution of the Transmission Owners Agreement and the Reliability  
16 Assurance Agreement, the transfer of functional control of certain of its transmission  
17 assets to PJM and its participation in the markets facilitated by PJM. Upon becoming  
18 signatories to these additional agreements, EKPC will also have the option to change  
19 its membership status to that of a Transmission Owner or Generation Owner.

20 Since 2005, EKPC has also been a Market Participant within MISO. Due to  
21 the loss of a direct interconnection with MISO following the transition of Duke from

1 MISO to PJM in 2012, EKPC will be terminating its membership in MISO as it fully  
2 integrates into PJM. EKPC was also a part of the MISO reserve sharing group until  
3 its discontinuation on December 31, 2009.

4 **Q. So is it correct to say that when some of the documents and reports considered**  
5 **by EKPC talk about “joining” PJM, they are more precisely referring to**  
6 **becoming fully integrated into PJM?**

7 A. Yes.

8 **B. SCOPE OF OPTIONS CONSIDERED BY EKPC**

9 **Q. Did EKPC consider any other options as alternatives to becoming fully**  
10 **integrated into PJM?**

11 A. Yes. EKPC gave consideration to maintaining the status quo, however, as I  
12 mentioned earlier, there are significant challenges associated with continuing to  
13 operate as an island. EKPC also gave consideration to fully integrating into MISO,  
14 however, when Duke announced it would transition from MISO to PJM, we  
15 recognized that we would be losing our only direct interconnection to MISO.  
16 Analyses conducted by our consultants confirmed that joining MISO was a less  
17 attractive option than joining PJM under the circumstances. We have also made TVA  
18 and KU/LG&E aware of our discussions with PJM, but discussions with those entities  
19 have not resulted in any specific alternatives being proposed. I would again add that a  
20 lack of available long-term firm transmission from either TVA or KU/LG&E limits  
21 the viability of these alternatives.

1 **Q. So it became evident that becoming fully integrated into PJM was the best option**  
2 **against which to compare likely scenarios involving the status quo?**

3 A. Yes.

4 **C. THE DELIBERATIVE PROCESS UTILIZED BY EKPC**  
5 **IN CONSIDERING INTEGRATION INTO PJM**

6 **Q. Can you describe the actual process that EKPC employed to determine whether**  
7 **becoming fully integrated into PJM was preferable to maintaining the status**  
8 **quo?**

9 A. Yes. Mr. Campbell will speak to the involvement of our Board of Directors in the  
10 deliberative process, but I can describe the efforts of management. Our internal  
11 deliberations consisted of two primary efforts. First, we engaged external consultants  
12 to conduct independent analysis of the prospect of becoming fully integrated into  
13 PJM. Second, we conducted our own internal analysis and held direct discussions  
14 with PJM personnel to discuss various issues.

15 **Q. Who were your external consultants?**

16 A. A preliminary, directional analysis of various energy and capacity market scenarios  
17 was conducted by our agent for energy marketing – ACES Power Marketing  
18 (“ACES”). We also engaged the highly-respected firm Charles River Associates  
19 (“CRA”) to conduct a second review. CRA’s analysis was totally independent of  
20 ACES’s analysis.

21 **Q. Did EKPC’s management assist with CRA’s analysis?**

A. Throughout the evaluation process, EKPC’s management provided whatever

1 information was requested and necessary for CRA to formulate its analytical model as  
2 well and to assess various scenarios involving variations of the base case used for the  
3 analysis.

4 **Q. What did CRA conclude?**

5 A. The CRA Report, which is attached as an exhibit to Mr. Luciani's pre-filed testimony,  
6 concluded that there are numerous qualitative and quantitative benefits to joining  
7 PJM. The three key sources of benefits of EKPC joining PJM are: 1) more efficient  
8 commitment and dispatch of EKPC's generating resources leading to lower adjusted  
9 production costs for EKPC, as a result of: a) eliminating transmission charges; and b)  
10 participating in a fully integrated regional energy market; 2) advantageous peak load  
11 diversity relative to PJM as a whole, which results in significantly less planning  
12 reserves; and 3) avoided long-term, firm point-to-point transmission charges that are  
13 currently being incurred to ensure that EKPC has the ability to import and export  
14 power throughout the year. In sum, CRA determined the net expected economic  
15 benefit of joining PJM, based on a 10-year present value, to be \$142 million. This  
16 benefit would serve to reduce the total power cost to EKPC's 16 member distribution  
17 cooperatives as well as help mitigate rising costs from current and proposed  
18 regulations for the United States Environmental Protection Agency ("EPA").

19 **Q. Is CRA's conclusion consistent with the earlier analysis conducted by ACES?**

20 A. Yes. While there are some differences in the analytical models, the overall results are  
21 similar. As I mentioned, CRA concluded that the EKPC will realize a \$142 million

1 net benefit over the first ten years of integration on a present value basis. ACES  
2 calculated that EKPC would realize an annual benefit of \$12.96 million for each of  
3 the first five years of integration.

4 **Q. What are some of the differences in the analytical models you mentioned a**  
5 **moment ago?**

6 A. The two biggest analytical differences are the study periods and the modeling tools  
7 used by CRA and ACES. ACES performed a five year analysis covering 2012 to  
8 2016. CRA performed a ten year analysis covering 2013 to 2022. Another significant  
9 difference was that ACES relied upon the PROMOD tool for Security Constrained  
10 Economic Dispatch (“PROMOD”) while CRA used the General Electric Multi-Area  
11 Production Simulation Model (“GE MAPS”). Both are useful tools, but in this  
12 context, the GE MAPS tool has an enhanced degree of sophistication that gives us a  
13 higher level of confidence in its accuracy. Mr. Luciani describes the GE MAPS tool  
14 in more detail in his testimony.

15 **Q. What other things did EKPC do to evaluate the merits of becoming fully**  
16 **integrated into PJM?**

17 A. We commissioned our counsel to conduct a legal review of the various agreements  
18 that we will be required to execute as part of the integration. Without waiving any  
19 applicable privileges, I can say we are comfortable with our current understanding of  
20 the rights and obligations that we will enjoy and accept under both the Transmission  
21 Owners Agreement and the Reliability Assurance Agreement.

1 **Q. Did you undertake any additional efforts to evaluate the merits of becoming**  
2 **fully integrated into PJM?**

3 A. Yes. We have met directly with PJM managers and other personnel and have held  
4 several conference calls with them to further resolve any questions we might have  
5 had. In late February, we tendered a number of written questions to PJM, which they  
6 answered in March. All of this is in addition to the many, many internal meetings we  
7 have held to discuss our options and to evaluate the consultants' findings.

8 **Q. How have the evaluative and deliberative efforts you have described above been**  
9 **communicated to EKPC's Board of Directors?**

10 A. As Mr. Campbell's testimony explains, EKPC's Board of Directors was kept timely  
11 advised of developments as we went through the various analytical exercises I have  
12 described.

13 **Q. Is it your opinion that EKPC has engaged in a thoughtful, comprehensive and**  
14 **deliberative process in evaluating whether to seek full integration into PJM and**  
15 **that the analysis produced by that process is objective, independent and**  
16 **credible?**

17 A. Yes.

18 **III. OPERATIONAL ASPECTS & BENEFITS OF FULL INTEGRATION INTO PJM**

19 **A. PJM'S OPERATIONS**

20 **Q. EKPC is seeking to enter into a long-term commercial relationship with PJM.**  
21 **Please describe PJM as an entity and its major lines of business.**

1 A. PJM is a federally regulated RTO, headquartered in Valley Forge, Pennsylvania, that  
2 coordinates the movement of wholesale electricity in all or parts of 13 states and the  
3 District of Columbia. PJM acts independently and impartially in managing the  
4 regional transmission system and the wholesale electricity market, ensuring the  
5 reliability of the largest centrally dispatched electric grid in North America. PJM  
6 operates as a not-for-profit company and has more than 750 members, including  
7 power generators, transmission owners, electricity distributors, power marketers and  
8 large consumers. PJM has three principal lines of business. It operates the power grid  
9 as an independent system operator. It facilitates markets for energy, capacity and  
10 ancillary services. It also coordinates regional transmission planning.

11 **Q. Please describe PJM's operation as an independent system operator.**

12 A. PJM monitors the high-voltage electric transmission grid 24 hours a day, every day of  
13 the year. PJM keeps the electricity supply and demand in balance by telling power  
14 producers how much energy should be generated and by adjusting import and export  
15 transactions. PJM reports that it currently dispatches approximately 185,600 MW of  
16 generating capacity and demand response resources over 62,591 miles of transmission  
17 lines by relying upon telemetric data from approximately 74,000 points on the electric  
18 grid. More than 60.1 million people live in the PJM region.

19 **Q. Please describe the various markets that PJM facilitates to the extent that they  
20 are relevant to EKPC's application.**

21 A. PJM coordinates the continuous buying, selling and delivery of wholesale electricity

1 through its Interchange Energy Market (“Energy Market”). PJM’s Energy Market  
2 establishes a market price for electricity by matching supply with demand using  
3 online interfaces for members with continuous real-time data. The Energy Market is a  
4 two-settlement (Day-Ahead and Real-Time) market using hourly locational marginal  
5 prices (“LMPs”) and financial transmission rights (“FTRs”). Under the PJM  
6 Operating Agreement, PJM will schedule in advance and dispatch generation on the  
7 basis of least-cost, security-constrained dispatch and the prices and operating  
8 characteristics offered by sellers within and into the PJM Region, continuing until  
9 sufficient generation is dispatched to serve the energy purchase requirements of such  
10 region and buyers out of such region, as well as the requirements of the PJM Region  
11 for ancillary services provided by such generation. Scheduling and dispatch is  
12 conducted in accordance with applicable schedules to the PJM Tariff and Operating  
13 Agreement. Market participants, such as EKPC, are able to follow energy market  
14 fluctuations as they occur and quickly respond to price signals bringing supply  
15 resources to the region when demand is high.

16 PJM also sponsors a capacity market which creates a long-term price signal  
17 for the cost of capacity needed to reliably serve load within the PJM system. The  
18 capacity market basically uses a three year planning horizon – with opportunities for  
19 adjustments in the interim – to establish pricing for capacity. This, in turn, attracts the  
20 investment that is necessary to make sure that adequate capacity exists when needed.  
21 Unlike the Energy Market which operates on a daily basis, the capacity market

1 generally functions on a quarterly schedule.

2           Though they are less relevant to EKPC’s decision to become fully integrated,  
3 PJM also administers various ancillary services, demand-response initiatives,  
4 financial transmission rights and reserve markets. Overall, PJM advertises that it has  
5 administered more than \$103 billion in energy and energy-service trades since its  
6 markets first opened in 1997.

7 **Q. Please describe PJM’s role in coordinating regional transmission expansion**  
8 **planning.**

9 A. PJM manages a sophisticated regional transmission expansion planning process  
10 (“RTEP”) for transmission expansion to ensure the continued reliability of the electric  
11 system. PJM is responsible for maintaining the integrity of the regional power grid  
12 and for managing changes and additions to the grid to accommodate new generating  
13 plants, substations and transmission lines. PJM analyzes and forecasts the future  
14 electricity needs of the region so that its planning process ensures that the growth of  
15 the electric system takes place efficiently, in an orderly fashion, and that reliability is  
16 maintained.

17 **Q. Do any other utilities in Kentucky participate in PJM?**

18 A. Yes. Duke and Kentucky Power Company are both fully integrated members of PJM.  
19 In addition, Big Rivers Electric Corporation, KU and LG&E are also members of  
20 PJM according to the schedule of members attached to the PJM Operating  
21 Agreement. Finally, AEP Kentucky Transmission Company, Inc., which has filed an

1 application for a certificate of public convenience and necessity to operate as a public  
2 utility in Kentucky, is also identified as a current member of PJM.

3 **B. OPERATIONAL DEVELOPMENTS UPON FULL INTEGRATION**

4 **Q. One of the most significant aspects of becoming fully integrated into PJM is the**  
5 **transfer of functional control of EKPC’s transmission assets to PJM. Can you**  
6 **identify what transmission assets will have their functional control transferred**  
7 **to PJM?**

8 A. Yes. The PJM Operating Agreement and Transmission Owners Agreement refer to  
9 PJM assuming operational control over “Transmission Facilities,” which is a defined  
10 term in both Agreements. Exhibit DM-1 to my testimony provides a detailed  
11 schedule of Transmission Facilities for which functional control will be transferred to  
12 PJM. Whenever I use the term “Transmission Facilities,” I am referring to these  
13 assets.

14 **Q. Why is a transfer of functional control of EKPC’s Transmission Facilities**  
15 **necessary to become a fully integrated member of PJM?**

16 A. The transmission grid can be operated most reliably and efficiently when there is a  
17 centralized dispatch of generation resources and transmission capacity. To  
18 accomplish this for Generation Owners and Transmission Owners within the PJM  
19 system, the Transmission Owners Agreement and Operating Agreement grant PJM  
20 the right and authorization to use the transmission capacity of EKPC’s Transmission  
21 Facilities that is required to provide service under the PJM Tariff and to resell

1 transmission service using such capacity. PJM will compensate EKPC for the use of  
2 its transmission capacity by distributing certain revenues to EKPC as set forth in the  
3 PJM Tariff and the Transmission Owners Agreement.

4 **Q. By transferring functional control of the Transmission Facilities to PJM, does**  
5 **EKPC lose any ownership interest in those assets?**

6 A. No. The transfer of functional control is purely for operational purposes. The  
7 Transmission Facilities remain the property of EKPC and EKPC retains responsibility  
8 for their maintenance and upkeep.

9 **Q. How will EKPC's operational and planning processes change as a result of**  
10 **becoming fully integrated into PJM?**

11 A. EKPC's operational and planning processes will change in two fundamental respects.  
12 First, many of our routine, day-to-day operations, which are currently integrated, will  
13 take on more distinct and separate existences within the overall PJM framework.  
14 Second, our planning efforts will be supplemented by the inclusion of a broader  
15 regional perspective in those processes. This means that we will have the same  
16 responsibilities for meeting our existing load safely, reliably and affordably, but we  
17 will be doing so, in part, in the context of regional operational and planning  
18 processes.

19 **Q. Please elaborate on the aspects in which EKPC's day-to-day operations will**  
20 **change.**

21 A. Broadly speaking, EKPC's day-to-day activities will change as production operations,

1 transmission operations, and load management functions will be more segregated  
2 from one another. Production operations will “bid” generation into the Day Ahead  
3 and Real Time components of the PJM Energy Market. The Transmission Facilities  
4 will be under the control and direction of the PJM system operator, and EKPC will  
5 become its own zone or sub-zone in the PJM system. This means that we will  
6 separate the functions of dispatch and transmission operations, which will be directed  
7 by PJM, from the functions of load management, which we will continue to manage,  
8 but within a broader overall context.

9 **Q. With respect to production operations, please describe the Day Ahead and Real**  
10 **Time Markets.**

11 A. The Day-Ahead Market (“DA”) is a forward market in which hourly LMPs are  
12 calculated for the next operating day based upon the total generation offers, demand  
13 bids and scheduled bilateral transactions that are provided to PJM each day. The  
14 Real-Time Market (“RT”) is a balancing spot market in which current LMPs are  
15 calculated at five-minute intervals based on actual grid operating conditions and the  
16 inevitable deviations between what was expected to occur DA and what actually  
17 occurs in RT. Weather as well as unexpected generation and transmission outages or  
18 contingencies can influence the market in RT. PJM settles transactions hourly,  
19 including any deviations which may have occurred, and issues invoices to market  
20 participants monthly.

21 **Q. Will EKPC participate in the Day Ahead and Real Time markets?**

1 A. Yes. Each day, EKPC will bid its estimated Member loads into the Day Ahead  
2 market. It will also bid its available generation resources into the Day Ahead market,  
3 including any interruptible loads and our Direct Load Control resources that EKPC  
4 may bid as Demand Response resources. The sum of all demand for load within the  
5 PJM system is then compared to the sum of all capacity resources bid into the Day  
6 Ahead market. Based upon a number of factors, but principally supply and demand,  
7 PJM then determines the LMP for each delivery point within PJM and uses that LMP  
8 to determine which generation resources should be dispatched on the following day –  
9 the operational day – to arrive at the most efficient and economic result. EKPC’s  
10 generators will receive instructions from PJM on when and to what extent to generate  
11 electricity on the operational day. To the extent that the load forecasts may prove to  
12 be incorrect or a contingency occurs somewhere within the system, the Real Time  
13 market provides a backup for buying and selling power as needed on the operational  
14 day. Thus, by giving PJM the ability to dispatch our generation resources, we gain  
15 the ability to share in the overall economic benefit of participating in a much larger  
16 energy market. This should mean that our production costs will decrease and our  
17 purchase of economic power will increase – both of which are beneficial to our  
18 Members. EKPC will maintain the responsibility for maintenance and upkeep of our  
19 capacity resources.

20 **Q. With respect to transmission, how will EKPC’s operations change?**

21 A. The change is very similar to the change I described for generation resources. PJM

1 will assume responsibility for managing our electric transmission grid. In exchange  
2 we will have the ability to share in the benefits of making our grid part of a much  
3 larger grid. As we transfer functional control of the Transmission Facilities to PJM,  
4 we will also need to coordinate maintenance and any outages with PJM. EKPC will  
5 retain the responsibility for maintenance and upkeep of the Transmission Facilities.

6 **Q. The last day-to-day operational change you mentioned was load management.  
7 How will EKPC's activities change in this respect once it joins PJM?**

8 A. We will continue to monitor our system as we have done before. However, as part of  
9 a larger interconnection, we will also work with PJM's regional transmission  
10 managers to proactively identify imbalances quickly and to prevent any adverse  
11 impacts to EKPC or our neighbors' systems. As a fully integrated member of PJM,  
12 imbalances on the EKPC system are managed far more efficiently and more cost  
13 effectively than on a stand-alone basis by virtue of the market's overall size and  
14 diversity of resources.

15 **Q. Will integrating into PJM impact EKPC's current interconnection agreements in  
16 any way?**

17 A. No. The substance of these agreements will not change; however, PJM will become a  
18 signatory to the agreements.

19 **Q. Let us go back to the other type of procedural changes you mentioned, which  
20 were changes in EKPC's existing planning processes. Please elaborate on the  
21 aspects in which EKPC's planning processes will change.**

1 A. The biggest changes will be in the areas of capacity planning and transmission  
2 expansion planning. PJM has mature processes in place for both of these important  
3 aspects of utility management. By participating in PJM's capacity market, EKPC will  
4 add a new level of scrutiny to its existing generation resource planning efforts.  
5 Likewise, PJM's RTEP process assures that reliability and congestion issues are  
6 addressed prospectively by assuring that transmission planning happens on a suitable  
7 scale and timely, recurring basis.

8 **Q. Describe how the PJM capacity market is structured.**

9 A. PJM's capacity market is structured around its Reliability Pricing Model ("RPM").  
10 Under the RPM regime, Generation Owners typically make capacity commitments  
11 three years in advance to ensure price certainty. This, in turn, creates a long-term  
12 price signal that helps to attract the investment that is needed to assure reliability  
13 throughout the entire PJM region. One important innovation in the RPM structure is  
14 the inclusion of demand response and transmission assets as resources along with  
15 traditional forms of generation capacity. In that respect, the RPM compliments and  
16 supplements the RTEP process. Under RPM, EKPC may bid its entire generation  
17 capacity into the market, but it will also have the option to self-supply its load and  
18 employ any bilateral contracts that it may choose to enter into for the procurement of  
19 power. Any remaining capacity requirements are secured through recurring capacity  
20 auctions.

1           In practice, it works like this: the delivery year for PJM starts on June 1<sup>st</sup> and  
2 ends on May 31<sup>st</sup> of the following calendar year. For each such delivery year, PJM  
3 holds a Base Residual Auction (“BRA”) three years prior to the delivery year in  
4 question, which would be in the month of May. In May 2013, the BRA will be held  
5 for delivery year 2016/2017. PJM then holds the first of three incremental auctions  
6 for that same delivery year 16 months later in September – or 20 months before the  
7 delivery year in question begins. PJM holds the second incremental auction 10  
8 months after that, which would be the month of July and just 10 months before the  
9 delivery year begins. The third and final incremental auction for the delivery year  
10 takes place in February – four months before the start of the delivery year in June.  
11 Thus, PJM’s capacity auctions are spaced out through the calendar year, but each  
12 auction of the year is focused upon a different delivery year.

13 **Q. You mentioned that EKPC may either bid all of its generation capacity into the**  
14 **PJM capacity market or it may self-supply its load requirements. What is the**  
15 **distinction between these two options?**

16 A. The RPM is structured so that all of the generating resources within the PJM system  
17 are bid into a common capacity market. This allows for the greatest market efficiency  
18 and dispatching of resources and provides clear pricing signals to incentivize new  
19 generation to be built. However, the RPM also contemplates that some utilities may  
20 prefer, or be required, to hold back sufficient generation resources to be able to supply  
21 all or a significant portion of their native load. The later scenario involves what is

1 called a Fixed Resource Requirement (“FRR”) plan. To ease the integration process  
2 of a new Generation Owner such as EKPC into PJM, we must initially participate in  
3 the PJM capacity market on an FRR basis until we are able to participate in a full  
4 capacity auction cycle. Generally speaking, the RPM without the FRR is the most  
5 efficient option because it carries with it a lower reserve requirement and the greatest  
6 benefit to EKPC’s Members.

7 **Q. How will EKPC participate in the PJM capacity market?**

8 A. EKPC will be required to submit a FRR plan for the 2013/14, 2014/15 and 2015/16  
9 delivery years since the Base Residual Auctions for those delivery years will have  
10 already taken place prior to EKPC’s integration. However, EKPC could, and intends  
11 to, participate in the RPM auction beginning in the 2016/17 delivery year, which  
12 means it would participate in the Base Residual Auction held in May 2013. During  
13 the initial FRR period, EKPC could only sell any additional capacity unneeded to  
14 meet its FRR reserve requirements in the incremental RPM auctions for each delivery  
15 year scheduled to take place over time or bilaterally to other PJM members in need of  
16 capacity. However, EKPC would be required to hold back an additional 3% of its  
17 reserve requirements during the period in which it operates on an FRR basis. This 3%  
18 holdback requirement makes an FRR plan less economic for EKPC as it would reduce  
19 EKPC’s savings somewhere between \$3 million and \$9 million per year. Mr.  
20 McNalley explains in his testimony that this equates to an approximate 20% reduction  
21 in the per MWh savings our Members would otherwise expect. Participation under

1 the traditional RPM approach will yield greater savings to EKPC due to the reduced  
2 reserve requirement and is a material consideration in our decision to seek full  
3 integration into PJM.

4 **Q. You also mentioned that EKPC may use demand resources and transmission**  
5 **construction in the capacity market process. Will it likely do so?**

6 A. EKPC is aware that the Commission has imposed conditions in the past with regard to  
7 whether customers within a utility system may participate in an RTO sponsored  
8 demand response program. As Mr. Campbell states in his testimony, EKPC is willing  
9 to accept a similar condition in this case, however, I would note that we are asking in  
10 our Application that each of our existing interruptible loads and our Direct Load  
11 Control program be included in PJM's Demand Response program as of the first day  
12 that we fully integrate into PJM. We have not made any decisions about using  
13 transmission capacity or other demand response programs, but would routinely  
14 evaluate those resources in the context of our own service needs and in the context of  
15 PJM's capacity auctions.

16 **Q. On page 30 of its Report, CRA assumes that Cooper Unit 1 and the four Dale**  
17 **Units are retired in 2015. Is it EKPC's plan to retire these units?**

18 A. No. At this time, EKPC has not made a decision to retire these units. As indicated in  
19 EKPC's 2012 Integrated Resource Plan ("IRP"), EKPC is soliciting Requests for  
20 Proposals to determine if retrofitting existing generating units, purchasing power, or  
21 constructing new facilities is the most cost-effective alternative to meet EPA rules.

1 The assumption for the CRA study was that the existing five coal fired generating  
2 units (4 units at Dale and Cooper Unit 1) would be replaced with a resource whose  
3 cost and operating characteristics are similar to a combined cycle facility.

4 **Q. Please describe how RTEP works?**

5 A. PJM's RTEP process is designed to identify transmission system upgrades and  
6 enhancements that are necessary to provide for the operational, economic and  
7 reliability requirements of the PJM system. Thus, RTEP incorporates transmission,  
8 generation and load response projects to meet all load-serving obligations. PJM  
9 applies planning and reliability criteria over a fifteen-year horizon to identify  
10 transmission constraints and other reliability concerns. Transmission upgrades to  
11 mitigate identified reliability criteria violations are then examined for their feasibility,  
12 impact and costs, culminating in one plan for the entire PJM footprint.

13 **Q. What role will EKPC have in RTEP planning?**

14 A. EKPC will have a limited role in RTEP planning for backbone projects. It will have a  
15 larger role in the planning of local projects of which it would be the sponsor or a  
16 beneficiary thereof.

17 **Q. Will EKPC's involvement in the PJM Capacity Market or RTEP have any  
18 impact upon the Commission or its jurisdiction over EKPC, particularly with  
19 regard to integrated resource planning?**

20 A. There will be no impact. Joining PJM will not affect the Commission's jurisdiction  
21 and we will continue to be subject to all of the same state requirements under which

1 we currently operate. EKPC will continue to engage in system planning in  
2 accordance with the integrated resource planning process. Mr. Campbell speaks to  
3 the issue of the Commission's jurisdiction in his testimony and one of the conditions  
4 to which EKPC is willing to agree is that it be expressly understood that this transfer  
5 of functional control of EKPC's Transmission Facilities will not alter or affect the  
6 Commission's jurisdiction.

7 **Q. Apart from the operational and planning changes you have already described,**  
8 **are there any other significant operational or planning aspects of becoming fully**  
9 **integrated into PJM that should be mentioned?**

10 A. Yes. Although it is not a change from the status quo, EKPC plans to remain a member of  
11 the TCRSG. This will help assure that our integration into PJM does not have an adverse  
12 impact upon any of our current reserve sharing partners. EKPC became a member of the  
13 TCRSG in November 2009 in order to comply with NERC rules regarding reserve  
14 requirements. Although EKPC will not need to remain a member of the TCRSG  
15 following its integration into PJM, it plans to remain a member so as to avoid any  
16 disruptions to TVA, KU or LG&E. PJM has been advised of EKPC's intentions in this  
17 respect and is willing to administer EKPC's participation in the TCRSG as necessary.  
18 EKPC has been advised by TVA, KU and LG&E that each of them agrees with this  
19 arrangement.

20 **Q. Will remaining a member of the TCRSG inhibit EKPC from realizing any of the**  
21 **anticipated benefits of full integration into PJM?**

1 A. No. There is an annual administrative fee, approximately \$120,000, that we will  
2 continue to pay as a member of the TCRSG. Because of the greater number of  
3 resources available as a fully integrated member of PJM, EKPC anticipates that the  
4 costs of remaining a member of the TCRSG will likely be less to meet its obligation  
5 than if it maintained the status quo.

6 **Q. Will any of your Owner-Members notice the operational changes you have**  
7 **described above?**

8 A. No. For our Members it should be a transparent development of our operations  
9 wherein they will notice no discernible change in the services we currently provide.

10 **Q. Will any of your Owner-Members' Members notice the operational changes you**  
11 **have described above?**

12 A. With the possible exception of interruptible loads, the single largest of which is  
13 Gallatin Steel ("Gallatin"), the transfer of functional control of EKPC's Transmission  
14 Facilities to PJM and resulting operational changes should again be transparent to our  
15 ultimate end users. We do not foresee any adverse impacts upon our continued ability  
16 to provide safe, reliable and affordable service throughout the EKPC system. If  
17 anything, the service we provide will be more reliable and more affordable.

18 **Q. You alluded to the fact that there might be an impact to Gallatin and other**  
19 **interruptible loads. Can you elaborate upon that?**

20 A. EKPC's analysis indicates that to fully realize the capacity value within PJM, EKPC's  
21 interruptible loads need to be enrolled in PJM's Demand Response Program.

1 Operating these programs outside of the PJM program diminishes the capacity value  
2 of these programs by approximately 30 percent. Under the current agreement  
3 between EKPC, Owen Electric Cooperative Corporation and Gallatin, EKPC has the  
4 ability to interrupt Gallatin's load. EKPC has six other interruptible loads which will  
5 also qualify for the Demand Response Program.

6 **Q. Which of the current Gallatin contract provisions will need to be modified as a**  
7 **result of placing Gallatin's load in PJM's Limited Demand Response Program?**

8 A. There are two portions of the Gallatin contract that will require modification. First,  
9 Provision 7 of the Gallatin contract will need to be modified to state that PJM and/or  
10 EKPC can call for a physical interruption to allow the Gallatin load to act as a  
11 capacity resource during emergency conditions in PJM. Second, as a result of joining  
12 PJM, Provision 13 of the Gallatin contract relating to regulation is no longer  
13 applicable and will need to be deleted as PJM will be providing regulation to Gallatin.

14 **Q. Will modifications will be required to the contracts of the other six interruptible**  
15 **loads?**

16 A. We anticipate that there may be some modifications that are necessary and such  
17 modifications will be filed with the Commission.

18 **Q. What approvals are needed to allow Gallatin and the other interruptible loads to**  
19 **participate in the PJM Limited Demand Response Program?**

20 A. Since each of these interruptible loads involves special contracts, we are in the  
21 process of securing the consent of the interruptible customers to make any necessary

1 contractual modification. Moreover, it is EKPC's understanding, based on the review  
2 of the Commission's Order in Case No. 2010-00203, that Commission approval is  
3 required to participate in the PJM Demand Response Program. In addition, EKPC  
4 and Gallatin are preparing a contract amendment, which is contingent upon both the  
5 Commission's approval of EKPC fully integrating into PJM and Gallatin's  
6 participation in PJM's Limited Demand Response Program. This contract  
7 amendment will be filed with the Commission.

8 **Q. Does the PJM Limited Demand Response Program encompass any of EKPC's**  
9 **other Demand Side Management programs?**

10 A. Yes. EKPC's Direct Load Control program is eligible for inclusion in this PJM  
11 program. Sections DSM-3a and DSM-3b of EKPC's tariffs contain the details of this  
12 program. A tariff change would be required, subject to the Commission's approval,  
13 to reflect the inclusion of the Direct Load Control program into PJM's Demand  
14 Response Program.

15 **Q. Are EKPC's energy efficiency programs eligible for inclusion in any PJM**  
16 **demand response program?**

17 A. Yes. Certain energy efficiency programs are eligible to qualify as capacity resources  
18 in PJM so long as they are measurable and verifiable. As indicated in EKPC's most  
19 recently filed Integrated Resource Plan (Case No. 2012-00149), EKPC will  
20 benchmark with other utilities and do research in preparation of obtaining an  
21 evaluation, measurement, and verification (EM&V) process. Since this EM&V

1 process is not currently in place, EKPC does not seek Commission approval of  
2 placing energy efficiency programs in PJM's demand response programs at this time.

3 **Q. So EKPC is asking the Commission to permit it to enroll its interruptible load  
4 and Direct Load Control load as participants in PJM's Limited Demand  
5 Response Program in order to optimize the ability of EKPC to monetize its  
6 capacity within PJM?**

7 A. Yes. The ability to monetize this capacity will flow back to all EKPC's ratepayers  
8 and contribute to the overall net benefit of fully integrating into PJM.

9 **C. BENEFITS OF FULLY INTEGRATING INTO PJM**

10 **Q. The changes you have described are not insignificant. In light of these changes,  
11 why are you confident that fully integrating into PJM is a good decision?**

12 A. As CRA states at the very beginning of its report, "...EKPC joining PJM will yield  
13 significant economic benefits to EKPC. The net benefits to EKPC are relatively robust."  
14 While there will be some changes to how EKPC operates once becoming fully integrated  
15 into PJM, the benefits of this integration are clear. The cost-benefit analysis sufficiently  
16 demonstrates that this is a good decision.

17 **Q. The CRA Report describes several benefits and costs that are likely to arise as a  
18 result of integration into PJM. Please briefly summarize the nature and extent  
19 of these benefits.**

20 A. CRA did a good job of identifying the categories of costs and benefits that EKPC will  
21 likely realize upon becoming a fully integrated member of PJM. On the "benefits"

1 side of the ledger, EKPC will be able to: 1) more efficiently participate in the PJM  
2 Energy Market and avoid significant production costs as a result; 2) monetize excess  
3 capacity and energy to a greater extent than it is currently able to do given existing  
4 transmission constraints and reserve requirements; and 3) avoid costs for firm point-  
5 to-point transmission service which it currently incurs to meet SERC planning reserve  
6 guidelines. On the “costs” side of the ledger, EKPC will have a modest increase in  
7 administrative expenses and governmental assessments and it will also assume an  
8 obligation to pay for certain future high-voltage transmission expansion projects  
9 within the PJM region. On a present value basis, the expected net benefit to EKPC  
10 over the first ten years of integration is \$142.0 million. Moreover, CRA evaluated the  
11 relative benefits that are likely to result under various sensitivities. In other words,  
12 CRA looked at what would happen if various variables in their assumptions were  
13 changed. In each scenario that CRA examined, there were net positive benefits for  
14 EKPC when it became fully integrated into PJM. This means that while certain  
15 factors could reduce the overall net benefit over time, other factors could increase the  
16 overall net benefit. The sensitivities analysis performed by CRA gives us a high  
17 degree of confidence that the \$142.0 million estimate is reasonable and appropriate.

18 **Q. Please describe the nature and extent of the trade benefits that EKPC expects to**  
19 **realize following the integration.**

20 A. Trade benefits are realized when EKPC is able to optimize its own production costs by  
21 purchasing power at a more affordable cost. CRA concluded that EKPC would be able

1 to generate less power (thereby decreasing production costs) while at the same time  
2 increasing its economic off-system purchases. This co-optimization yields a more  
3 economic dispatch of generating resources and approximately \$52.7 million in net  
4 savings over the ten year period following integration.

5 **Q. Please describe the nature and extent of the capacity benefits that EKPC expects**  
6 **to realize following the integration.**

7 A. Capacity benefits are the single largest category of benefits that accrue in the context  
8 of EKPC's full integration into PJM. Due to the fact that EKPC is a winter peaking  
9 system and PJM as a whole is summer peaking, EKPC has the unique opportunity to  
10 monetize this diversity through the reduction of its own peak reserve requirements to  
11 match those of PJM. Thus, instead of maintaining our current 12% planning reserve  
12 requirement in both the winter and summer seasons, EKPC would only be required to  
13 maintain a 2.8% installed planning reserve for EKPC's summer peak as a fully  
14 participating member of PJM's RPM. The net savings for EKPC to participate fully  
15 in PJM through the RPM equates to \$147.8 million over the ten year term of the  
16 study. If, however, EKPC was only permitted to join PJM on an FRR basis, it would  
17 be required to increase its reserve requirement by an additional 3%. As I mentioned  
18 earlier and as Mr. McNalley quantifies in his testimony, this would have a materially  
19 adverse effect upon the overall benefits to be derived from becoming fully integrated  
20 into PJM.

21 **Q. Please describe the nature and extent of the benefits arising from the**

1           **cancellation of the existing firm point-to-point transmission service agreement.**

2    A.    Becoming a signatory to the Transmission Owners Agreement and the Reliability  
3           Assurance Agreement will allow EKPC to immediately cancel the firm transmission  
4           reservation currently in effect with PJM for 400 MW of point-to-point transmission  
5           rights that is set to expire on December 31, 2016 and resulting in a savings of more  
6           than \$7 million per year. If we assume that a similar agreement had to be made once  
7           the current agreement expires, then those costs will also be avoided by becoming a  
8           Transmission Owner in the PJM system. Fully integrating into PJM also limits the  
9           risks associated with being unable to secure adequate and affordable firm  
10          transmission service after the current transmission reservation expires. Thus, over the  
11          first ten years of integration, EKPC's members will save approximately \$56.1 million  
12          in known and certain transmission costs for which they are currently obligated  
13          without suffering any detrimental impact to service reliability and access to the PJM  
14          market.

15   **Q.    You said earlier that there will also be new costs associated with integrating into**  
16   **PJM. Please describe the nature and extent of the administrative costs**  
17   **associated with full integration into PJM.**

18    A.    As a Transmission Owner and Generation Owner in PJM, EKPC will assume  
19          responsibility for additional administrative expenses. These costs generally arise in  
20          three contexts: 1) administrative costs imposed directly by PJM; 2) assessments  
21          charged by FERC; and 3) those which EKPC must assume internally as part of the

1 integration and ongoing supervision of activities within PJM. CRA has concluded,  
2 and we believe it is reasonable, that EKPC will have approximately \$48.3 million in  
3 new administrative costs over the first ten years following integration. This figure is  
4 arrived at by adding the following components: \$35 million for PJM fees; \$7.7  
5 million in new FERC assessments; and \$5.6 million for EKPC to internally complete  
6 the integration and the ongoing administration of the larger relationship with PJM.

7 **Q. How will the \$5.6 million in costs internal to EKPC be allocated?**

8 A. Approximately \$1 million will be allocated to cover the initial costs of the integration.  
9 This chiefly includes purchasing the equipment that will be necessary to provide the  
10 communications infrastructure and other hardware needed to incorporate EKPC's  
11 system parameters into PJM's models and to interface with PJM on a fully integrated  
12 basis. The remainder of the costs will generally be allocated to cover new personnel,  
13 legal and energy marketing expenses associated with operating as part of PJM.  
14 Internally, EKPC anticipates adding four full-time equivalents: one in market  
15 management, one in accounting, one in congestion management, and one in risk  
16 management.

17 **Q. To what extent will EKPC's relationship with ACES change when it becomes**  
18 **fully integrated into PJM?**

19 A. The internal cost estimate specifically includes the additional costs associated with  
20 continuing to use ACES to assist and facilitate EKPC's interactions with PJM in the  
21 energy and capacity markets and planning functions. We will be interacting with PJM

1 more substantively and more frequently. Therefore, we will be relying upon and  
2 using ACES more frequently as well.

3 **Q. Please describe the nature and extent of the transmission costs associated with**  
4 **becoming fully integrated into PJM.**

5 A. CRA estimates that EKPC will incur costs of approximately \$66.4 million over the  
6 first ten years of integration as part of PJM’s RTEP program, which allocates the total  
7 cost of “backbone” transmission line projects for lines rated at 500 kV and above.  
8 EKPC will have the opportunity, however, to have the costs of any of its own  
9 transmission projects allocated to other utilities to the extent that such utilities would  
10 benefit from the addition of the new transmission infrastructure. To the extent that  
11 any additional Transmission Owners may join PJM, they would share in the RTEP  
12 expense and thereby reduce EKPC’s allocation. Members that leave PJM continue to  
13 be obligated for their allocation incurred while members.

14 **Q. Are there any additional benefits to becoming fully integrated with PJM that are**  
15 **not detailed in the CRA Report?**

16 A. Yes. There are at least four other key benefits that come with joining PJM that are  
17 not included in the CRA Report. These benefits arise from: 1) an enhanced ability to  
18 provide reliable service; 2) positioning EKPC to have greater flexibility for  
19 responding to future federal regulatory requirements; 3) fundamental safeguards in the  
20 PJM marketplace that will help protect EKPC’s members from needless market  
21 volatility; and 4) savings derived from discontinuing our status as a Market

1 Participant in MISO.

2 **Q. Why were these four benefits not included in the CRA Report?**

3 A. CRA performed a cost-benefit analysis. EKPC already has a very good track record  
4 of providing reliable service, so it is difficult to quantify the incremental benefits  
5 offered through participation in PJM as a result. Likewise, the federal regulatory  
6 landscape is very uncertain at this point. CRA's report focused upon known and  
7 reasonably measurable criteria and factors. EKPC will certainly be better positioned  
8 to respond to future federal requirements as a fully integrated member of PJM, but  
9 until actual rules are promulgated and finalized by the EPA or FERC, it is not  
10 possible to know exactly how much better EKPC will be positioned. The same is true  
11 of the structural protections that are in place to safeguard the integrity and stability of  
12 PJM's markets. The value is hard to quantify, but most certainly these additional  
13 aspects of full integration protect and benefit EKPC's Members and, by extension,  
14 those Members' ratepayers. As for the savings from discontinuing our membership in  
15 MISO, the decision was not made until after the benefits of joining PJM were clear –  
16 which was after CRA's report was completed.

17 **Q. How will network reliability be improved once EKPC becomes fully integrated**  
18 **into PJM?**

19 A. As I said earlier, EKPC's reliability is already very high. However, EKPC is  
20 currently constrained to manage reliability issues only with the resources at its  
21 disposal within the EKPC system. While this is workable for most reliability

1 concerns, the increasing interconnectivity of the grid increases the likelihood that  
2 reliability issues in another area may spill over into EKPC's system unless adequate  
3 safeguards are in place. By joining PJM as a Transmission Owner, EKPC will be part  
4 of a very large grid and the ability to work around reliability issues in any particular  
5 location will be enhanced. Our Members will not necessarily notice these incremental  
6 improvements to reliability because, in the ordinary course of business, reliability is  
7 already high. However, on the very rare day when things do not go as planned,  
8 having the ability to route a greater amount of capacity and power through a larger  
9 grid allows for greater overall system stability and reliability. Thus, transferring  
10 functional control of EKPC's Transmission Facilities and participating in PJM under  
11 the Transmission Owners Agreement and Reliability Assurance Agreement will have  
12 a positive impact upon ratepayers within the EKPC system. With unconstrained  
13 access to PJM, EKPC's network reliability will not be harmed and will most certainly  
14 be improved.

15 **Q. Can you provide a specific example of how full participation in PJM will better**  
16 **position EKPC to respond to developments in federal regulations?**

17 A. Certainly. With Rule 1000, FERC is demonstrating a move towards establishing a  
18 national cost allocation methodology for transmission expansion projects. However,  
19 it remains unclear exactly when and in what form this new direction will take shape.  
20 Becoming integrated into PJM now gets EKPC into an established cost allocation  
21 methodology that has already received FERC's blessing. Therefore, we have a very

1 high degree of confidence that EKPC will certainly be in no worse position based  
2 upon what FERC may do in the future. Participation in PJM as a Transmission  
3 Owner allows us to exchange the uncertainty of future federal cost allocation  
4 protocols for the better predictability of RTEP. Another example I would offer is in  
5 the environmental realm. EPA's new and proposed rules are causing many utilities to  
6 re-evaluate their generation portfolios. In isolation, a utility must make a significant,  
7 forty-year investment today based upon an incomplete future federal regulatory policy  
8 picture. By becoming a Generation Owner in PJM, we have the ability to hedge some  
9 of the risks associated with those types of investment decisions by having access to a  
10 very large capacity market. Full membership in PJM will allow us to respond to new  
11 environmental requirements with two very significant new tools – the freedom to  
12 purchase economic power in the short-term and the ability to participate in PJM's  
13 capacity market over the long-term. Additionally, EKPC can access other existing  
14 generation resources through joint partnership opportunities that reduce the risk of  
15 permitting, constructing and operating such resources on a stand-alone basis.

16 **Q. Please explain how EKPC's members will benefit from the structural safeguards**  
17 **inherent within the PJM markets that you mentioned earlier.**

18 A. The structure of PJM's Energy Market and RPM assure that EKPC's members will  
19 not be exposed to volatility to any extent greater than what they currently face.  
20 Moreover, PJM's operations are constantly monitored by an independent firm  
21 engaged to assure transparency and integrity in the Energy Market and PJM has

1 imposed specific credit requirements upon its members to significantly reduce the  
2 possibility of defaults. While the benefits of these market structures are difficult to  
3 precisely quantify, they are nevertheless real and tangible safeguards which will  
4 ultimately benefit EKPC's Members.

5 **Q. Please describe the savings that will be derived from EKPC's ability to**  
6 **discontinue its status as a Market Participant in MISO.**

7 A. EKPC became a Market Participant within MISO in 2005 so that we would have the  
8 ability to buy and sell power through that market. Following the transition of Duke  
9 from MISO to PJM, we lost our only direct interconnection to MISO and our ability  
10 to transact in that market was made more complicated and costly to wheel power out  
11 of MISO. Once we become fully integrated into PJM, we will no longer have a need  
12 to access the MISO market and we will be able to discontinue our status as a Market  
13 Participant. This will save EKPC approximately \$125,000 per year in membership  
14 fees alone. When internal costs are included, the savings would, of course, be even  
15 greater.

16 **Q. The CRA Reports lists several qualitative considerations and risk factors that go**  
17 **along with becoming fully integrated into PJM. Have you adequately taken these**  
18 **into account?**

19 A. Among the most significant of the considerations and risk factors described in the  
20 CRA Report is the difficulty associated with: 1) predicting EKPC's future costs  
21 arising from PJM's RTEP; 2) the effects of future variations in fuel costs and load

1 growth; and 3) exit obligations. EKPC takes each of these issues seriously and has  
2 reviewed CRA's findings closely. We agree that they are legitimate risk factors, but  
3 nothing we have seen thus far causes us to believe the risks are unacceptable. To the  
4 contrary, even when these risks are taken into account under various sensitivities, full  
5 integration into PJM is still attractive.

6 **Q. Can you summarize the relative benefits and costs of EKPC becoming fully-**  
7 **integrated into PJM?**

8 A. Yes. Joining PJM is a long-term commitment and there are uncertainties regarding  
9 what amount the costs of ever disassociating with PJM may be. There is also some  
10 uncertainty with regard to what portion of future RTEP costs would be allocated to  
11 EKPC and whether future variations in fuel and load forecasts will fall within  
12 expectations. These types of risks are common to all long-term business partnerships,  
13 however, and we are convinced that these risks are well within acceptable limits.  
14 What is certain is that EKPC stands to significantly gain from capitalizing on its  
15 seasonal diversity with PJM, enjoy the benefits of favorable trading opportunities and  
16 avoiding costs that it is currently incurring both for production of power and for  
17 securing firm transmission paths. EKPC has the opportunity to lock in these real  
18 savings and also to experience other benefits which, though more difficult to ascribe a  
19 dollar value to, are nonetheless real and meaningful. The economics of joining PJM  
20 are good for EKPC, its Owner-Members and its Owner-Members' Members.

1                                    **IV.    TIMING OF FULL-INTEGRATION INTO PJM**

2    **Q.    What is the ideal timeframe for EKPC being able to fully integrate into PJM?**

3    A.    So that we can begin to realize and maximize the benefits of membership in PJM  
4            under the Transmission Owners Agreement and the Reliability Assurance Agreement,  
5            EKPC desires to be able to participate in the Base Residual Auction for the 2016/17  
6            delivery year, which will be held in May 2013. That would also allow us to become  
7            fully integrated into PJM on an operational level by June 1, 2013.

8    **Q.    Is there anything else that is important about integrating into PJM by June 1,**  
9            **2013?**

10   A.    Yes. The sooner we integrate into PJM, the sooner we will be able to start enjoying  
11            the trade benefits that are available to EKPC and, beginning in the 2013 summer  
12            peaking season, EKPC would be able to start monetizing the value of its seasonal  
13            diversity with PJM as a whole. Finally, once we are fully integrated into PJM, the  
14            need for the existing 400 MW firm point-to-point transmission service agreement  
15            goes away and we will be able to cancel that agreement effective immediately. Thus,  
16            EKPC will be able to enjoy several types of benefits right away if we are able to  
17            integrate into PJM by June 1, 2013.

18   **Q.    In light of these considerations, when does EKPC request the Commission to**  
19            **issue an order in this case?**

20   A.    In order for EKPC to participate in the May 2013 Base Residual Auction for the  
21            2016/17 delivery year and to complete the integration by June 1, 2013, PJM has told

1 us that we would need to have approval from the Commission on or before December  
2 31, 2012. Based upon that assurance, EKPC therefore respectfully requests that the  
3 Commission enter an Order approving EKPC's entry into PJM at least by December  
4 31, 2012.

## 5 V. SUMMARY

6 **Q. Would you like to summarize your testimony?**

7 A. Yes. EKPC has undertaken a very deliberative process for evaluating whether the  
8 time is right for membership in an RTO. We have evaluated several alternatives,  
9 including maintaining the status quo. Clearly, PJM is the best fit for EKPC. The net  
10 benefits of joining PJM are well documented and the risks are acceptable. The  
11 operational changes we will be making are no different than what Duke and Kentucky  
12 Power have already done and the Commission's continued jurisdiction over EKPC  
13 will not be adversely affected in any way. Joining PJM is for a proper purpose and  
14 consistent with the public interest for all the reasons I have stated in my testimony.  
15 Accordingly, we would respectfully request the Commission to approve the  
16 Application.

17 **Q. Based upon your testimony here today, is it your personal and professional**  
18 **opinion that EKPC becoming fully integrated into PJM is for a proper purpose?**

19 A. Yes.

20 **Q. Based upon your testimony here today, is it your personal and professional**  
21 **opinion that EKPC becoming fully integrated into PJM is also in the public**

1           **interest?**

2    A.    Yes.

3    **Q.    You are sponsoring one exhibit, the schedule of Transmission Facilities**  
4           **identified as DM-1, and incorporating it by reference into your testimony. Can**  
5           **you state whether this exhibit was either prepared directly by you or by someone**  
6           **working under your supervision and direction?**

7    A.    Yes. This schedule was prepared by someone working directly under my supervision  
8           and direction.

9    **Q.    Does this conclude your testimony?**

10   A.    Yes.

**VERIFICATION**

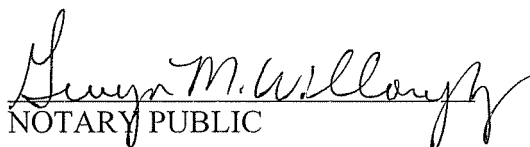
COMMONWEALTH OF KENTUCKY

COUNTY OF CLARK

The undersigned, Don Mosier, after being duly sworn, deposes and says that he is the Executive Vice President and Chief Operating Officer of East Kentucky Power Cooperative, Inc., and that the matters set forth in the foregoing testimony are true and correct to the best of his knowledge, information and belief.

  
\_\_\_\_\_  
Don Mosier

Subscribed and sworn to before me by Don Mosier on this 3<sup>rd</sup> day of May, 2012.

  
\_\_\_\_\_  
NOTARY PUBLIC

MY COMMISSION EXPIRES NOVEMBER 30, 2013  
My Commission expires: \_\_\_\_\_ NOTARY ID #409352

**Exhibit DM-1**  
**Schedule of**  
**Transmission Facilities**

Transmission Lines Transferred to PJM's Functional Control

DESIGNATION			
From (a)	To (b)	Operating (c)	Designed (d)
SPURLOCK	AVON	345	345
GALLATIN CO	KU GHENT	345	345
SMITH	NORTH CLARK	345	345
SPURLOCK DBL CIIRCUIT TAP	ZIMMER (DUKE)/STUART (DPL)	345	345
SMITH	WEST GARRARD	345	345
BEATTYVILLE	POWELL	161	161
COOPER	DENNY	161	161
COOPER	ELIHU	161	161
COOPER	MARION CO	161	161
COOPER	TYNER	161	161
COOPER	WOLFE CREEK	161	161
GREEN CO	SUMMERSHADE	161	161
LAUREL RIVER DAM DBL CIRCUIT TAP		161	161
MARION CO	GREEN CO	161	161
LAUREL CO TAP		161	161
RUSSELL CO TAP		161	161
SUMMERSHADE	BARREN COUNTY	161	161
TYNER	BEATTYVILLE	161	161
MCCREARY TAP		161	161
BULLITT CO DC TAP		161	161
BULLITT CO	SHELBY CO	161	161
PULASKI CO TAP		161	161
CASEY CO TAP		161	161
SUMMERSHADE	SUMMERSHADE TAP	138	138
SUMMERSHADE	TVA SUMMERSHADE	138	138
TYNER	FALL ROCK	161	161
ARGENTUM LOOP		138	138
AVON	FAYETTE	138	138
AVON	RENAKER	138	138
BOONE	DUKE ENERGY LONGBRANCH	138	138
CENTRAL HARDIN DBL CIRCUIT TAP		138	138
CRANSTON	ROWAN	138	138
FAWKES	FAWKES KU TIE	138	138
FAWKES	FAWKES TAP	138	138
FAWKES	WEST BEREA	138	138
FLEMINGSBURG	GODDARD	138	138
DALE	AVON	138	138
DALE	FAWKES	138	138
GHENT	BOONE	138	138
GODDARD	CRANSTON	138	138
MARION COUNTY	KU LEBANON	138	138
OWEN CO TAP		138	138
PLUMVILLE	GODDARD	138	138
RENAKER	BOONE	138	161
RODBURN	SKAGGS	138	138
SMITH	FAWKES	138	138
SMITH	LAKE REBA	138	138
SPURLOCK	BOONE	138	138
SPURLOCK	RENAKER	138	138
SPURLOCK	KENTON #1	138	138
SPURLOCK	PLUMVILLE	138	138
DALE	POWELL	138	138
SPURLOCK	FLEMINGSURG	138	138

**Transmission Substations Transferred to PJM's Functional Control**

STATION	VOLTAGE (kV)
COOPER	161
DALE STATION	138
SPURLOCK	345
SPURLOCK	138
ARGENTUM	138
AVON	345 & 138
BAKER LANE	138
BARREN CO	161
BONNIEVILLE	138
BOONE COUNTY	138
BULLITT CO	161
CASEY CO	161
CENTRAL HARDIN	138
DENNY	161
FAYETTE	138
FALL ROCK	161
FAWKES	138
GALLATIN COUNTY	138
GODDARD	138
GREEN COUNTY	161
HEBRON	138
JK SMITH	345
JK SMITH	138
LAUREL CO	161
LAUREL DAM	161
LIBERTY JCT	161
MARION CO	161
MCCREARY CO	161
NELSON CO	138
NORTH CLARK	345
OWEN CO	138
PLUMVILLE	138
POWELL CO	161
POWELL CO	138
PULASKI CO	161
RENAKER	138
ROWAN CO	138
RUSSELL CO	161
SHELBY CO	161
SKAGGS	138
STANLEY PARKER	138
SUMMERSHADE	161
TYNER	161
WAYNE CO	161
WEBSTER ROAD	138
WEST BEREA	138
WEST GARRARD	345