

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF EAST KENTUCKY POWER)	
COOPERATIVE, INC. TO TRANSFER)	CASE NO.
FUNCTIONAL CONTROL OF CERTAIN)	2012-00169
TRANSMISSION FACILITIES TO PJM)	
INTERCONNECTION, LLC)	

ORDER

On May 3, 2012, East Kentucky Power Cooperative, Inc. ("EKPC") filed an application seeking approval, pursuant to KRS 278.218, to transfer functional control of certain transmission facilities to the PJM Interconnection, L.L.C. ("PJM") effective June 1, 2013. EPKC is organized under KRS Chapter 279 as an electric generating and transmission cooperative and is a utility subject to the jurisdiction of the Commission.¹ Intervention in this case was requested by, and granted to: the Attorney General's Office, Rate Intervention Division ("AG"); PJM; Gallatin Steel Company ("Gallatin Steel"); and Kentucky Utilities Company and Louisville Gas and Electric Company ("KU/LG&E").

By Order dated June 7, 2012, the Commission established a procedural schedule for this case which included two rounds of discovery on EKPC, the opportunity for intervenors to file testimony, one round of discovery on intervenors, and a public hearing. Informal conferences were held at the Commission's offices on October 12,

¹ KRS 279.210(1).

19, and 26, 2012. A public hearing was held at the Commission's offices on November 7, 2012, and EKPC has requested the Commission to issue a decision in this case by December 31, 2012, to provide adequate time for EKPC to complete the preliminary steps needed to accomplish the transfer of control by June 1, 2013.

Standard of Review

EKPC's application is subject to the Commission's jurisdiction under KRS 278.218, which governs a change in ownership or control of assets of an electric utility where those assets have an original book value of \$1,000,000 or more. That statute provides, in part, that "[t]he commission shall grant its approval if the transaction is for a proper purpose and is consistent with the public interest."² While the statute does not define "public interest," the Commission has, in the context of a transfer of a utility, interpreted the "public interest" as follows:

[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.³

² KRS 278.218(2).

³ Case No. 2002-00018, *Application for Approval of the Transfer of Control of Kentucky-American Water Company to RWE Aktiengesellschaft and Thames Water Aqua Holdings GmbH*, at 7 (Ky. PSC May 30, 2002).

This standard establishes a two-step process: First, there must be a showing of no adverse effect on service or rates; and second, there must be a demonstration that there will be some benefits.⁴

While the application in this case involves the transfer of functional control of utility assets, rather than a transfer of ownership of a utility, the same criteria apply in determining whether the proposed transfer satisfies the “public interest” standard.

EKPC’s Application

EKPC has almost 3,100 MW of generation and 2,800 miles of transmission lines. It provides generating and transmission service at wholesale to, and is owned by, its 16 member electric distribution cooperatives who, in turn, provide retail electric service to approximately 521,000 customers in 87 Kentucky counties. PJM is a regional transmission organization (“RTO”) that coordinates the movement of wholesale electricity in all or parts of 13 states and the District of Columbia. PJM also operates an energy market and a capacity market. The energy market sets a market price for electricity by matching supply and demand for both a day-ahead and a real-time market. The capacity market uses a three-year planning horizon to create a long-term price signal for the cost of capacity needed to reliably serve load within the PJM system.

EKPC has been a member of PJM since 2005 for purposes of participating in its energy market and to reserve transmission service within the PJM region. This has allowed EKPC the ability to purchase and sell energy in PJM and to reserve firm and

⁴ Case No. 2002-00475, *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* (Ky. PSC Aug. 25, 2003).

nonfirm transmission service. EKPC's current PJM membership is 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 ("OATT"). EKPC now requests authority to fully integrate into PJM by transferring to it functional control of all of EKPC's transmission lines and substations that operate at 100 kv and above. If the Commission approves the transfer, EKPC will be required to execute the PJM Transmission Owners Agreement and the PJM Reliability Assurance Agreement, transfer functional control of 100 kv and above transmission assets to PJM, and participate in the PJM markets. EKPC will then have the option of changing its membership status to either a Transmission Owner or a Generation Owner in PJM.

EKPC states that over the past decade it had periodically assessed whether to join a RTO, but concluded that membership would not be cost-effective. Then in 2010, the Commission hired Liberty Consulting Group ("Liberty") to conduct a focused management audit of EKPC. One of the audit findings was that the benefits of membership in a RTO could now well outweigh any costs, and Liberty recommended that EKPC hire an independent consultant to perform a detailed assessment of the costs and benefits of a RTO membership.

As a result, in 2010, EKPC engaged ACES Power Marketing ("ACES") to conduct a preliminary directional analysis of various energy- and capacity-market scenarios. ACES, which provides energy-trading and risk-management services, is owned by EKPC and 18 other power supply cooperatives, and for some years has performed power-marketing functions for EKPC. The ACES analysis concluded that fully integrating into PJM was economically advantageous.

EKPC then decided to engage another independent consultant to provide a more detailed analysis of RTO costs and benefits. After conducting a competitive bidding process, EKPC retained Charles River Associates (“CRA”) in 2011 to conduct a second review, which was independent of the ACES directional analysis. The CRA Report, dated March 20, 2012, concluded that the net expected economic benefit of EKPC joining PJM, based on a 10-year present value, was \$142 million. The CRA Report was based on an EKPC load forecast performed in 2010 and refreshed in 2011.⁵ In accordance with the requirements of the Rural Utilities Service (“RUS”), EKPC began to perform a new load forecast in 2012, which indicated some changes from the refreshed 2010 forecast. A copy of EKPC’s interim 2012 forecast was sent to CRA with a request that it supplement its March 20, 2012 Report to reflect this most recent forecast, updated assumptions related to bilateral seasonal capacity swaps, and reduced costs for PJM’s Regional Transmission Expansion Plan due to the termination of two major projects.⁶ The CRA Supplemental Report, dated September 10, 2012, affirmed all of CRA’s prior findings, but reflected a decrease to \$131.9 million for the 10-year present value benefits of joining PJM.

CRA concluded that EKPC could achieve three key benefits from membership in PJM:

1. Trade benefits consisting of more efficient commitment and dispatch of EKPC’s generating resources leading to lower adjusted production costs for EKPC (i.e., fuel, variable operations and maintenance expenses, and emission costs). By

⁵ EKPC Supplemental Response to AG Data Request Item 31, p.1 of 12, filed Sept. 10, 2012.

⁶ *Id.* at 2 of 12.

decreasing impediments to trade and fully participating in PJM's integrated regional energy market, EKPC will be able to purchase more power at lower costs to substitute for higher-cost generation on its own system;

2. Impacts on PJM's capacity market resulting from EKPC being a winter-peaking utility while PJM is a summer-peaking system, which creates advantageous peak-load diversity for EKPC relative to PJM as a whole, results in significantly less planning reserves needed by EKPC, and produces cost savings by maintaining a lower reserve margin. EKPC also requests authority to bid its customers' interruptible load into the PJM demand-response program to provide additional revenue; and

3. Avoided long-term, firm point-to-point transmission charges of approximately \$7.5 million annually that EKPC is currently paying.

EKPC also identified three major challenges it must face as a result of not being a fully integrated member of an RTO. First, operating as a stand-alone dispatch control area and balancing authority is becoming increasingly challenging for EKPC, which is surrounded by PJM to the north and east, KU and LG&E to the west, and the Tennessee Valley Authority ("TVA") to the south. Without a RTO membership, EKPC would have to rely upon its own resources or those of its neighbors to match generation to load, which is not always the most economic choice due to transmission constraints.

Second, the cost of securing firm transmission access to regional energy markets is increasing. For EKPC to engage in the sale of excess energy or to make economic energy purchases, it must ensure the availability of a reliable and firm transmission path between the market and the EKPC system. To secure this requisite transmission path, EKPC purchased 400 MW of long-term, firm point-to-point transmission service to

facilitate importing power to meet its reserve and economic purchase needs. Maintaining this 400 MW transmission path costs EKPC approximately \$7 million per year.

Third, EKPC must maintain an adequate amount of capacity reserve in order to safely and reliably operate its system. Currently, for planning purposes, EKPC has an internal target to maintain a 12 percent capacity reserve margin on its winter peak load, or approximately 360 MW. In addition, EKPC must carry operating reserves during all periods of time. EKPC currently relies on the TEE Contingency Reserve Sharing Group (“TCRSG”), along with TVA, KU, and LG&E, to meet the North American Electric Reliability Council imposed contingency reserve standards. As part of this arrangement, EKPC must hold back 94 MW of reserves it could otherwise sell on the market. This reserve sharing limits EKPC’s fleet-wide plant optimization, making its generation dispatch less optimal.

In addition to identifying these three challenges that would be ameliorated by membership in PJM, EKPC indicated that there were a number of non-quantifiable benefits of PJM’s membership. They include being better positioned to respond to future federal environmental and regulatory requirements and the structural protections in place to safeguard the integrity and stability of the PJM markets.

Positions of the Parties

AG

The AG is of the opinion that EKPC has met its burden of establishing that the proposed transfer of its transmission assets to PJM is for a proper purpose and is consistent with the public interest. The AG notes that the proposed transfer will not

adversely affect EKPC's level of service, but rather will save ratepayers money while allowing the EKPC system to become more efficient and reliable. The AG also recognizes the concerns expressed by KU/LG&E (as discussed below) and recommends that EKPC, PJM, and KU/LG&E develop mutually satisfactory conditions upon which all may agree and which will ensure that no harm will result to the transmission or rates for either utility's members or ratepayers.

Gallatin Steel

Gallatin Steel also supports EKPC's request, asserting that the transfer of control of certain of EKPC's transmission facilities to PJM is for a proper purpose and consistent with the public interest. Gallatin Steel notes that EKPC's full integration into PJM would result in multiple benefits, including lower adjusted production costs due to more efficient generation resource commitment and dispatch, significantly lower planning reserves, and avoided long-term firm point-to-point transmission charges. Gallatin Steel takes no issue with the conclusions in the CRA Report that EKPC would achieve an estimated net benefit should it fully integrate into PJM.

KU/LG&E

KU/LG&E have taken no position on the issue of whether EKPC should or should not be authorized to join PJM. Rather, KU/LG&E have focused exclusively on the potential impacts to the KU/LG&E system and to their respective ratepayers in the event that EKPC becomes a full member of PJM.

EKPC's and KU's systems are heavily interconnected, given the geographic proximity of the two systems and the fact that the companies share 67 interconnection points between their transmission systems. The companies also use each other's

facilities to serve their respective customers through numerous load interconnection points. KU/LG&E serve over 100 MW (peak) of their native-load using EKPC's transmission system. EKPC serves approximately 450 MW of its native-load customers' load using KU/LG&E's transmission system. EKPC and KU/LG&E are signatories to a Network Integration Transmission Service Agreement which provides for KU/LG&E to pay EKPC formula rates to use EKPC's transmission system. The EKPC formula rates are set forth in EKPC's OATT, which is under the exclusive jurisdiction of the Federal Energy Regulatory Commission ("FERC"). Currently, KU/LG&E pay cost-based rates under EKPC's transmission tariff that are calculated using EKPC's transmission-asset rate base. KU/LG&E include these transmission costs in their base rates.

Although KU/LG&E do not object to EKPC's full integration into PJM, KU/LG&E contend that EKPC's full membership in PJM will increase EKPC's transmission rates by changing the calculation methodology to reflect PJM costs and requirements. This will impose new costs and risks on KU/LG&E and their customers unless EKPC and PJM commit to hold KU/LG&E harmless from the impacts of this transaction. KU/LG&E also expressed concerns over the potential negative impact on the TCRSG as a result of EKPC's decision to fully join PJM, and they recommend that if the transaction is approved it should be conditioned on a requirement that EKPC and PJM develop a plan for how EKPC can fulfill its obligations as a member of TCRSG, and require that the plan be completed and vetted with LG&E/KU and TVA.

Stipulation and Recommendation

A Stipulation and Recommendation (“Stipulation”) dated November 2, 2012, was filed in the record on November 7, 2012. The Stipulation relates solely to the issues raised by KU/LG&E, and was signed by, and agreed to by, KU/LG&E, EKPC, PJM and the AG. The remaining party to this case, Gallatin Steel, did not agree to the Stipulation, but did sign it as “Hav[ing] No Objection.”⁷ The Stipulation is in general intended to hold KU/LG&E harmless from any cost increases or other adverse effects they might incur as a result of EKPC joining PJM. The Stipulation provides, in pertinent part, as follows:

1. KU/LG&E, EKPC, and PJM shall work together, subject to FERC approval, to keep the KU/LG&E load served by the EKPC transmission system as part of the KU/LG&E balancing authority by use of a pseudo-tie between PJM and KU/LG&E, with each party bearing its own cost to implement this arrangement;

2. KU/LG&E shall pay for transmission service provided by EKPC for deliveries to the KU/LG&E load in accordance with the terms of the PJM OATT applicable to the EKPC pricing zone, subject to change based on EKPC’s revenue requirements;

3. PJM shall not charge KU/LG&E any other rates or charges that are assessed on load in the PJM markets;

4. KU/LG&E will contract with EKPC for ancillary services at the terms and conditions set forth in EKPC’s OATT, Schedules 1 and 2, subject to change based on EKPC’s costs, not PJM’s costs;

⁷ A copy of the Stipulation is attached to this Order as an Appendix and is incorporated herein.

5. EKPC and PJM will work with KU/LG&E and TVA to develop a plan for how EKPC can continue to fulfill its reserve obligation as a member of TCRSG after it becomes a member of PJM;

6. If FERC does not approve the requisite terms of the Stipulation, EKPC agrees to not unilaterally pursue integration into PJM, but EKPC will work in good faith with KU/LG&E to achieve a resolution acceptable to all parties, FERC, and the Commission;

7. EKPC's load served from the KU/LG&E transmission system is within the PJM balancing authority, will be treated as EKPC zonal load, and will pay the KU/LG&E OATT;

8. EKPC and PJM agree to maintain the current interconnection agreement with KU/LG&E, including the amended September 2011 interconnection agreement between EKPC and KU/LG&E;

9. PJM agrees to recognize and honor flowgates identified by LG&E and KU to their reliability coordinator, TVA;

10. PJM agrees to provide KU/LG&E with modeling information and results of analyses related to critical contingencies identified in network integration studies for EKPC; and

11. The Commission shall retain jurisdiction following EKPC's transfer of transmission assets to monitor and enforce the provisions of the Stipulation and shall have jurisdiction over PJM for purposes of enforcing PJM's commitments to the extent not inconsistent with FERC jurisdiction and to the extent any requisite FERC approvals have been granted.

Commission Findings

Based on the evidence of record and being otherwise sufficiently advised, the Commission finds that EKPC has filed a significant amount of evidence, consisting of expert testimony and financial analysis, to support its application to join PJM. EKPC filed the CRA Report and Supplemental Report to demonstrate that the benefits of membership in PJM outweigh the costs. CRA performed its cost/benefit analysis using existing state-of-the-art modeling tools: GE MAPS, a dispatch model which estimates the locational marginal price, as well as the North American Electricity and Environment Model (“NEEM”), which takes into account environmental requirements and likely plant retirements. The NEEM modeling outputs (which include fuel cost and variable operation and maintenance costs) were used as inputs into the GE MAPS modeling of prices at different locations in the PJM system.

CRA also utilized their own extensive experience in estimating costs and benefits of RTO membership. CRA used the study period 2013-2022, based upon that experience, and projected costs and benefits on an annual basis throughout the study period, as well as cumulatively for the 10-year period on a net present value basis.

As described in the Supplemental Report, CRA estimated \$40 million in trade benefits over the study period. In general, this is the benefit of being able to sell excess generation into the PJM Market, taking into account the production costs associated with that generation as well as the benefit associated with being able to buy needed generation or generation that is less expensive than EKPC can generate at any given time.

CRA also estimated positive PJM capacity market impacts for EKPC by participating in PJM's Reliability Pricing Model ("RPM"). Under the RPM forward market construct, PJM annually conducts an auction in May for generation owners to make capacity available three years in advance of the delivery year and for load serving entities to buy capacity as needed for that delivery year. Thus, in May 2013, PJM will conduct a capacity auction for the June 2016 – May 2017 delivery year. The capacity auction includes not only generation capacity but also demand response and transmission assets as resources. As a participant in RPM, EKPC may bid its entire generation capacity into the market and receive the market price for that generation, while simultaneously purchasing at the market price the generation needed to serve its load. Alternatively, EKPC can elect to self-supply its generation needs by participating under a Fixed Resource Requirement ("FRR") for capacity. Under the FRR, EKPC can use its own generation and any capacity available to it under bilateral contracts to meet its load, with any capacity shortfall or excess being bought or sold in the PJM capacity market at market prices.

EKPC has requested authorization to participate under RPM, although the two other Kentucky jurisdictional utilities in PJM, Duke Energy Kentucky, Inc. and Kentucky Power Company, have always participated under FRR. EKPC notes that it is a winter-peaking utility and now must meet a 12 percent generation planning reserve requirement, which currently equates to 360 MW, in both the winter and the summer season. However, PJM is a summer peaking system and, if EKPC becomes a member of PJM and participates in RPM, EKPC will be required to hold a much smaller planning reserve requirement of 2.8 percent, which currently equates to 70 MW, during the

summer season only. The ability to maintain a lower reserve margin is expected to produce additional revenue for EKPC, since any generating capacity in excess of its load and reserve margin can be sold at the PJM capacity market price. These capacity market benefits are substantial, and are expected to yield \$137 million over the study period.

In addition to the benefit of EKPC's seasonal load diversity with the PJM system, EKPC will be allowed to maintain a lower reserve margin as a participant under RPM. If EKPC participates under FRR, it would be required to hold back an additional three percent of its reserve requirement, thereby reducing the amount of generation capacity it could sell for delivery into the PJM summer peaking market. This additional hold back of three percent is estimated to reduce EKPC's capacity market benefits by \$3 million to \$9 million annually.

Due to the three-year future delivery year structure for RPM, capacity auctions for the 2013-2014, 2014-2015, and 2015-2016 delivery years have already taken place. Thus, upon joining PJM, EKPC will be required to initially participate in FRR. Although existing PJM rules require a FRR participant to provide five years notice before switching to RPM, EKPC and PJM will seek a waiver from FERC to allow EKPC to switch at the start of the 2016 RPM auction year.

The final area of benefits to accrue to EKPC is the elimination of the long-term firm point-to-point transmission charges that are associated with the annual reservation of 400 MW of transmission capacity on the PJM system. This transmission capacity currently is needed by EKPC to economically meet its load requirements during certain times of the year. As a member of PJM, EKPC will be entitled to receive transmission

service without paying this \$7.5 million annual charge, resulting in estimated benefits of \$56.1 million over the 2013-2022 study period.

The cost of RTO membership includes annual administrative charges payable to PJM and FERC. Over the 10-year study period, these amount to \$35 million to PJM and \$7.7 million to FERC. EKPC is also expected to incur one-time costs and ongoing costs for equipment and personnel needed to interface with PJM, for a total of \$5.6 million over the study period. Finally, there will be net transmission costs estimated at \$53 million over the study period. This category is comprised of two components: EKPC's share of costs for the expansion of transmission facilities throughout the entire PJM region; and EKPC's share of transmission revenues allocated to transmission owning members in PJM for firm point-to-point transmission service. Both of these components are calculated on a pro rata basis to all members.

In summary, CRA estimates that over the 10-year study period, EKPC will see a net economic benefit of approximately \$131.9 million associated with membership in PJM. Subject to rounding, as set forth in the CRA Supplemental Report, the estimated cost and benefit values, expressed on a net present value basis, are summarized in the table below:⁸

⁸ *Id.* at 11 of 12.

<u>Category</u>	<u>Costs</u>	<u>Benefits</u>
Administrative Costs	\$48.3 Million	
Transmission Costs	\$53.0 Million	
Trade Benefits		\$40.0 Million
Capacity Benefits		\$137.0 Million
Avoided PTP Transmission Charges		\$56.1 million
Subtotal	\$101.3 Million	\$233.1 Million
Net Benefits		\$131.9 Million

The Commission finds that EKPC has demonstrated that membership in PJM will not have an adverse impact on its rates or quality of service, and that there will be substantial benefits from cost savings in each of the years covered by the study period, including PJM planning years 2016-2023 in which EKPC seeks to participate in RPM. Consequently, EKPC's request to transfer functional control of its transmission assets to PJM effective June 1, 2013 is for a proper purpose, is consistent with the public interest, and should be approved. The Commission will, therefore, authorize EKPC to execute the PJM owners Agreement and the PJM Reliability Assurance Agreement, copies of which were attached to the EKPC's application as Exhibits 5 and 6, and all other documents and agreements necessary to effectuate EKPC's full integration into PJM. We will also approve EKPC's participation in RPM, with the caveat discussed below relating to annual reporting and reviews.

The Commission further finds that approval of EKPC's Application will not diminish the Commission's jurisdiction or authority with respect to: (1) the Commission's review and prescription of rates for EKPC based upon the value of EKPC's property used to provide electric service; (2) EKPC's obligation of to file any Integrated Resource Plans or any other information required under Commission statute, regulation, or Order; (3) EKPC's obligation to provide bundled generation and transmission service

to its members; and (4) EKPC's obligation to obtain any Certificate of Public Convenience and Necessity or Site Compatibility Certificate that may be required prior to commencing construction of an electric generation or transmission facility. In addition to needing Commission approval to join PJM, EKPC also needs approval of FERC and will seek the consent of the RUS. To properly keep the Commission fully informed, EKPC should file a report by the seventh day of each month, beginning with February 2013, describing the prior month's actions related to its efforts to join PJM. The monthly reports should include the status of FERC proceedings and RUS review, copies of any other agency decisions approving, approving with conditions, or denying membership in PJM, and the date that either functional control of EKPC's transmission assets are transferred to PJM or the proposed transfer is terminated.

EKPC has requested that, in conjunction with membership in PJM, each of its customers' interruptible loads under contract and under its Direct Load Control program be authorized to be included in PJM's Demand Response program as of the date of membership. The Commission recognizes that EKPC is not requesting authority for the retail customers who participate by contract or tariff in an interruptible load control program to participate, either directly or through a third party, in any PJM Demand Response program. Rather, the request is for authorization for EKPC, as the generation supplier, to be the participant in the PJM Demand Response programs so that EKPC can bid into PJM the interruptible load that is available to EKPC under contract or tariff.

The Commission recognizes that the PJM Demand Response program can be an effective planning tool with potential benefits for both EKPC and PJM, and we

encourage EKPC to have a dialogue with its customers to utilize this tool in such a way as to maximize those benefits. We find that EKPC's participation in the PJM Demand Response program on behalf of its 16 member cooperatives and their retail customers is reasonable, provided that each existing or new interruptible load contract or tariff has been filed with and accepted or approved by the Commission. In the event that EKPC determines in the future that it will be beneficial to its system to allow retail interruptible customers to participate, directly or through third parties, in the PJM Demand Response program, EKPC and its member cooperatives will need prior Commission approval of new contracts or amendments to existing contracts and tariffs.⁹ EKPC should review all existing interruptible contracts and its two existing tariffs, designated as Section D–Interruptible Service and Section F–Voluntary Interruptible Service, to ensure compliance with the terms of this Order and the PJM Demand Response program and file revisions as appropriate or needed within 30 days.

With respect to the Stipulation, the Commission finds that the terms, conditions, and commitments contained therein are reasonable and should be accepted as a complete resolution and satisfaction of the issues raised in this case by KU/LG&E. The Commission commends the parties, particularly PJM, for their diligent efforts to work in a collaborative manner to structure an agreement that will ensure no adverse impacts to KU/LG&E, while preserving for EKPC all of the benefits that are projected to accrue from membership in PJM. The Commission also recognizes that on December 5, 2012,

⁹ The same requirement for Commission approval of retail customer participation in PJM Demand Response was imposed in Case No. 2010-00203, *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* (Ky. PSC Dec. 22, 2010)

EKPC filed notice that KU/LG&E and TVA have now determined that once EKPC joins PJM, EKPC's continued participation in the TCRSG, as provided for in Article III of the Stipulation, should be terminated. EKPC's notice, which included confirming letters from KU/LG&E and TVA, states that EKPC has given the requisite six months' notice to withdraw from the TCRSG as requested by KU/LG&E and TVA due to their concerns that there are North American Electric Reliability Corporation compliance risks associated with PJM's performance of EKPC's reserve obligations.

EKPC's withdrawal from the TCRSG constitutes a modification of the Stipulation. While the evidence of record indicates that EKPC and LG&E/KU have agreed to the modification, the record does not indicate agreement by the other parties to the Stipulation. Consequently, we will conditionally accept the Stipulation, subject to the filing of documentation that all of the parties have agreed to the modification.

EKPC's membership in PJM does create some degree of risk, particularly with respect to EKPC being granted sufficient transmission rights to be able to serve its own load without having to pay higher prices for energy due to transmission congestion. Consequently, the Commission will require EKPC to file by May 31 of each year a comprehensive report setting forth in detail the amount of transmission rights awarded and purchased; a description of hedging plans and strategies to address transmission congestion and market prices for capacity and energy; a breakdown by category of the prior years' benefits and costs of PJM membership; and a projection of future benefits and costs reflecting the most recent PJM capacity auction results. Based on the Commission's annual review of these reports, actions may be taken as necessary to ensure that EKPC's continued membership in PJM is beneficial to its members and

consumers, and that EKPC is participating in PJM in a manner that maximizes all available RTO benefits.

Finally, the Commission finds that the bulk of the trade benefits that EKPC expects to accrue as a member of PJM will flow back to its 16 member cooperatives and their retail customers through the Fuel Adjustment Clause. However, absent a base rate case filing by EKPC, there is no existing mechanism to flow back to customers the capacity market benefits. While we recognize that the capacity market benefits will not actually increase EKPC's revenues until June 2016 and thereafter, those benefits are expected to be more than three times the trade benefits. For this reason, the Commission finds that EKPC's membership in PJM should be conditioned upon EKPC agreeing to file, no later than November 30, 2015, an application for approval of a rate mechanism to flow back to customers the capacity market benefits expected to accrue from membership in PJM. EKPC's Chief Executive Officer should file within seven days of the date of this Order, a letter accepting and agreeing to be bound by this condition.

IT IS THEREFORE ORDERED that:

1. EKPC's request to transfer functional control of its transmission facilities operated at 100 kv and above to PJM is approved subject to the filing, within 10 days of the date of this Order, of: (a) the letter from EKPC's Chief Executive Officer agreeing to file, no later than November 30, 2015, a rate mechanism to flow back to customers the PJM capacity market benefits; and (b) documentation that all parties agree to modify the Stipulation to allow EKPC to withdraw from the TCRSG.

2. The Stipulation, dated November 2, 2012, as modified by the December 5, 2012 filing to extinguish any obligation arising under Article III, is incorporated herein and is conditionally approved subject to the filing of the documentation discussed in Ordering paragraph 1.

3. EKPC shall file within 30 days of the date of this Order any appropriate or needed amendments to existing special contracts or tariffs to reflect that EKPC is authorized to bid any customer's interruptible load into the PJM Demand Response program.

4. Any customer on the EKPC system that seeks to participate directly or through a third party in the PJM Demand Response program shall do so under the terms of an EKPC special contract or tariff that has been approved by the Commission.

5. EKPC shall file monthly status reports as described in the findings above until it has fully integrated into PJM or the transaction is terminated.

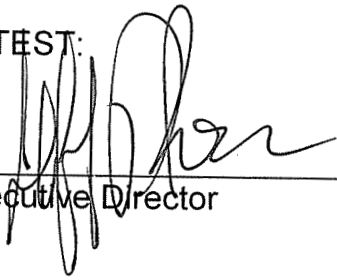
6. By May 31 of each year, EKPC shall file with the Commission the comprehensive report detailing transmission rights, hedging strategies, and PJM benefits and cost as more fully described in the findings above.

7. The reports required to be filed by EKPC pursuant to Ordering paragraphs 5 and 6 shall reference the number of this case and shall be retained in EKPC's general correspondence file.

By the Commission

ENTERED
DEC 20 2012
KENTUCKY PUBLIC
SERVICE COMMISSION

ATTEST:



Executive Director

Case No. 2012-00169

APPENDIX

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2012-00169 DATED DEC 20 2012

RECEIVED

STIPULATION AND RECOMMENDATION

This Stipulation and Recommendation is entered into this 2nd day of November 2012 by and among Louisville Gas and Electric Company ("LG&E"); Kentucky Utilities Company ("KU") (LG&E and KU are hereafter collectively referenced as "the Utilities"); East Kentucky Power Cooperative, Inc. ("EKPC"); Office of the Attorney General of the Commonwealth of Kentucky, by and through his Office of Rate Intervention ("AG") and PJM Interconnection, L.L.C., ("PJM") in the proceeding involving the above parties, which are the subject of this Stipulation and Recommendation, as set forth below. (The Utilities, EKPC, AG and PJM are referred to collectively herein as the "Parties.")

NOV 07 2012
PUBLIC SERVICE
COMMISSION

WITNESSETH:

WHEREAS, EKPC filed on May 3, 2012, with the Kentucky Public Service Commission ("Commission") its Application *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.*, and the Commission has established Case No. 2012-00169;

WHEREAS, the Utilities, AG and PJM have been granted intervention by the Commission in this proceeding;

WHEREAS, informal conferences, attended in person or by teleconference by representatives of the Parties and Commission Staff took place on October 12, 19, and 26, 2012, at the offices of the Commission, during which a number of procedural and substantive issues were discussed, including terms and conditions related to the issues pending before the Commission in this proceeding that might be considered by all Parties to constitute reasonable means of addressing their concerns;

WHEREAS, the Parties desire to recommend to the Commission that it enter its Order setting the terms and conditions that the Parties believe are reasonable as stated herein;

WHEREAS, it is understood by all Parties that this agreement is a stipulation among the Parties concerning all matters at issue in these proceedings pursuant to 807 KAR 5:001, Section 4(6);

WHEREAS, the Parties have spent many hours to reach the stipulations and agreements that form the basis of this Stipulation and Recommendation;

WHEREAS, the Parties, who represent diverse interests and divergent viewpoints, agree that this Stipulation and Recommendation, viewed in its entirety, is a fair, just and reasonable resolution of all the issues in this proceeding; and

WHEREAS, the Parties recognize that this agreement constitutes only an agreement among, and a recommendation by, themselves, and that all issues in this proceeding remain open for consideration by the Commission at the formal hearing in this proceeding.

NOW, THEREFORE, in consideration of the premises and conditions set forth herein, the Parties hereby stipulate, agree, and recommend as follows:

ARTICLE I. Agreement to Support EKPC's Integration Into in PJM

Section 1.1. Subject to all of the commitments and conditions contained herein, all Parties agree to support EKPC's request to integrate into PJM.

ARTICLE II. Maintenance of the Utilities' Load Outside of the PJM Markets

Section 2.1. The load served by the Utilities utilizing EKPC's transmission system (the "the Utilities' Load") has been, and the Utilities desire that it continue to be, part of the Utilities' Balancing Authority ("BA") and not treated as being within the PJM markets by virtue of EKPC's integration into PJM. The Utilities and EKPC, in coordination and cooperation with each other and with PJM, and subject to approval by the Federal Energy Regulatory

Commission (“FERC”), shall keep the Utilities’ Load outside of PJM as set forth in this Section.

Section 2.1.1. The Utilities’ Load shall be pseudo-tied between PJM and the Utilities, so that such load will be in the Utilities’ BA. The Utilities, EKPC, and PJM shall cooperate in good faith to determine the specific metering and related equipment and protocols in order to implement the pseudo-tying of the Utilities’ Load between PJM and the Utilities’ BA. Except as otherwise agreed between PJM and EKPC, each party shall bear its own costs to implement such arrangements, and in no events shall Utilities be responsible for costs incurred by PJM.

Section 2.1.2. The Utilities shall pay for transmission service on the EKPC transmission system for deliveries to the Utilities’ Load in accordance with the terms of the PJM Open-Access Transmission Tariff (“OATT”), i.e., the EKPC Transmission Pricing Zone rate, subject to all other provisions of this Article II. The Utilities will be billed by and shall make payments to PJM for such service. The Utilities understand and acknowledge that the EKPC zonal rate, and thus the rate payable by the Utilities, is subject to change in accordance with EKPC’s rights under the PJM Tariff and applicable laws and regulations, but such changes shall not contravene any provision in this Article II and will be calculated

based on EKPC's transmission revenue requirements using PJM-prescribed and FERC-approved rate calculation methodologies.

Section 2.1.3. Because the Utilities' Load will be in the Utilities' BA and not in the PJM markets, PJM shall not charge the Utilities with any other rates or charges that are assessed on load that is within the PJM Markets pursuant to the PJM tariff, including, but not limited to Regional Transmission Expansion Plan, locational marginal prices, congestion, and administrative costs. This provision applies only to charges for transmission service for the Utilities' Load and does not address costs that may develop in furtherance of possible future, unknown FERC policies or requirements.

Section 2.1.4. With respect to Ancillary Services Schedules 1 (Scheduling, System Control and Dispatch Service) and 2 (Reactive Supply and Voltage Control from Generation or Other Sources Service), the Utilities will contract with EKPC to supply such services to the Utilities, who will purchase them based upon the terms and conditions as currently set forth in Schedules 1 and 2 of EKPC's current Open Access Transmission Tariff. EKPC reserves its right to modify the rates for Schedules 1 and 2, and thus the charges payable by the Utilities; however, any such change shall be based only on EKPC's costs and not PJM's costs.

Section 2.1.5. The objective of this Article is to insulate the Utilities' Load from the effects of EKPC's integration into PJM by maintaining

arrangements comparable to those that existed prior to EKPC's integration into PJM. If the FERC does not approve all of the terms of this Stipulation and Recommendation that require FERC approval, EKPC shall not unilaterally pursue its integration efforts; rather, recognizing the importance of EKPC fully integrating into PJM on or before June 1, 2013, EKPC and the Utilities shall work with all good faith, best efforts, and reasonable speed to negotiate and achieve modified means by which EKPC may fully integrate into PJM on terms acceptable to the Parties, the Commission, and FERC. If the Parties cannot agree upon such means in a timely manner, each Party reserves its right to make such proposals to the Commission and FERC as it deems appropriate and to protest and contest proposals by the other Party.

Section 2.1.6. The Utilities, EKPC and PJM acknowledge and agree that the EKPC load served from the Utilities' transmission system ("EKPC Load") is within the PJM BA and will be treated as EKPC zonal load. EKPC shall pay for transmission service on the Utilities' transmission system for deliveries to the EKPC Load in accordance with the Utilities' OATT; however, the Utilities shall not charge or allocate to EKPC Load the cost of any transmission project outside the Utilities' service territory arising from regional transmission expansion or planning associated with the Utilities' involvement in the Southeastern Regional Transmission Planning

("SERTP") group, which is the Utilities' planned means of complying with FERC Order No. 1000 and related policies or requirements. This provision applies only to charges for transmission service for EKPC Load and does not address costs that may develop in furtherance of possible future, unknown FERC policies or requirements. In the event Utilities' involvement in the SERTP is not a successful means of complying with FERC Order No. 1000 and related policies or requirements, EKPC reserves the right to challenge the Utilities' subsequent means of complying with FERC Order No. 1000 and related policies or requirements to the extent such subsequent means of compliance would result in increased charges or rates being assessed to the EKPC Load within the PJM BA and treated as EKPC zonal load.

Section 2.2. Any intervention by the Utilities into EKPC's filings with FERC relating to EKPC's integration into PJM shall be in support of these filings with FERC and shall not contest these arrangements or otherwise be of an adversarial nature; however, the Utilities reserve the right to oppose EKPC or PJM concerning any issue(s) that have not arisen in this proceeding, as well as to contest any deviation from EKPC's planned integration into PJM according to the terms of EKPC's application in this proceeding as modified or conditioned by the terms of this Stipulation and Recommendation. For the purposes of this provision, the following issues shall be deemed to have

arisen in this proceeding (in addition to those that have actually arisen in this proceeding):

1. EKPC's request to shorten time to be eligible to participate in the Reliability Pricing Model ("RPM") market from 5 years to 3 years;
2. Filing of PJM-EKPC Network Integration Transmission Service ("NITS") Agreement;
3. Transfer of existing EKPC OATT, Point-to-Point, and NITS service agreements and interconnection agreements to the PJM tariff;
4. EKPC revenue requirements (rate) filing and ancillary services filing;
5. Notice of cancellation of EKPC's current OATT; and
6. PJM tariff amendments necessary to reflect EKPC's integration (adding EKPC as a pricing zone, EKPC's rates).

Section 2.3. EKPC agrees to engage in a good faith review of any FERC proceeding filed by the Utilities, either individually or in concert with other utilities, seeking approval of the SERTP as the Utilities' means of complying with FERC Order No. 1000 and related policies or requirements. If, following such review, EKPC agrees with the filing, it will intervene to support the Utilities' application in that proceeding insofar as it is consistent with the provisions and intent of this Stipulation and Recommendation.

Section 2.4. Concerning load switching for maintenance and restoration purposes, the Utilities and EKPC will continue to address load switching on the same terms as exist today.

ARTICLE III. EKPC's Contingency Reserve Sharing Group ("CRSG") Participation

Section 3.1. EKPC and PJM agree to work with the Utilities and TVA to develop a plan for how EKPC can fulfill its obligations (currently 94 MW of reserves) as a member of the CRSG. The Utilities acknowledge that EKPC and PJM have begun this effort. EKPC, the Utilities, and PJM agree to work with all good faith and best practices with TVA to complete the plan timely, with a target completion date of December 31, 2012.

Section 3.2. EKPC and PJM further commit to use all good faith and best practices to resolve all disputes or issues that arise with TVA or the Utilities concerning the CRSG.

Section 3.3. EKPC, PJM, and the Utilities agree that the continuation of the CRSG is contingent upon NERC Standards as they exist today. If NERC Standards change that adversely impact any member of the CRSG, then that party or parties may exercise their rights to withdraw under the current CRSG agreement.

Section 3.4. Immediately upon TVA's issuance of its notice of withdrawal from the CRSG, the provisions of this Article III shall cease to be of any effect, and any and all obligations between any of the Parties to this Stipulation and Recommendation created solely by this Article III shall immediately end.

ARTICLE IV. Transmission System Operations

Section 4.1. EKPC and PJM agree to maintain the current interconnection agreement with the Utilities. PJM agrees that the amended September 2011 interconnection agreement entered into between EKPC and the Utilities

does not have to be terminated. PJM can file the interconnection agreement with FERC with a PJM Service Agreement on it as part of the integration. This will ensure continued effective coordination of the Utilities' and EKPC's systems.

Section 4.2. EKPC and the Utilities further agree to operate and coordinate their 69 kV systems according to operating guides, procedures, and practices, written and unwritten, that exist today and impact the Utilities. This provision shall not conflict with the provisions of Section 4.1.

Section 4.3. PJM agrees to recognize and honor flowgates the Utilities identify to their RC, TVA.

The Joint Reliability Coordination Agreement Among and Between Midwest Independent System Operator, Inc. ("MISO"), PJM Interconnection, LLC, and Tennessee Valley Authority ("JRCA"), revised May 1, 2009, is in effect as between PJM and TVA. (MISO has withdrawn from the JRCA.) The JRCA addresses the process by which a transmission entity, like the Utilities, identifies flowgates to be included in the Congestion Management Process, the required testing to verify the impacts of the flowgates, the requirements for data exchange to ensure that the identified flowgates are included in models, and the methods by which congestion management is implemented in real time operations.

PJM is committed via the JRCA to recognize and honor flowgates that the Utilities identify to TVA, the Utilities' Reliability Coordinator, if those identified flowgates pass the required testing that is specified in the FERC-

approved Congestion Management Process, which is an attachment to the JRCA.

ARTICLE V. PJM Network Integration Study

Section 5.1. PJM agrees to provide to the Utilities modeling information and results of analyses related to critical contingencies identified in network integration studies for EKPC. PJM and EKPC further agree to work with the Utilities in a cooperative way, using all good faith and best practices, to supply to the Utilities such input, modeling, and analytical data concerning the EKPC network integration study as the Utilities reasonably request to understand and analyze any potential impacts to their system that EKPC's full integration into PJM may cause. EKPC, PJM, and the Utilities agree to follow all applicable Critical Energy Infrastructure protocols in their data exchanges. PJM commits to work with the Utilities to ensure a thorough understanding of analyses performed and to discuss alternative measures to mitigate planning criteria violations identified.

ARTICLE VI. Kentucky Public Service Commission's Ongoing Jurisdiction

Section 6.1. The Commission shall retain jurisdiction following the transfer of control from EKPC to monitor and enforce these commitments.

Section 6.2. The Commission shall have jurisdiction over PJM for the limited purpose of enforcing PJM's commitments as set forth in this Stipulation and Recommendation to the extent not inconsistent with the jurisdiction of the FERC; however, the Commission shall have no authority to enforce any

commitment of PJM that is subject to acceptance by FERC but which acceptance FERC denies.

ARTICLE VII. Miscellaneous Provisions

Section 7.1. Except as specifically stated otherwise in this Stipulation and Recommendation, the Parties agree that making this Stipulation and Recommendation shall not be deemed in any respect to constitute an admission by any Party hereto that any computation, formula, allegation, assertion, or contention made by any other Party in these proceedings is true or valid.

Section 7.2. The Parties agree that the foregoing stipulations and agreements represent a fair, just, and reasonable resolution of the issues addressed herein and are consistent with the public interest for purposes of approving EKPC's full membership in PJM pursuant to KRS 278.218.

Section 7.3. The Parties agree that, following the execution of this Stipulation and Recommendation, the Parties shall cause the Stipulation and Recommendation to be filed with the Commission by November 2, 2012, together with a recommendation that the Commission enter its Order on or before December 31, 2012, implementing the terms and conditions herein.

Section 7.4. Each signatory waives all cross-examination of the other Parties' witnesses unless the Commission disapproves this Stipulation and Recommendation, and each signatory further stipulates and recommends that the application, testimony, pleadings, and responses to data requests filed in this proceeding be admitted into the record (subject to all pending Petitions for Confidential

Treatment and all applicable Confidentiality Agreements) and approved as filed, except as modified by this Stipulation and Recommendation. The Parties stipulate that after the date of this Stipulation and Recommendation they will not otherwise contest EKPC's application in this proceeding, as modified by this Stipulation and Recommendation, during the hearing in this proceeding, and that they will refrain from cross-examination of all witnesses during the hearing, except insofar as such cross-examination supports the Stipulation and Recommendation or EKPC's application subject to the commitments and conditions of this Stipulation and Recommendation.

Section 7.5. *The Parties agree to act in good faith and to use their best efforts to recommend to the Commission that this Stipulation and Recommendation be accepted and fully incorporated into any Order approving EKPC's application in this proceeding.*

Section 7.6. *If the Commission issues an Order adopting all of the terms and conditions recommended herein, each of the Parties agrees that it shall file neither an application for rehearing with the Commission, nor an appeal to the Franklin Circuit Court with respect to such Order.*

Section 7.7. *The Parties agree that if the Commission does not implement all of the terms recommended herein in its final Order in this proceeding, or if the Commission in its final Order in this proceeding adds or imposes additional conditions or burdens upon the proposed transfer of control or upon any or all of the Parties that are unacceptable to any or all of the Parties, then: (a)*

this Stipulation and Recommendation shall be void and withdrawn by the Parties from further consideration by the Commission and none of the Parties shall be bound by any of the provisions herein, provided that no Party is precluded from advocating any position contained in this Stipulation and Recommendation; and (b) neither the terms of this Stipulation and Recommendation nor any matters raised during the settlement negotiations shall be binding on any of the Parties to this Stipulation and Recommendation or be construed against any of the Parties.

Section 7.8. The Parties agree that this Stipulation and Recommendation shall in no way be deemed to divest the Commission of jurisdiction under Chapter 278 of the Kentucky Revised Statutes.

Section 7.9. The Parties agree that this Stipulation and Recommendation shall inure to the benefit of, and be binding upon, the Parties, their successors and assigns.

Section 7.10. The Parties agree that this Stipulation and Recommendation constitutes the complete agreement and understanding among the Parties, and any and all oral statements, representations, or agreements made prior hereto or contemporaneously herewith, shall be null and void, and shall be deemed to have been merged into this Stipulation and Recommendation.

Section 7.11. The Parties agree that, for the purpose of this Stipulation and Recommendation only, the terms are based upon the independent analysis of the Parties to reflect a fair, just, and reasonable resolution of the issues herein and are the product of compromise and negotiation. The Parties

further agree that the resolution proposed herein is in accordance with law, for a proper purpose, and is consistent with the public interest, all as contemplated by KRS 278.218.

Section 7.12. The Parties agree that neither the Stipulation and Recommendation nor any of the terms shall be admissible in any court or commission except insofar as such court or commission is addressing litigation arising out of the implementation of the terms herein. This Stipulation and Recommendation shall not have any precedential value in this or any other jurisdiction.

Section 7.13. The signatories hereto warrant that they have informed, advised, and consulted with the Parties they represent in this proceeding in regard to the contents and significance of this Stipulation and Recommendation, and based upon the foregoing are authorized to execute this Stipulation and Recommendation on behalf of the Parties they represent.

Section 7.14. The Parties agree that this Stipulation and Recommendation is a product of negotiation among all Parties, and that no provision of this Stipulation and Recommendation shall be strictly construed in favor of, or against, any Party.

Section 7.15. The Parties agree that this Stipulation and Recommendation may be executed in multiple counterparts.

IN WITNESS WHEREOF, the Parties have hereunto affixed their signatures.

East Kentucky Power Cooperative, Inc.

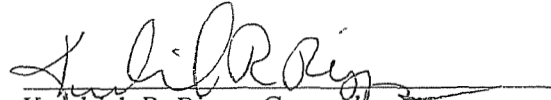
HAVE SEEN AND AGREED:

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Mark David Goss, Counsel


Louisville Gas and Electric Company
and Kentucky Utilities Company

HAVE SEEN AND AGREED:


Kendrick R. Riggs, Counsel
Allyson K. Sturgeon, Counsel

Office of the Attorney General of the
Commonwealth of Kentucky, by and through
his Office of Rate Intervention

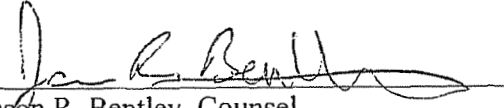
HAVE SEEN AND AGREED:



Jennifer B. Hans, Assistant Attorney General

PJM Interconnection, L.L.C.

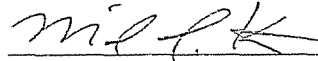
HAVE SEEN AND AGREED:



Jason R. Bentley, Counsel

Gallatin Steel Company

HAVE SEEN AND HAVE NO OBJECTION:

A handwritten signature in black ink, appearing to read "m.l.k.", written over a horizontal line.

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