

Goss ■ Samford PLLC



Attorneys at Law

September 10, 2012

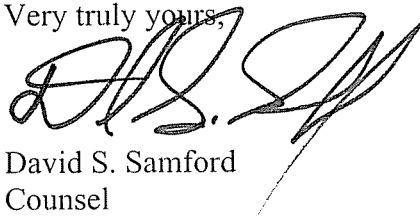
Mr. Jeff Derouen
Executive Director
Public Service Commission
211 Sower Boulevard
Frankfort, Kentucky 40602

Re: Case No. 2012-00169

Dear Mr. Derouen:

Please find enclosed for filing with the Commission in the above-reference case, an original and ten copies of East Kentucky Power Cooperative, Inc.'s supplemental response to Request 31 of the Attorney General's Initial Data Requests, originally filed June 28, 2012.

Very truly yours,



David S. Samford
Counsel

Enclosures

Cc: Parties of Record

RECEIVED

SEP 10 2012

PUBLIC SERVICE
COMMISSION

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2012-00169
FIRST REQUEST FOR INFORMATION RESPONSE

ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION DATED 06/15/12
REQUEST 31

RESPONSIBLE PERSON: **Don Mosier/Ralph L. Luciani**
COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 31. Please indicate whether EKPC will agree to promptly supplement its responses given herein, if and when any additional, new or different information should become known or available.

Response 31. EKPC has agreed and is obligated to provide timely updates to the Commission and intervenors as new information related to the PJM application becomes known or available. The narrative below outlines the need to supplement this response.

Every two years, East Kentucky Power Cooperative, Inc. ("EKPC") and its owner-members, in accordance with the Rural Utilities Service ("RUS") approved work plan, are required to submit to RUS a load forecast of peak demand and energy use by member. EKPC's last official load forecast was approved in November 2010 by the EKPC Board of Directors and, subsequently, by RUS. A refreshed version of the approved 2010 forecast was completed in 2011 and was used by Charles River Associates ("CRA") in the March 20, 2012 analysis, which served as support for EKPC's joining PJM and was filed in this case on May 3, 2012 as Application Exhibit 4 (Exhibit RLL-2 to the Direct Testimony of Ralph L. Luciani.)

In accordance with RUS requirements, EKPC and its owner-members are currently working to produce a 2012 load forecast. The analysis that EKPC has completed to date indicates the 2012 load forecast will change from the refreshed 2010 forecast used by CRA in the PJM analysis. EKPC's Board of Directors approved the 2012 interim load forecast at its August board meeting. As a result, EKPC asked CRA to supplement its analysis using the 2012 interim load forecast changes to determine what impact it would have on the benefits of EKPC joining PJM.

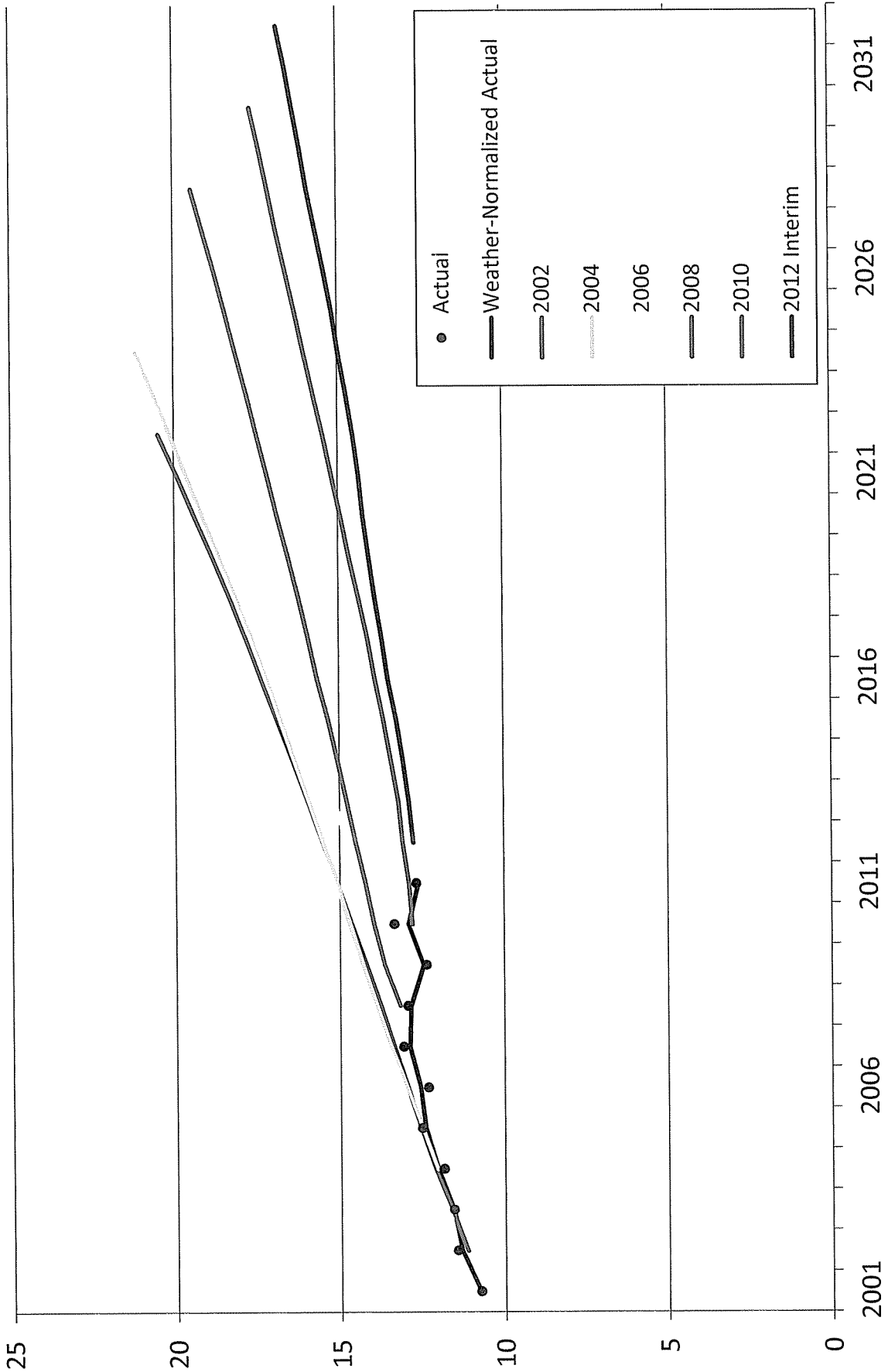
EKPC also requested that two other assumptions be updated in CRA's supplemental analysis. First, as discussed in its original filing, EKPC continues to forecast extremely limited long-term firm transmission availability with its interconnected systems. Therefore, the original assumption that EKPC could bilaterally swap its excess summer capacity for winter capacity with a third party in the status quo case is likely to be too optimistic. The second assumption that was updated was based on new developments in PJM's long range Regional Transmission Expansion Plan ("RTEP"). Since the filing of the Application in this proceeding, the PJM Board of Managers decided to terminate the Mid-Atlantic Power Pathway ("MAPP") and Potomac-Appalachian Transmission Highline ("PATH") projects and remove them from RTEP; CRA's supplemental analysis removes all RTEP costs associated with these two projects.

It should be noted that these updates to CRA's March 20, 2012 PJM analysis are reasonable and are bounded by the original sensitivities considered, which gives EKPC increased confidence that the results contained in the original analysis are reliable.

Graphs depicting EKPC's 2012 interim load forecast are provided on pages 3 through 5 of this response. The load forecast data sheet that EKPC provided to CRA for its supplemental analysis is provided on page 6 of this response.

CRA's supplemental analysis is provided on pages 7 through 12 of this response.

EKPC Total Energy Requirements (Million MWh)



Winter Season	Winter Conforming Peak	Summer Season	Summer Conforming Peak	Year	Total Requirements
2011 - 2012	2,841	2012	2,249	2012	12,823,890
2012 - 2013	2,891	2013	2,278	2013	12,952,644
2013 - 2014	2,925	2014	2,311	2014	13,120,530
2014 - 2015	2,955	2015	2,343	2015	13,321,356
2015 - 2016	2,991	2016	2,378	2016	13,569,521
2016 - 2017	3,039	2017	2,414	2017	13,750,445
2017 - 2018	3,080	2018	2,445	2018	13,947,804
2018 - 2019	3,116	2019	2,474	2019	14,126,622
2019 - 2020	3,139	2020	2,495	2020	14,291,419
2020 - 2021	3,171	2021	2,522	2021	14,421,599
2021 - 2022	3,202	2022	2,548	2022	14,586,101
2022 - 2023	3,241	2023	2,580	2023	14,785,080
2023 - 2024	3,273	2024	2,611	2024	15,010,178
2024 - 2025	3,317	2025	2,648	2025	15,190,421
2025 - 2026	3,361	2026	2,687	2026	15,419,598
2026 - 2027	3,412	2027	2,740	2027	15,670,290
2027 - 2028	3,452	2028	2,779	2028	15,916,062
2028 - 2029	3,496	2029	2,825	2029	16,112,284
2029 - 2030	3,594	2030	2,867	2030	16,339,332
2030 - 2031	3,594	2031	2,905	2031	16,546,175
2031 - 2032	3,618	2032	2,941	2032	16,794,617



Prepared For:

East Kentucky Power Cooperative

EKPC RTO Membership Assessment

Supplemental Report

Prepared By:

Charles River Associates

Date: September 10, 2012

1. OVERVIEW

On behalf of East Kentucky Power Cooperative ("EKPC"), Charles River Associates ("CRA") assessed the costs and benefits of EKPC joining the PJM Interconnection Regional Transmission Organization ("PJM") in a report ("CRA March Study") issued on March 20, 2012. Based on the analysis performed, we concluded that EKPC joining PJM will yield significant economic benefits to EKPC. Since the issuance of the CRA Report, additional items have been identified for analysis in this Supplemental Report:

1. 2012 Interim Load Forecast. As noted in the CRA March Study, the significant capacity market benefits for EKPC as part of PJM are dependent on the continued diversity of EKPC's demand profile with that of PJM. To the extent that this diversity diminishes over time, EKPC benefits would decrease. Since the issuance of the CRA March Study, EKPC has prepared a 2012 interim load forecast that reduces the diversity between the winter and summer peak load on the EKPC system from that of the forecast used in the CRA March Study. We analyze the impact of the 2012 interim load forecast on benefits in this Supplemental Report.

2. Capacity Swap Limitation. For conservatism in the CRA March Study, it was assumed in the *Status Quo Case* that EKPC would be able to swap summer for winter capacity with a neighboring entity. However, EKPC's ability to perform such a swap is dependent on obtaining long-term transmission service on neighboring entity systems, and our understanding based on recent EKPC experience is that this type of transmission service is not generally available to EKPC. As such, we have analyzed the impact of assuming that capacity swaps are not able to be performed in the *Status Quo Case*.

3. RTEP High-Voltage Allocation. In the CRA March Study, it was assumed that EKPC would be allocated high-voltage transmission expansion costs in the *Join PJM Case* beginning in calendar year 2014. As discussed in EKPC's Response 1b to Attorney General Request 1 in PSC Case 2012-00169, it is our understanding that these RTEP allocations would not commence in the *Join PJM Case* until calendar year 2015. Further, in the CRA March Study, 50% of the cost of the planned MAPP and PATH transmission projects in PJM was included as allocable to EKPC given the state of uncertainty about these projects. Since that time, the PJM Board of Managers has decided to terminate the MAPP and PATH projects and remove them from the RTEP. As such, we have analyzed the impact of a one-year delay in EKPC's RTEP allocation and the removal of the cost of the MAPP and PATH projects from the RTEP allocation.

The impact of each of these updates to the cost/benefit results presented in the CRA March Study is first analyzed and presented individually, and then the combined impact of making all three changes together is assessed.

2. DISCUSSION AND RESULTS

2.1. CAPACITY BENEFITS BACKGROUND

Capacity market benefits are comprised of the difference between the cost of meeting required reserves by EKPC in the *Status Quo Case* and the *Join PJM Case*. EKPC is winter-peaking and must meet a 12% planning reserve requirement in both the winter and summer seasons in the *Status Quo Case*. EKPC is projected to be short of winter capacity from 2013 to 2022, but long in summer capacity for most of this period.

As such, EKPC would need to purchase or construct winter capacity, or swap summer for winter capacity with a neighboring entity to meet *Status Quo Case* reserve requirements. In the *Join PJM Case*, as a result of PJM regional load diversity and the summer peaking nature of PJM as a whole, EKPC would need to meet a smaller reserve margin target that would apply for the summer only.

2.2. 2012 INTERIM EKPC LOAD FORECAST

For use in this Supplemental Study, EKPC provided to CRA its 2012 interim load forecast for the 2013 to 2022 period. In this forecast, EKPC's winter peak load is reduced by 250 MW on average while the summer peak load is reduced by about 13 MW on average from the peak load forecast used in the CRA March Study, as shown in Table A-1.

Table A-1: Difference in Peak Load Forecast in Supplemental Study (MW)

	Winter Peak (MW)		Summer Peak (MW)	
	2013-14	2022-23	2013	2022
March 2012 CRA Study	3,070	3,610	2,263	2,638
Supplemental Study	2,925	3,241	2,278	2,548
- Increase (Decrease)	(145)	(370)	15	(90)
- 10-Yr Average Increase (Decr.)	(250)		(13)	

As such, the difference between EKPC's peak load in the winter and summer is reduced by about 240 MW on average (250 - 13) with the new forecast. Under the 2012 interim load forecast, EKPC still remains significantly winter peaking, with an average winter peak about 665 MW above the EKPC summer peak.

The annual energy for load in the 2012 interim load forecast is about 0.2% below the forecast used in the CRA March Study for the year 2013, about 1% below in 2017, and about 4% below in 2022. Using the 2012 interim load forecast, along with recalculating the capacity benefits that would accrue to EKPC if it were to join PJM, we also recalculated the associated trade benefits. With the 2012 interim load forecast, the capacity benefits of EKPC joining PJM decrease from \$147.8 million to \$121.9 million over the 2013 to 2022 period, a reduction in benefits of \$25.9 million (2012 present value). Similarly, the trade benefits of EKPC joining PJM decrease from \$52.7 million to \$40.0 million over the 2013 to 2022 period, a reduction in benefits of \$12.7 million (2012 present value).

2.3. CAPACITY SWAP LIMITATION

Capacity swaps of EKPC summer capacity for a neighboring entity's winter capacity were assumed to take place in the *Status Quo Case* in the CRA March Study. As noted in the CRA March Study, EKPC's winter capacity requirements would not be binding in the *Join PJM Case*, and thus capacity swaps would not be needed in that case. Removing the capacity swaps from the *Status Quo Case* effectively assumes that EKPC would not sell its long summer capacity in the *Status Quo Case*. Removing capacity swaps, the capacity benefits in the CRA March Report of \$147.8 million over the 2013 to 2022 period increase to \$164.9 million, an increase of \$17.1 million (*2012 present value*). Removing capacity swaps when using the 2012 interim load forecast discussed in Section 2.2 increases the capacity benefits of \$121.9 million over the 2013 to 2022 period to \$137.0 million, an increase of \$15.1 million (*2012 present value*). The increase in benefits is slightly different (\$17.1 vs. \$15.1) because the amount of capacity swaps that would take place is dependent on the load forecast.

Note that even with this change, we are still conservatively assuming that EKPC can get by with only purchasing winter season (rather than full year) capacity in the *Status Quo Case*. In practice, this winter season capacity may not be available, including the requisite transmission service, in the external marketplace. If EKPC has to build peaking-type capacity to meet its winter demand (effectively creating full-year capacity), the *Join PJM Case* benefits would increase further.

2.4. RTEP ALLOCATION

In the CRA Study, transmission costs in the *Join PJM Case* totaled \$66.4 million (*2012 present value*), including an assumed RTEP allocation of \$4.8 million in 2014 and including 50% of the cost of the MAPP and PATH projects in the RTEP allocation starting in 2020. Starting the RTEP allocation in the *Join PJM Case* in 2015 and eliminating the MAPP and PATH projects reduces transmission costs to \$53.0 million, thus increasing the net benefit of the *Join PJM Case* by \$13.4 million (*2012 present value*).

2.5. COMBINED IMPACT

As shown in Table A-2, with these updates, the overall net benefit of the *Join PJM Case* remains significantly positive, decreasing from \$142.0 million in the March 2012 CRA Study to \$131.9 million, a reduction of \$10.1 million (*2012 present value*). The capacity benefits component decreases from \$147.8 million to \$137.0 million, a decrease of \$10.8 million, reflecting the \$25.9 million decrease in capacity benefits when using the 2012 interim load forecast, combined with the \$15.1 million increase in capacity benefits from removing capacity swaps.

**Table A-2: 2013-2022 Benefits (Costs) to EKPC of Joining PJM
Combined Impact of Updates
(in millions of 2012 present value dollars; positive numbers are benefits)**

	CRA March Study	Supplemental Report
1. Decrease in Adjusted Production Costs (Trade Benefits)	52.7	40.0
2. Administrative Costs	(48.3)	(48.3)
3. Transmission Costs	(66.4)	(53.0)
4. PJM Capacity Market Impacts	147.8	137.0
SubTotal Net Benefits (Costs)	85.9	75.7
5. Avoided Long-Term Firm PTP Transmission Charges	56.1	56.1
Net Benefits (Costs)	142.0	131.9

As shown in Table A-3, with these updates, net benefits of the *Join PJM* Case remain positive in all years.

**Table A-3: 2013-2022 Annual Benefits (Costs) to EKPC of Joining PJM
With Updates
(in millions of dollars; positive numbers are benefits)**

	Jun-Dec											2012 Present Value
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		
Decreased Cost to Serve EKPC Load	2.3	3.9	3.9	3.8	3.8	5.3	6.8	8.4	10.1	10.3		40.0
PJM Administrative Charges	(2.5)	(4.4)	(4.5)	(4.7)	(4.9)	(5.1)	(5.3)	(5.6)	(5.8)	(6.1)		(35.0)
FERC Charges under PJM OATT	(0.5)	(1.0)	(1.0)	(1.0)	(1.1)	(1.1)	(1.2)	(1.2)	(1.3)	(1.3)		(7.7)
Internal Staffing/Equipment Costs	(1.4)	(0.6)	(0.6)	(0.6)	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)		(5.6)
Subtotal Generation/Administration	(2.1)	(2.0)	(2.3)	(2.6)	(2.8)	(1.7)	(0.4)	0.9	2.2	2.2		(8.3)
PJM Transmission Expansion Allocation	0.0	0.0	(10.3)	(10.3)	(10.3)	(10.3)	(10.3)	(10.3)	(10.3)	(10.3)		(56.7)
Allocation of PJM Firm PTP Revenues	0.3	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6		3.7
Subtotal Transmission Costs	0.3	0.5	(9.8)	(9.7)	(9.7)	(9.7)	(9.7)	(9.7)	(9.7)	(9.7)		(53.0)
PJM Capacity Market Benefits	2.3	16.2	15.5	18.4	17.4	16.5	20.4	25.6	30.8	36.1		137.0
Net Benefits	0.5	14.7	3.4	6.1	4.9	5.2	10.3	16.8	23.3	28.6		75.7
Avoided Firm PTP Charges Payable	4.4	7.6	7.6	7.7	7.9	8.1	8.3	8.5	8.8	9.0		56.1
Net Benefits	4.9	22.3	11.0	13.9	12.8	13.3	18.6	25.4	32.1	37.6		131.9
<i>Net Benefits March 2012 Study Increase/(Decrease)</i>	<i>5.6</i>	<i>14.3</i>	<i>9.3</i>	<i>14.8</i>	<i>15.6</i>	<i>17.8</i>	<i>25.3</i>	<i>28.5</i>	<i>36.4</i>	<i>42.9</i>		<i>142.0</i>
	<i>(0.8)</i>	<i>8.0</i>	<i>1.7</i>	<i>(0.9)</i>	<i>(2.8)</i>	<i>(4.5)</i>	<i>(6.7)</i>	<i>(3.1)</i>	<i>(4.3)</i>	<i>(5.4)</i>		<i>(10.1)</i>

3. CONCLUSIONS

CRA confirms that the methodology used in this supplemental analysis is consistent with the methodology utilized in the report results incorporated in Application Exhibit 4, filed with the Commission on May 3, 2012 (Exhibit RLL-2 to the Direct Testimony of Ralph L. Luciani.) Based on this supplemental analysis, we continue to conclude that EKPC joining PJM will yield significant economic benefits to EKPC. The net benefits to EKPC continue to be relatively robust, with the key sources of benefits arising from trade benefits, capacity market benefits, and avoided long-term firm transmission charges. As before, the key source of additional costs is the allocation of PJM regional high voltage transmission expansion costs. However, these projected costs remain more than offset by the quantified benefits.