Exhibit No.:	
Issue:	RTO
Witness:	James W. Okenfuss
Type of Exhibit:	Direct Testimony
Sponsoring Parties:	Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company
Case Nos.:	EO-2012-0135 EO-2012-0136
Date Testimony Prepared:	October 5, 2012

MISSOURI PUBLIC SERVICE COMMISSION

CASE NOS.: EO-2012-0135 and EO-2012-0136

DIRECT TESTIMONY

OF

JAMES W. OKENFUSS

ON BEHALF OF

KANSAS CITY POWER & LIGHT COMPANY

AND

KCP&L GREATER MISSOURI OPERATIONS COMPANY

Kansas City, Missouri
October 2012

DIRECT TESTIMONY

OF

JAMES W. OKENFUSS

Case Nos. EO-2012-0135 and Case No. EO-2012-0136

Q: Please state your name and business address.

A: My name is James W. Okenfuss. My business address is 1200 Main St., Kansas City, Missouri 64105.

Q: By whom and in what capacity are you employed?

A: I am employed by Kansas City Power & Light Company ("KCP&L") as Manager, Fundamental Analysis for the Energy Resource Management Department.

Q: On whose behalf are you testifying?

A: I am testifying on behalf of KCP&L and KCP&L Greater Missouri Operations Company ("GMO") for St. Joseph Light & Power ("L&P") and Missouri Public Service ("MPS") territories, (collectively referred to as the "Company").

Q: What are your responsibilities?

A: My responsibilities include managing the long-term economic analyses for the Company, including the development of long-term market price forecasts and production cost estimates, which are used to evaluate alternative decisions the Company faces. The large simulation models used to produce these forecasts and estimates are maintained and operated under my guidance and supervision. These forecasts and estimates have many uses in the Company including Integrated Resource Planning, Fuel and Interchange Budgeting and Cost-of-Service

estimates in rate cases.

Q: Please describe your education, experience and employment history.

A: I have earned a Bachelor of Science Degree in Electrical Engineering from the University of Missouri – Columbia, a Master of Business Administration Degree from Rockhurst University, and a Master of Arts Degree in Economics from the University of Missouri – Kansas City.

I have 23 years of experience in the electric energy industry, specifically in the marketing, engineering and resource planning areas. I am a licensed Professional Engineer in the State of Missouri. For ten years, I have also been an Adjunct Professor of Economics with Avila University's MBA program, where I have taught courses in Statistics, Quantitative Analysis and Managerial Economics.

My employment history began in 1988 as the Marketing Engineer and the Sibley Station Results Engineer for MPS. For several years, I worked as a consultant. I designed, constructed and upgraded domestic and international power generation plants for Black and Veatch, LWG Consulting, and Shafer, Kline and Warren. Returning to Aquila (formerly MPS), I worked in the Fundamental Analysis Department of the Merchant Group and then transitioned to Resource Planning at Aquila Networks. I then worked with FirstEnergy in Akron, Ohio as Manager of Market Analytics. After two years, I returned to Kansas City and joined KCP&L in my current role.

Q: Have you previously testified in a proceeding at the Missouri Public Service Commission ("MPSC" or the "Commission") or before any other utility regulatory agency?

A: Yes. I have submitted written Rebuttal Testimony for Aquila Networks in Case No. ER-2004-0034 on the issue of fuel prices used in cost simulations. Also, I have provided oral testimony in Case No. EC-2011-0250 on behalf of GMO in support of its 2009 IRP filed in Case No. EE-2009-0237.

Q: What is the purpose of your testimony?

A: The purpose of my testimony is to discuss the analyses performed by the Company for these cases. The Company produced two analyses as part of the overall filing. The first analysis estimated the costs and benefits of participation in the SPP Energy Imbalance Service ("EIS") market. The second analysis estimated the impact on wholesale transactions due to lack of market access in the event that the Company were to operate outside of any RTO-organized markets.

I. COMPANY STUDY OF ENERGY IMBALANCE SERVICE MARKET

Q: Where in the Interim Report is the first analysis discussed?

A: The analysis of the EIS Market is discussed in Section 3.2 of the Interim Report.

Q: Please provide background for this portion of the analysis within the Interim Report.

A: The Stipulation and Agreements for MPSC Case Nos. EO-2006-0142 and EO-2009-0179 ("Stipulations") required each company to file pleadings and reports documenting the benefits of participation in the SPP EIS Market for KCP&L and GMO individually. The Stipulations clearly defined the nature of the pleading

and report that the Company should file. The report is referred to as the "Interim Report" and is described in footnote 2 of both Stipulations as follows:

> What is contemplated in this Interim Report is that the actual (modeled) production costs for KCP&L-GMO participating in the SPP facilitated markets will be compared to an estimate of what those costs would have been absent such participation for a twelve-month period. This Interim Report does not anticipate a SPP-wide cost/benefit study.

Q: **In the quote above, "SPP facilitated markets" refers to only the EIS market?**

A: Correct.

Q: **How did the Company prepare the Interim Report?**

A: The benefit/cost analysis was conducted using production cost modeling simulations to estimate the total cost of operation for each system. The test period used for the model was the 2010 calendar year. This year was selected to meet the requirement that the report cover a recent twelve-month period. Current budget assumptions were used to simulate actual operating parameters while actual fuel prices were used to calculate costs within the existing SPP EIS market. The analysis consisted of two separate scenarios – simulated fleet operation with and without participation in the SPP EIS Market. Comparison of these scenarios highlight the benefit of market participation through reduced production costs. Each company, KCP&L and GMO, have an individual set of scenarios and a separate analysis.

Q: **Describe the two scenarios used in the analysis**.

A: Scenario 1 included participation in the existing SPP EIS market and assumed current operation by simulating company fleet operation using actual fuel prices from Calendar Year 2010 and current budget assumptions.

Scenario 2 assumed operation without the EIS Market. The simulation of the Company's fleet operations used identical fuel prices and budget assumptions from Scenario 1 with two exceptions to approximate operation without the EIS market: the SPP Transmission Effect and the Wheeling Impact.

Q: **How did the Company simulate these two effects?**

A: For the SPP Transmission Effect, the Company referenced a July 2005 SPP Cost-Benefit Analysis by Charles River Associates ("CRA"). This report was provided with the Company filing for reference as Attachment J. Within that study, a scenario was developed to simulate the effect of removing SPP transmission operation by reducing flowgate capacity by 10%. The Company used this assumption from the CRA study in the Interim Report. In Scenario 2, the model included a reduction in transmission import and export capability of 10%. This reduced the capability to sell to or buy from the SPP Market to simulate reduced flowgate capacity.

For the Wheeling Impact, the CRA report was again referenced. This report proposed that wheeling charges be applied to power flows within the SPP Market footprint. CRA defined wheeling rates for each modeled interface as a wheel-out rate. The Company used this assumption from the CRA study in the Interim Report. In Scenario 2, the model included a wheeling charge was applied to power being sold by the Company to the wholesale market. The value of this wheeling rate was determined from the KCP&L and GMO zonal components of the actual transmission cost data provided in the filing in Attachments H and I.

The wheeling charge rates developed and used in the simulation are detailed Table 8 of the filing.

Q: What were the results of this analysis?

A: The results estimated increased production costs on both KCP&L and GMO should either not participate in the SPP EIS Market. The increased estimated annual production costs for 2010 were $6.7 Million for KCP&L and $6.2 Million for GMO. The results are detailed in Tables 9 and 10 of the filing. These results are also attached hereto as Schedules JWO-1 and JWO-2.

II. IMPACT ON WHOLESALE TRANSACTIONS

Q: Where in the Interim Report is this analysis discussed?

A: The analysis can be found in Section 7.2 of the Interim Report.

Q: Why was this impact included in the SPP Benefit/Cost analysis?

A: Transmission service priority, transaction costs, price risk, and point-to-point transmission rates all have material impacts on market operations. Each of these will have a negative effect on KCP&L and GMO if the companies operate on a stand-alone basis rather than in the SPP footprint.

Q: How can transmission service priority affect wholesale transactions?

With regard to service priority, potential counterparties are less likely to enter into transactions with KCP&L and GMO when the transmission path crosses a tariff boundary because of the inability to secure a path that is as firm as what could be obtained if transacting with another party in the RTO footprint. The loss of potential counterparties due to increased risk of curtailments could materially impact the operating cost of the companies. It is difficult to calculate the potential

curtailments that might be incurred as a stand-alone entity because few market participants currently utilize lower priority non-firm point-to-point service for wholesale transactions. The companies anticipate the increased use of non-firm point-to-point transmission service associated with stand-alone operations will result in an increased level of schedule curtailments, which may result in a 10 – 15% impact on off-system sales volumes.

Q: How do transaction costs impact wholesale transactions?

A: A factor influencing the level of counterparty transactions across an RTO boundary is the cost and ease with which transactions in the same RTO can be conducted, as compared to transactions with an external entity. This consideration of transaction cost pushes market participants toward sales and purchases that do not cross an RTO boundary.

Q: What is the effect of price risk?

A: Price risk associated with external transactions typically cannot be hedged as easily as transactions within the RTO footprint. In the day-ahead energy market under development by SPP, the price risk within the market can be managed through Transmission Congestion Rights, but price risk on transactions with external entities cannot be fully addressed in that manner.

Q: What is the effect of point-to-point transmission rates?

A: A final element that impedes external transactions is the rate "pancaking" effect resulting from the assessment of point-to-point charges on one or both legs of the transmission path across an RTO border. The Company projected point-to-point rates during the 2014-2017 period for KCP&L and GMO transmission pricing

zones. These rates are significantly higher than the 2010 wheeling rates used for the Interim Study. These 2014-2017 projections served as estimates of the rates that will be paid by an external entity to import power from SPP during that time period.

Q: **How did the Company simulate these effects?**

A: In order to recognize these effects on system costs, the wheeling rates used in Scenario 2 from the Company's earlier analysis were increased to account for the higher cost to conduct a power trade outside the SPP market. These higher rates and the reasoning behind their value are discussed in Section 7.2 of the filing. The result of this simulation is an estimate of the expected impact from the elements described above.

Q: What were the results of this analysis?

A: The results estimated increased production costs on both KCP&L and GMO above the increases found in the Interim Study. The expected increase to annual production costs were $6.2 Million for KCP&L and $2.5 Million for GMO. The results are detailed in Tables 28 and 29 of the filing. These results are also attached hereto as Schedules JWO-3 and JWO-4.

Q: Does that conclude your testimony?

A: Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Application of Kansas City Power & Light Company for Authority to Extend the Transfer of Functional Control of Certain Transmission Assets to the Southwest Power Pool, Inc.	)))))	Case No. EO-2012-0135
In the Matter of the Application of KCP&L Greater Missouri Operations Company for Authority to Extend the Transfer of Functional Control of Certain Transmission Assets to the Southwest Power Pool, Inc.	)))))	Case No. EO-2012-0136

AFFIDAVIT OF JAMES W. OKENFUSS

STATE OF MISSOURI)
) **ss**
COUNTY OF JACKSON)

James W. Okenfuss, being first duly sworn on his oath, states:

1. My name is James W. Okenfuss. I work in Kansas City, Missouri, and I am employed by Kansas City Power & Light Company as Manager, Fundamental Analysis.

2. Attached hereto and made a part hereof for all purposes is my Direct Testimony on behalf of Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company consisting of eight (8) pages, having been prepared in written form for introduction into evidence in the above-captioned docket.

3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

James W. Okenfuss

Subscribed and sworn before me this 4 day of October, 2012.

Notary Public

My commission expires: Feb. 4, 2015

CHRISTY L. DAVIS
Notary Public - Notary Seal
State of Missouri
Commissioned for Jackson County
My Commission Expires: February 04, 2015
Commission Number: 11415563

Schedule JWO-1

KCPL Production Cost Summary			
MWHrs	EIS Market	No EIS	Change
Total Generation Supply - MWHrs	21,998,770	21,897,335	-0.46%
Total Market Purchases - MWHrs	827,227	750,999	-9.21%
Total Market Sales - MWHrs	6,235,316	6,107,237	-2.05%
Dollars	EIS Market	No EIS	Change
Total Generation Supply - $	$ 261,985,000	$ 261,502,000	-0.18%
Total Market Purchases - $	$ 29,762,204	$ 28,999,103	-2.56%
Total Market Sales - $	$ 183,316,181	$ 175,416,732	-4.31%
Adjusted Production Cost - $	$ 108,431,023	$ 115,084,372	6.14%
Net Increase		**$ 6,653,349**	

Schedule JWO-2

GMO Production Cost Summary			
MWHrs	EIS Market	No EIS	Change
Total Generation Supply - MWHrs	6,425,847	6,424,749	-0.02%
Total Market Purchases - MWHrs	3,183,230	3,060,937	-3.84%
Total Market Sales - MWHrs	558,399	435,014	-22.10%
Dollars	EIS Market	No EIS	Change
Total Generation Supply - $	$ 117,268,000	$ 118,341,000	0.91%
Total Market Purchases - $	$ 83,319,495	$ 84,393,335	1.29%
Total Market Sales - $	$ 16,233,405	$ 12,169,742	-25.03%
Adjusted Production Cost - $	$ 184,354,090	$ 190,564,593	3.37%
Net Increase		**$ 6,210,503**	

Schedule JWO-3

KCPL Production Cost Summary			
MWHrs	No EIS	Additional Risk	Change
Total Generation Supply - MWHrs	21,897,335	21,818,743	-0.36%
Total Market Purchases - MWHrs	750,999	710,645	-5.37%
Total Market Sales - MWHrs	6,107,237	5,988,291	-1.95%
Dollars	No EIS	Additional Risk	Change
Total Generation Supply - $	$ 261,502,000	$ 260,643,000	-0.33%
Total Market Purchases - $	$ 28,999,103	$ 29,038,309	0.14%
Total Market Sales - $	$ 175,416,732	$ 168,428,936	-3.98%
Adjusted Production Cost - $	$ 115,084,372	$ 121,252,373	5.36%
Net Increase		**$ 6,168,001**	
Delta from EIS Market - Sect. 3.2		$ 6,653,349	
Net Increase from EIS Market		**$ 12,821,350**	

Schedule JWO-4

GMO Production Cost Summary			
MWHrs	No EIS	Additional Risk	Change
Total Generation Supply - MWHrs	6,424,749	6,407,255	-0.27%
Total Market Purchases - MWHrs	3,060,937	3,021,047	-1.30%
Total Market Sales - MWHrs	435,014	377,631	-13.19%
Dollars	No EIS	Additional Risk	Change
Total Generation Supply - $	$ 118,341,000	$ 118,114,000	-0.19%
Total Market Purchases - $	$ 84,393,335	$ 85,258,850	1.03%
Total Market Sales - $	$ 12,169,742	$ 10,340,666	-15.03%
Adjusted Production Cost - $	$ 190,564,593	$ 193,032,184	1.29%
Net Increase		**$ 2,467,591**	
Delta from EIS Market - Sect. 3.2		$ 6,210,503	
Net Increase from EIS Market		**$ 8,678,094**	