Exhibit No.:
Issue: Risk from Off-System Sales
Witness: Michael M. Schnitzer
Type of Exhibit: Surrebuttal Testimony
Sponsoring Party: Kansas City Power & Light Company
Case No.: ER-2009-0089
Date Testimony Prepared: April 7, 2009

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO.: ER-2009-0089

SURREBUTTAL TESTIMONY

OF

MICHAEL M. SCHNITZER

ON BEHALF OF

KANSAS CITY POWER & LIGHT COMPANY

Kansas City, Missouri
April 2009

"[redacted]**" Designates "Highly Confidential" Information Has Been Removed. Certain Schedules Attached To This Testimony Also Contain Confidential Information and Have Been Removed Pursuant To 4 CSR 240-2.135.**

SURREBUTTAL TESTIMONY

OF

MICHAEL M. SCHNITZER

Case No. ER-2009-0089

Q: Please state your name and business address.

A: My name is Michael M. Schnitzer. My business address is 30 Monument Square, Concord, Massachusetts 01742.

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

A: I am a Director of the NorthBridge Group, Inc. ("NorthBridge"). NorthBridge is a consulting firm specializing in providing economic and strategic advice to the electric and natural gas industries.

Q: Are you the same Michael M. Schnitzer who provided Direct Testimony and Rebuttal Testimony in support of Kansas City Power & Light Company ("KCP&L" and the "Company") in this Case No. ER-2009-0089?

A: Yes, I am.

I. PURPOSE OF TESTIMONY AND CONCLUSIONS

Q: Please describe the purpose of your Surrebuttal Testimony.

A: The purpose of my Surrebuttal Testimony is to respond to the Rebuttal Testimony of Staff witnesses V. William Harris and Dr. Michael S. Proctor, and Office of Public Counsel ("OPC") witness Barbara A. Meisenheimer. Mr. Harris accepts my projection for Off-System Contribution Margin (or "Margin") at the 25th percentile (See Harris Rebuttal at 3, lines 15-16) but references results (*i.e.*, ** [redacted] **) from my Direct

Testimony projection that do not reflect current market conditions, most notably lower natural gas and electricity prices. Dr. Proctor, on the other hand, proposes an alternative method in his Rebuttal Testimony that results in a lower recommended Margin offset of approximately **[redacted]**. While Dr. Proctor's alternative method produces a net result that is closer to the results (i.e., **[redacted]**) from my Rebuttal Testimony, I have significant issues with his methodology. Dr. Proctor and Ms. Meisenheimer both advocate a rejection of this Commission's established policy of using "forward-looking" forecasts to establish the offset to revenue requirements for Margin. Dr. Proctor "normalizes" historical test year wholesale electricity prices to establish an around-the-clock ("ATC") electricity price of **[redacted]**/MWh, and then recommends that the Commission calculate the 25th percentile of a historically-based margin distribution that is consistent with his ATC price as the offset to revenue requirements. His historical test year approach results in a recommended Margin offset of nearly **[redacted]**, compared to my recommended Margin offset of **[redacted]** utilizing the previously approved approach. OPC witness Meisenheimer proposes using an after the fact simulation of historical test year off-system margin as a basis for establishing the Margin offset. Her new approach results in an estimated off-system margin of **[redacted]** which is **[redacted]** times higher than my 25th percentile Margin based on the previously approved methodology.

Q: Could you please summarize your conclusions?

A: Yes, there are two main conclusions. First, Dr. Proctor's proposal to utilize an historical test period approach instead of the forward-looking methodology adopted by the Commission in the 2006 and 2007 Rate Cases should be rejected. Dr. Proctor does not

provide a valid justification for abandoning the previously approved approach. If Dr. Proctor's approach were adopted, it is likely that the Company would experience a Margin shortfall, with the associated financial stresses. This is precisely the result that the Commission sought to avoid when it approved the forward-looking approach, coupled with the use of the 25th percentile value of Margin for establishing the revenue requirement offset. The effect of adopting Dr. Proctor's recommendation would be equivalent to setting the Margin offset at the 65th percentile on a prospective basis. The Commission has already rejected similar proposals, and should reject Dr. Proctor's proposal, as well.

Second, OPC witness Meisenheimer's proposal to use "simulated" historical test year off-system margins instead of the Commission approved forward-looking approach to determine the revenue requirement offset should also be rejected. The effect of adopting her recommendation would be equivalent to setting the Margin at greater than the 99th percentile on a prospective basis. This would virtually assure that the Company would under-recover its Off-System Contribution Margin, and the magnitude of the under-recovery could easily approach **[redacted]**. The Commission should therefore reject this proposal, as well, and continue to use the forward-looking 25th percentile methodology adopted in prior cases. The bases for my conclusions are described in the sections below.

II. DR. PROCTOR'S USE OF HISTORICAL TEST YEAR PRICES SHOULD BE REJECTED

Q: Please elaborate on your first conclusion.

A: Dr. Proctor's testimony recommends that the Commission use historical test year electricity prices to establish the Margin offset at approximately **[redacted]**. He

calculates this number in three steps. First, he recommends that the Commission adopt an adjusted test-year annual average ATC wholesale electricity price of **[redacted]**/MWh based on "normalized" historical data.[1] Second, he uses a regression equation (discussed below) to translate this ATC electricity price into an off-system margin value of **[redacted]**. Third, he creates a distribution of the historical ATC electricity prices (as shown in Schedule MP-3) and calculates the 25th percentile value at **[redacted]**/MWh, which he translates into approximately **[redacted]** of off-system margin. He recommends the Commission use this value[2] as a revenue requirement offset, which he states will be consistent with the Commission policy to "allow KCPL a 75% probability of recovering the level of Margins used to calculate net fuel expense." See Proctor Rebuttal at 23, lines 4-5.

Q: Do you agree with Dr. Proctor's methodology?

A: No, I do not. The fundamental flaw in Dr. Proctor's approach is in the first step – the use of an adjusted historical test year average ATC wholesale price to determine the off-system margin. As I have testified previously, past wholesale prices are not an accurate or unbiased predictor of future wholesale prices. In particular, during periods of rising natural gas prices, a test period approach will result in an under-estimation of expected off-system prices and margins. Conversely, as is the case here, during periods of falling natural gas prices, a test period approach such as Dr. Proctor's will result in an over-estimation of off-system prices and margins.

[1] Dr. Proctor recommends using the most recent twelve month period ending February 28, 2009 for the historical test-year, and recommends a true-up through either March 31 or April 30. Proctor Rebuttal Testimony at 12, line 3 and at 13, lines 5-10. His normalization adjustments are discussed at 12, lines 7-16.

[2] Dr. Proctor uses his regression equations to predict the 25th percentile off-system margin value he believes the NorthBridge model would produce, if his recommended historical ATC prices were used as an input.

Q: Please elaborate.

A: As I stated above, Dr. Proctor's analysis hinges on an adjusted historical test year average ATC electricity price of **[redacted]**/ MWh. The question is: is that value a reasonable predictor of expected ATC prices for the period August 2009 to July 2010? The answer is an emphatic "no." According to Dr. Proctor's own methodology, the average delivered natural gas price, consistent with his **[redacted]**/MWh ATC value is **[redacted]**/MMBtu. If the current 2009/2010 forward price for gas was in the **[redacted]**/MMBtu range, then Dr. Proctor's proposal might, by coincidence, be reasonable. However, at the end of February, the actual Henry Hub quote (adjusted for delivery to KCP&L) for the forward year beginning August 2009 was only **[redacted]**/MMBtu.[3] So, Dr. Proctor is implicitly using an above market natural gas price forecast as the starting point for his analysis – a price that is about **[redacted]** percent too high.

Dr. Proctor's own regression analysis can be used to illustrate the impact of this error. Using his regression equation coupled with the current forward price for natural gas to predict the expected ATC wholesale price yields an expected ATC price of **[redacted]**/MWh, over **[redacted]**/MWh lower than the historical test period figure. Because his "expected" ATC value is **[redacted]**/MWh too high, his 25th percentile ATC value is also too high. As a result, Dr. Proctor overestimates the corresponding 25th percentile value for off-system margin. His estimate of **[redacted]** is nearly **[redacted]** my Margin estimate of **[redacted]**. The **[redacted]** difference between that value and Dr. Proctor's estimate of **[redacted]** is due to his implicit use of out-of-date market prices, which are higher than the current market.

[3] The delivered quote of **[redacted]**/MMBtu is taken from a market date of February 24, 2009, which is the same market date used for my Rebuttal Testimony.

Q: Will Dr. Proctor's recommendation, if accepted by the Commission in this case, allow KCP&L a 75% probability of recovering ** [redacted] ** of Margin?

A: No. When KCP&L makes off-system sales beginning in July 2009, it will make those sales at 2009-2010 prices, not at the historic prices used in Dr. Proctor's analysis. Schedule MMS-12 (HC) shows the ATC electricity price distribution from my Rebuttal Testimony,[4] with Dr. Proctor's claimed 25th percentile value highlighted on the graph. As the top figure in Schedule MMS-12 (HC) clearly shows, the ** [redacted] **/MWh ATC price that Dr. Proctor claims is the 25th percentile value is actually a 59th percentile value. This corresponds to the ** [redacted] ** off-system margin value advocated by Staff, which is actually a 65th percentile value, as shown in bottom figure in Schedule MMS-12 (HC). Thus, if Dr. Proctor's recommendation were to be accepted, KCP&L would have only a 35 percent probability on a prospective basis of recovering ** [redacted] ** of Margin.

Dr. Proctor's own regression equations yield a similar result. Schedule MMS-13 (HC) shows both Dr. Proctor's original distribution of ATC prices from Schedule MP-3 as well as the distribution his methodology would have produced had he used the current forward market price for gas at the time he filed his Rebuttal Testimony. The 25th percentile of that revised distribution would be an ATC price of ** [redacted] **/MWh, substantially lower than the ** [redacted] **/MWh value from his historic test period analysis. This lower ATC figure corresponds to an off-system margin value of ** [redacted] **, which is lower than my 25th percentile Margin value of ** [redacted] **. As shown in Schedule MMS-13, the ATC value of ** [redacted] **/MWH (corresponding to Staff's claimed 25th percentile off-system margin value of ** [redacted] **) actually falls

on the 75th percentile of Dr. Proctor's updated distribution. Therefore, under Dr. Proctor's own methodology, KCP&L would be allowed only a 25% probability of recovering this amount, not a 75% probability as claimed by Dr. Proctor.

Q: Do you have any concerns about Dr. Proctor's regression methodology?

A: Yes. I take issue in particular with his use of a technique which "ranks" the observations before running his regression to predict off-system margin based on natural gas prices and ATC electricity prices. Normally when a regression equation is estimated, a statistician will take pairs of data (*e.g.*, in this case, a 1000 pairs of ATC electricity prices and off-system margins) and look for the correlation between the dependent variable (*e.g.*, off-system margin) and the independent variable (e.g., ATC electricity prices).[5] This allows the statistician to make predictions of the dependent variable based on other values of the independent variable. This is what Dr. Proctor claims to do with his regression: he says he is using ATC electricity prices to predict off-system margin. But, Dr. Proctor has not followed normal statistical practice. Instead, he breaks up the 1000 pairs of data and ranks the 1000 ATC electricity prices from lowest to highest and ranks the 1000 off-system margin values from lowest to highest. Then he runs the regression analysis on these new "ranked pairs" of data, instead of the original data pairs. He justifies this practice as follows: "The objective was to determine how well the distribution of one of the variable correlated with the distribution of the other variable." See Proctor Rebuttal Testimony, from 14, line 22 to 15, line 1.

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[4] See Schnitzer Workpaper 'Workpaper (MMS-12) (ATC Dist) HC.xls'.

[5] Rice, John A. *Mathematical Statistics and Data Analysis*. Belmont, CA: Wadsworth, 1995, at p. 507: "The principle underlying this method is to minimize the sum of squared deviations of the predicted, or fitted, values (given by the curve) from the actual observations. For example, suppose that a straight line is to be fit to the points (y_i, x_i), where $i = 1, \ldots, n$; y is called the dependent variable and x is called the independent variable, and we wish to predict y from x."

Q: Do you agree with his justification?

A: No, not in the way he then uses the regression results. If the objective is to see how well the distributions are correlated then there is a rationale for this ranking technique. But, if the objective is to predict off-system margin based on ATC electricity prices, then use of the technique is not justified.

Q: Does Dr. Proctor raise any other issues concerning your analysis?

A: Dr. Proctor raises several methodological issues with the statistical and probabilistic modeling I used to create my forward-looking distribution of Margin. I will respond briefly to each.

Q: What is Dr. Proctor's first issue?

A: Dr. Proctor takes issue with the use of forward gas prices, which he claims are too volatile. See Proctor Rebuttal at 9, lines 16-17.

Q: Do you agree with Dr. Proctor?

A: I agree with Dr. Proctor that forward prices for all commodities are volatile. My testimony in this rate case, as well as the past two KCP&L rate cases has been premised on that observed fact. However, forward prices represent the market's best estimate of what spot prices are likely to be, and so I disagree with Dr. Proctor's response, which is to use historical electricity prices and attempt to normalize those prices in the same manner one would use to normalize a traditional rate case component like weather or load. Forward prices are volatile, but that volatility is simply a reflection of the changing expectations of the community of active buyers and sellers who are constantly reappraising a multitude of relevant market drivers. The normalization of historical prices cannot be the basis for a forward-looking estimate of Margin.

Q: What is Dr. Proctor's second issue?

A: The second section of Dr. Proctor's testimony is titled "Consistent Use of Natural Gas Prices." Dr. Proctor argues in this section of his testimony that gas and electricity prices used for the off-system margin calculation should be consistent with gas prices used in fuel cost calculations and electricity prices used in determining the cost of off-system purchased power.

Q: Do you agree with Dr. Proctor?

A: No. In the prior two rate cases, KCP&L has calculated Margin prospectively, and calculated all other cost of service items based on an historical test year adjusted for known and measurable changes. These other cost of service items are subject to regulatory lag, which sometimes benefits customers and sometimes benefits the utility. There is no systematic bias in this type of regulatory lag: fuel and purchase power costs might increase or decrease following any particular test year. This has also been true in the last two KCP&L rate cases in which the Commission approved a forward-looking calculation of Margin. Under the Commission's Orders, customers get the higher of the actual Margin realized or the 25th percentile "floor" guaranteed by KCP&L through the regulatory liability mechanism. This result can only benefit customers, as there is no corresponding regulatory asset mechanism if realized Margin falls short of the 25th percentile. So, customers are fully protected by the Margin calculation and regulatory liability mechanism, and there is no reason to require that both Margin and other cost of service items use consistent historical test year data.

Q: What is Dr. Proctor's third issue?

A: Dr. Proctor recommends a different method of calculating price volatility from that which I used. Although he concedes at p. 17, line 23 of his Rebuttal Testimony that "statistically, either approach appears to be acceptable," he prefers his own methodology. He states at p. 20, lines 15-20 his concern that using the NorthBridge method may result in a higher calculated volatility that will result in a lower 25th percentile value for Margin.

Q: Do you agree with Dr. Proctor's concern about the NorthBridge method of calculating volatility?

A: No. The two methods do produce slightly different results, but the impact of the difference is overstated by Dr. Proctor. The far larger impact results from the use of historical prices versus forward prices, as discussed above.

Q: If the Commission were to adopt Dr. Proctor's recommendation, what would be the effect of this change from the Commission's prior decisions on off-system sales in the 2006 and 2007 Rate Cases?

A: Previously, the Commission adopted the 25th percentile methodology based on my forward-looking probability distribution of Margin, effectively establishing a floor level of Margin that was guaranteed by KCP&L. If KCP&L exceeded the floor, the additional Margin was flowed back (with interest[6]) to customers through a regulatory liability mechanism. If KCP&L failed to meet the floor, shareholders were responsible for the

[6] See 2007 Report and Order at 39: "KCPL shall pay a short-term interest rate of LIBOR[148] plus 32 basis points on all margin amounts exceeding the 25% level, with the interest paid not charged to ratepayers in cost of service."

shortfall. In its Orders, the Commission reasoned that the 25th percentile was a fair allocation of risk between shareholders and customers. If the Commission were in this case to adopt the historical price methodology proposed by Dr. Proctor using his recommended ATC price of **[redacted]**/MWh, it would effectively be changing its policy on the fair allocation of risk, and placing considerably more risk on the shareholders of KCP&L. This is so because Dr. Proctor's methodology overstates the probability of achieving a certain level of Margin when past (*i.e.*, test-year) ATC electricity prices exceed forward prices for the August 2009-July 2010 period, as they do in this case.

Q: Should the Commission change its risk allocation policy as advocated by Dr. Proctor?

A: No. In the 2007 Rate Case the Commission rejected the OPC's proposal to set the floor at the 40th percentile of my forward-looking probability distribution of Margin: "In short, in balancing the interests of shareholders and ratepayers, straying from KCP&L's recommended 25th percentile might benefit ratepayers some, but might also damage KCP&L much, much more than any benefit that might accrue to ratepayers." See Report and Order at 39. Dr. Proctor's methodology would effectively establish the floor at a level far higher than the 40% proposed in the 2007 Rate Case by OPC and, if adopted, would place substantially more risk on KCP&L shareholders.

III. THE ALTERNATIVE OPC PROPOSAL SHOULD BE REJECTED

Q: What is your response to OPC's alternative methodology?

A: OPC Witness Barbara Meisenheimer filed Rebuttal Testimony opposing the Company and Staff methodologies and advocates establishing the Margin offset at **[redacted]

[redacted]** based on the results of a RealTime™ model run. Ms. Meisenheimer has calculated that KCP&L would have generated **[redacted]** in off-system margin for an adjusted 2007 test year, based on updated market prices, fuel costs, load and other inputs observed during the period October 2007 through September 2008. The value modeled (**[redacted]**) represents the average value of 20 scenarios and does not represent the 25th percentile of a probability distribution as previously approved by the Commission.

Q: Should the Commission adopt the OPC projection of **[redacted] of off-system margin as advocated by Ms. Meisenheimer?**

A: No. The output of the RealTime™ model run is neither a meaningful estimate of the future nor an accurate simulation of the past. It represents an attempt to model the past performance of KCP&L in making off-system sales in the 2007 test year (updated to reflect certain changes in inputs), but that past performance is already known with certainty. In fact, Ms. Meisenheimer's Rebuttal Testimony (at 5, lines 13-14) shows historical values of Non-Firm Off-System Sales Margin of **[redacted]** for calendar year 2007 and **[redacted]** for calendar year 2008. So, the result of the RealTime™ model is in Ms. Meisenheimer's own words[7] "substantially above the Company's historic performance." If the OPC wishes to argue that the Commission should set the Margin offset based on an adjusted historical test year, then they may do so. But there is no need to model the Margin value for that test year as it already exists.

Q: Where does the OPC recommended value of **[redacted] fall on the prospective distribution of Margin shown in your Rebuttal Testimony?**

[7] See Meisenheimer Rebuttal Testimony at 5, lines 5-8.

A: Schedule MMS-14 (HC) shows that OPC witness Meisenheimer's RealTime™ model result is so unlikely given current forward market prices that it falls beyond the 99th percentile of a current forward-looking probability distribution, such as that previously approved by the Commission.

IV. CONCLUSIONS

Q: Please summarize your conclusions.

A: The Commission should continue to "look ahead" to assess the likelihood that KCP&L will exceed the floor established by the 25th percentile methodology adopted in prior KCP&L rate cases. Dr. Proctor's methodology based on historical prices in a falling market overstates the probability that KCP&L will achieve the alternative floor he would establish and therefore should be rejected. The other methodological issues raised by Staff are minor and do not provide a reasonable or proper rationale for changing the Commission's 25th percentile methodology. The OPC's approach produces a result which is significantly greater than historic off-system margins, is highly unlikely to occur on a forward-looking basis, and therefore should also be rejected.

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 to Modify Its Tariff to Continue the Implementation of Its Regulatory Plan	)))	Case No. ER-2009-0089

AFFIDAVIT OF MICHAEL M. SCHNITZER

COMMONWEALTH OF MASSACHUSETTS)
) **ss**
COUNTY OF MIDDLESEX)

Michael M. Schnitzer, being first duly sworn on his oath, states:

1. My name is Michael M. Schnitzer. I work in Concord, Massachusetts, and I am employed by The Northbridge Group, Inc. as a Director.

2. Attached hereto and made a part hereof for all purposes is my Surrebuttal Testimony on behalf of Kansas City Power & Light Company consisting of Thirteen (13) pages and Schedule(s) Mms. 12 through Mms. 14, 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.

Michael M. Schnitzer

Subscribed and sworn before me this 7th day of April 2009.

Notary Public

My commission expires: June 21, 2013

SCHEDULES MMS-12 THROUGH MMS-14

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