Exhibit No.:
Issue: Risk from Off-System Sales
Witness: Michael M. Schnitzer
Type of Exhibit: Direct Testimony
Sponsoring Party: Kansas City Power & Light Company
Case No.: ER-2006-____
Date Testimony Prepared: January 27, 2006

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. ER-2006-____

DIRECT TESTIMONY

OF

MICHAEL M. SCHNITZER

ON BEHALF OF

KANSAS CITY POWER & LIGHT COMPANY

Kansas City, Missouri
January 2006

"[redacted]**" Designates that "Highly Confidential" Information has been Removed. "Proprietary" or "Highly Confidential" Information has been Removed from Certain Schedules Attached To This Testimony Designated "(P)" or ("HC") Pursuant to the Standard Protective Order.**

DIRECT TESTIMONY

OF

MICHAEL M. SCHNITZER

Case No. ER-2006-____

Q: Please state your name and business address.

A: My name is Michael M. Schnitzer. My business address is 55 Old Bedford Road, Lincoln, Massachusetts 01773.

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: Please summarize your relevant professional background.

A: In 1992, I co-founded NorthBridge. Before that, I was a Managing Director of Putnam, Hayes & Bartlett, which I joined in 1979. I have focused throughout this time on assisting energy companies with strategic issues, particularly those relating to competition and wholesale market structure issues.

I have testified before the Federal Energy Regulatory Commission ("FERC") and a number of state commissions on issues relating to competitive restructuring and wholesale market design, including Locational Marginal Pricing and Financial Transmission Rights, Regional Transmission Organizations, standard market design, resource adequacy, and transmission expansion policies. On several occasions I have been invited by FERC staff to participate as a panelist in technical conferences on these subjects.

I hold a Master of Science degree in Management from the Sloan School of Management of the Massachusetts Institute of Technology, which I received in 1979. My concentration was in finance. I also received a Bachelor of Arts degree in chemistry, with honors, from Harvard College in 1975. A copy of my resume is attached as Schedule MMS-1.

I. PURPOSE OF TESTIMONY AND CONCLUSIONS

Q: Please describe the purpose of your testimony.

A: I am providing testimony on behalf of Kansas City Power & Light Company ("KCPL" and "Company") in support of its proposal for the treatment of off-system energy and capacity sales revenue and related costs as "above the line" for ratemaking purposes pursuant to the July 28, 2005 Order of the Public Service Commission of the State of Missouri ("Commission") in Case No. EO-2005-0329. As described in the testimony of Mr. Chris B. Giles, KCPL proposes to establish the level of net revenues from off-system sales (i.e. revenues less associated expenses) ("Off-System Contribution Margin") at **[redacted]** and account for this as a reduction to KCPL's test year revenue requirements.

My testimony is organized in three parts. In the first part, I discuss the uncertainty inherent in any forecast of Off-System Contribution Margin from a largely coal-based generating fleet such as KCP&L's selling into the wholesale power market in the northern part of the Southwest Power Pool ("SPP" and "SPP-North"), and why actual results may vary substantially from forecasts made a year or more in advance. In particular, I discuss the three key drivers of this uncertainty – natural gas prices, the "market heat rate," and the quantity of off-system sales – and I illustrate the range of uncertainty associated with natural gas prices alone using historical data. In the second part of my testimony, I provide a prospective analysis of the range of possible Off-System Contribution Margin in 2007, taking into account the three key factors discussed above. In the third part of my testimony, I address the implications of such risk and volatility for KCPL and its ratepayers. In this part, I discuss the allocation of risks under the Company's proposal and examine the ways in which KCPL can reduce the risk through hedging.

Q: Could you please summarize your conclusions?

A: Yes, there are three. First, the actual margin from 2007 off-system sales is likely to vary substantially from the level of margin forecast in January 2006. This is so because the three key drivers of Off-System Contribution Margin – natural gas prices, the market heat rate, and the quantity sold – are themselves uncertain and cannot be forecast with precision. Recent historical data underscore this conclusion. During the 2002 to 2005 period, natural gas price volatility alone would have caused forecasts of off system contribution made a year in advance to be off by an average of 78 percent relative to actual results.

Second, a comprehensive prospective assessment of the 2007 Off-System Contribution Margin indicates a broad range of possible outcomes centered on a median value of **[redacted]**, with a 5 percent likelihood of less than a **[redacted]** contribution and a 5 percent likelihood of greater than a **[redacted]** contribution.

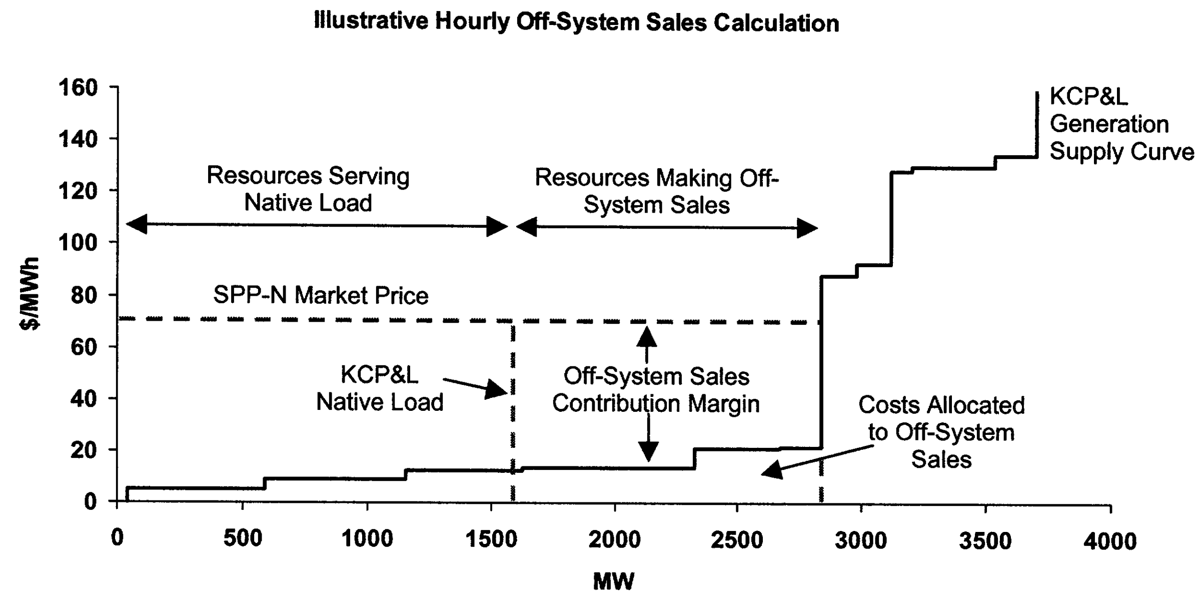
Third, this volatility in Off-System Contribution Margin must be borne by either shareholders or customers, or be shared between them. Any mechanism that places this risk on customers in order to insulate shareholders from earnings volatility during the construction of Iatan Unit 2 would necessarily result in significant retail rate volatility. The Company's proposal places this risk, and the cost and responsibility for hedging this risk, with the shareholders. However, even with available hedges in place, KCPL will bear significant risk. In exchange for bearing this risk, the Company proposes to establish the level of Off-System Contribution Margin at **[redacted]** as described in the testimony of Mr. Giles.

II. RISK FACTORS IN MAKING COAL-BASED OFF-SYSTEM SALES

Q: Please elaborate on your first overall conclusion.

A: This part of my testimony examines the key risk factors KCPL faces in making off-system sales. The margin earned on KCPL's off-system sales has historically accounted for a significant portion of its earnings. Mr. Giles testifies that the margin from off-system sales represent almost **[redacted]** of total earnings. Therefore, a high level of volatility in Off-System Contribution Margin during the construction of Iatan Unit 2 could have serious implications for KCPL's earnings and cash flow, its resulting credit measures, and the need for accelerated amortization. As described in the testimony of Mr. Burton L. Crawford, KCPL has historically been able to sell almost every megawatt hour it can generate from its baseload fleet. After serving retail sales to its native load and "Firm" wholesale sales to customers such as City Utilities of Springfield, KCPL makes "Non-Firm" sales to the short-term market with prices and terms determined at the time of sale. In any hour, the Off-System Contribution Margin is the difference between gross revenues and costs for those sales. The concept is illustrated in Figure 1 below.

Figure 1 – Illustrative Hourly Off-System Contribution Margin



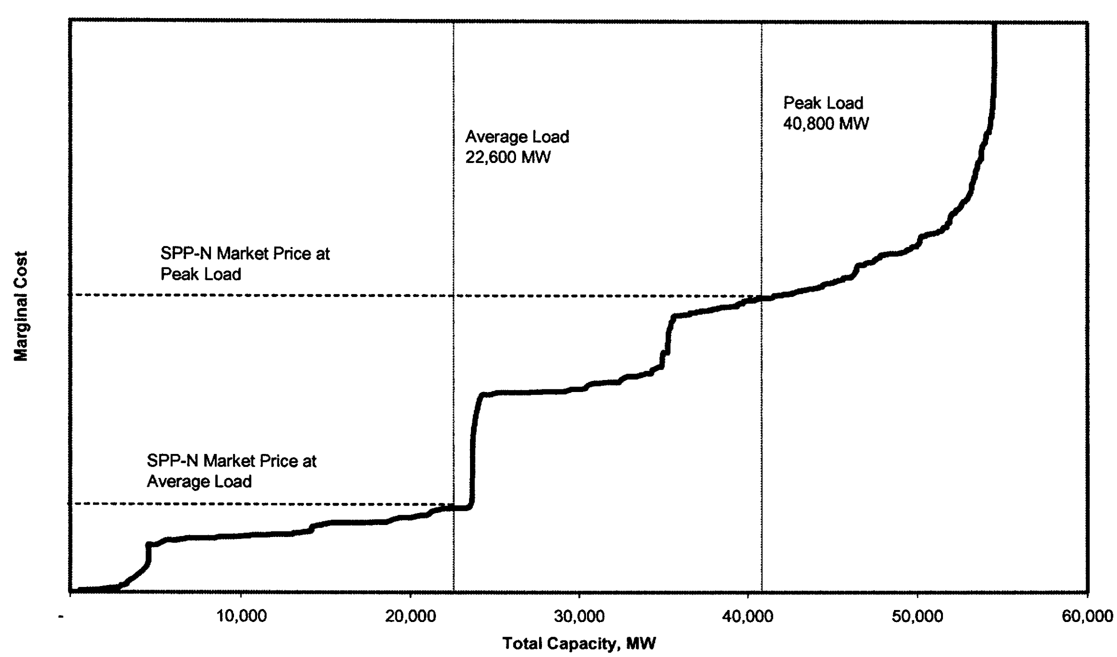
Q: What determines the cost of the Non-Firm sales?

A: As illustrated in Figure 1, costs are allocated to Non-Firm sales based on the incremental cost of operating the units in KCPL's generation supply curve to make the additional sales in excess of the sum of KCP&L retail sales and Firm wholesale sales ("Native Load"), which costs are based largely on the price of coal. Although there is some potential for volatility in the cost of making Non-Firm sales, the primary source of volatility is on the revenue side.

Q: What determines the revenue from Non-Firm sales?

A: Revenues are simply the market price realized times the quantity available for sale. As illustrated in Figure 1, KCPL makes off-system sales at a regional SPP-North market price. The price for Non-Firm sales in any particular hour is simply the intersection of the regional supply and demand curves in that hour. The concept is illustrated in Figure 2 below, showing illustrative average and peak loads. The supply curve is the aggregate ranking of available resources in the market from lowest cost to highest cost. The left side of the supply curve represents baseload units such as nuclear and coal with low dispatch costs. The middle section of the curve represents higher priced cycling units that can be ramped up and down to follow load. Lastly, the right side of the curve represents peaking units with the highest marginal cost that serve load in the hours of highest demand. The demand curve is shown as a vertical line, reflecting the fact that in any given hour, demand is largely inelastic. In any hour, the intersection of the supply curve and the demand curve determines the marginal unit for serving aggregate load. The marginal cost of that unit sets what is in effect the "market price." This simplified illustration does not deal with demand-side resources or any locational differences in price resulting from transmission congestion.

Figure 2 – SPP-North Supply-Demand Balance



Q: Are the SPP markets currently structured to have a single market clearing price in every hour as shown in Figure 2?

A: No, currently SPP is a bilateral market, with sales taking place between individual buyers and sellers and Figure 2 is simply illustrative of how supply and demand determine price in the current bilateral market. Bilateral transactions are entered into based on the parties' expectations about that hourly price over the particular time period of the sale (e.g., for the on-peak time block one day ahead).

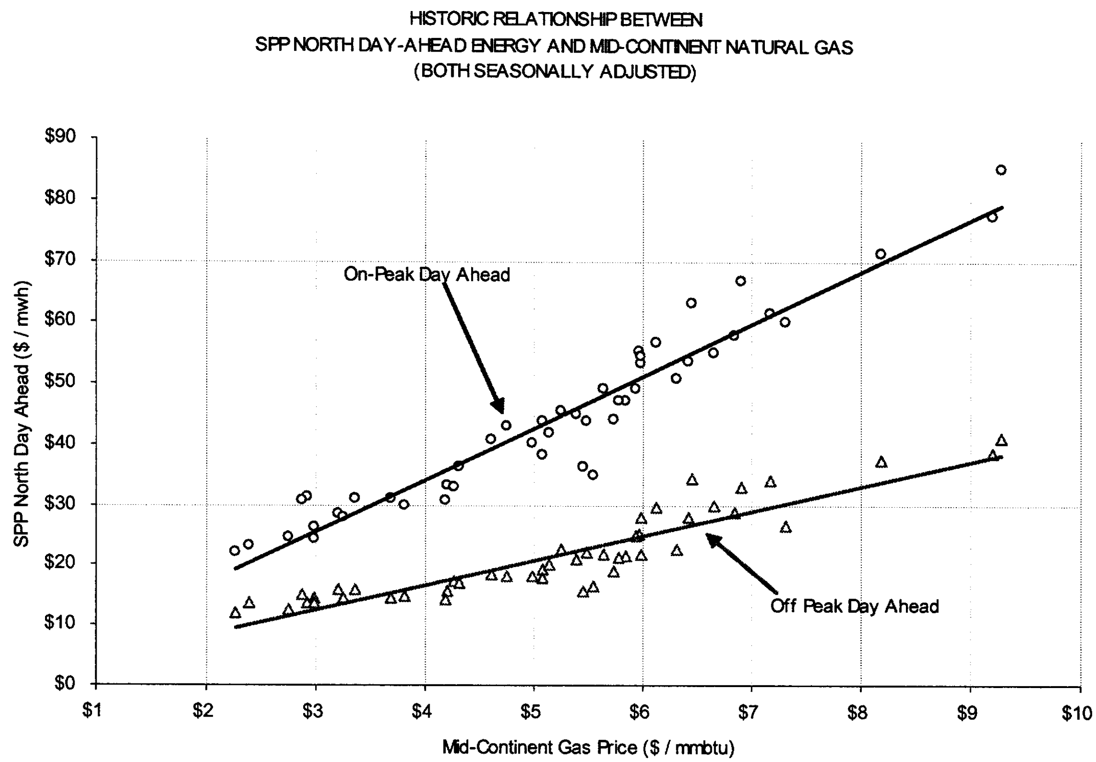
Q: What are the main sources of volatility in KCPL's off-system sales revenues?

A: As discussed above, revenues are simply the product of market price and quantity sold. Therefore, off-system sales revenue volatility is a function of the market price volatility and the variability in the sales quantity.

Q: Please describe the volatility of market prices.

A: Historically, observed day-ahead spot prices in SPP-North are highly correlated with the price of natural gas as shown in Figure 3 below.

Figure 3 – Spot Price Correlation with Natural Gas

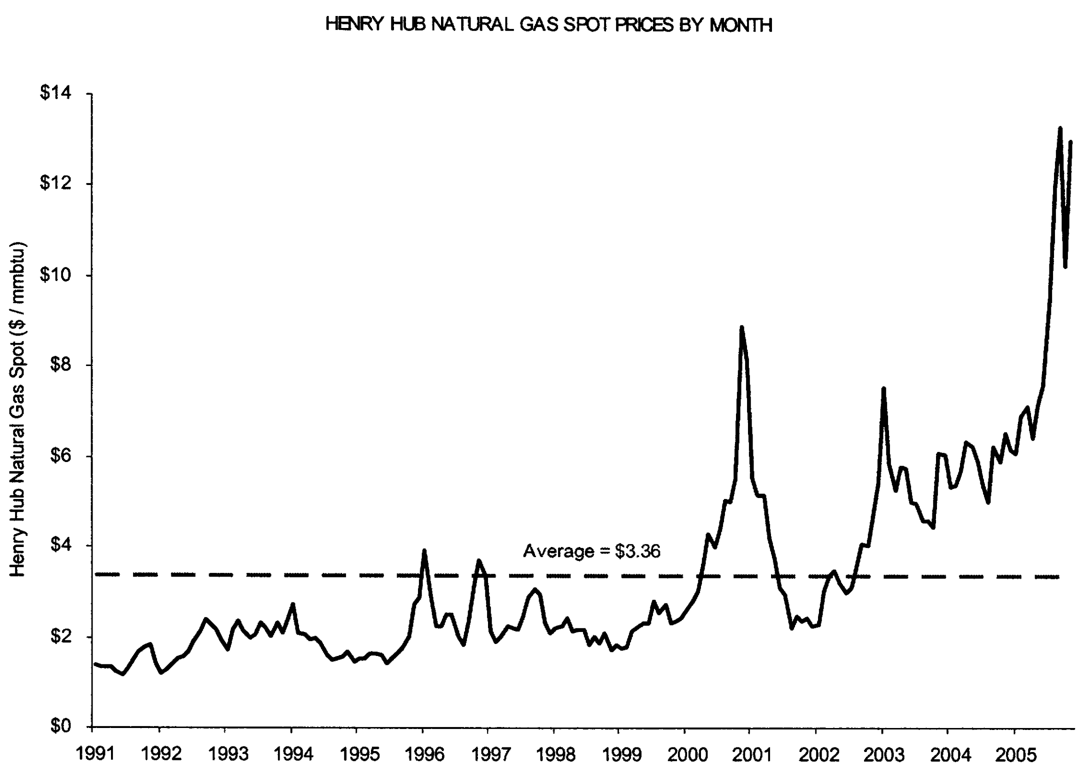


Because of the strong correlation with natural gas prices, the market price can be conveniently represented as two separate components: the price of natural gas and the "market heat rate." The market heat rate is not the same as a physical heat rate. For example, an efficient baseload coal unit may have a physical heat rate of 9,500 Btu/kwh, while a gas peaking unit may have a physical heat rate of 12,000 Btu/kwh. Instead, a market heat rate represents the market price of electricity in any hour denominated in $/mwh divided by the current delivered price of natural gas denominated in $/mmBtu. Dividing through and adjusting for units produces a quotient which is a market heat rate denominated in Btu/kwh. Price volatility can be described as a function of these two factors: gas price and market heat rate.

Q: Please describe the volatility of natural gas prices.

A: As shown in Figure 4 below, since 1991 monthly Henry Hub Natural Gas Spot prices have fluctuated significantly, rising from below $2.00/mmBtu to over $10.00/mmBtu in 2005, with a simple average price over this period of $3.36/mmBtu. The spikes in gas prices (particularly in 2001 and 2005) show how quickly gas prices can change. Forward gas prices reflect market expectations of future spot prices. As spot prices change in response to external shocks (e.g., Hurricane Katrina) forward prices will quickly adjust to new levels.

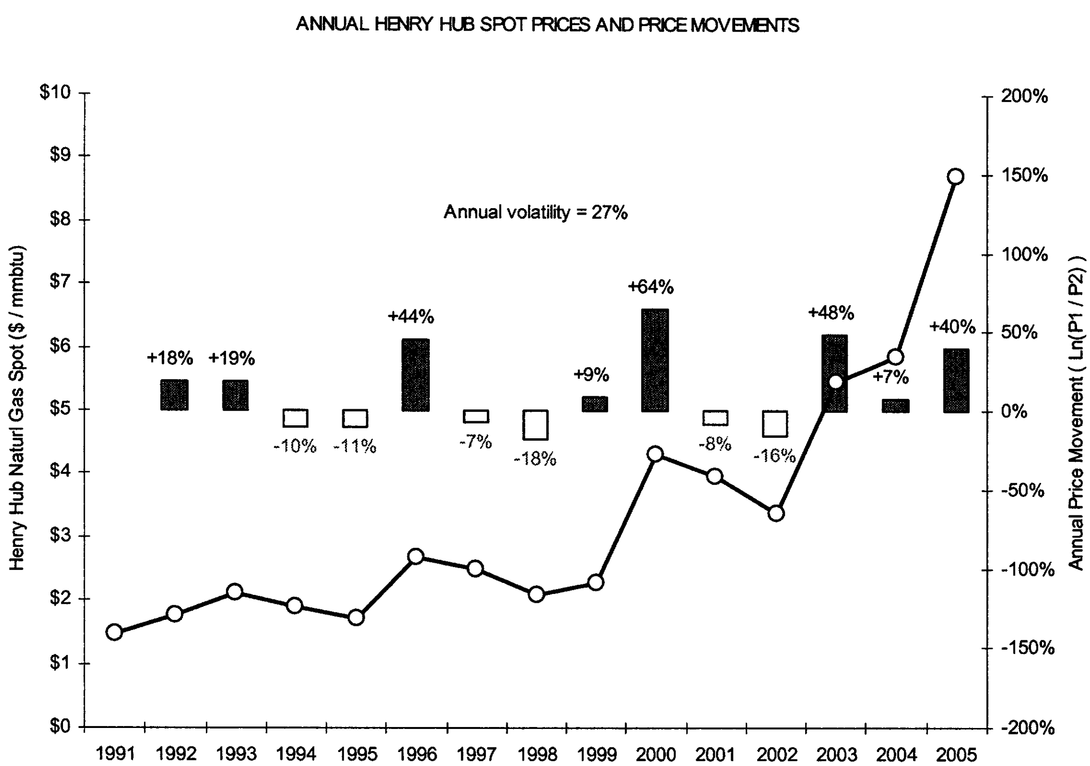
Figure 4 – Monthly Natural Gas Spot Prices 1991-2005



Q: Can you measure the volatility of the price changes over this period?

A: Yes. The statistical convention for measuring historical volatility is as a percentage change from period to period. The general convention is to calculate volatility using the natural logarithm of the ratio of the price in a given year to the previous year's price. As shown in Figure 5 below, the annual average Henry Hub spot prices (left vertical axis) for natural gas since 1991 are shown as a line graph. The annual price changes (right vertical axis) are shown as bars corresponding to price increases or price decreases. Although we recently think of natural gas prices as increasing (and there has been an increase overall since 1991), there is significant upward and downward volatility over this period. The price increased in eight of the fourteen years and decreased in the other six.

Figure 5 – Annual Gas Prices and Volatility



The annual volatility over this period is calculated at 27%. The impact of this amount of volatility on the Off-System Contribution Margin is magnified by the leveraging effect of sales from a baseload unit in hours in which gas units set the SPP-North market price.

Q: Please explain what you mean by the leveraging effect of gas prices.

A: Simply put, the leveraging effect means that for a 1% change in gas price, there will be a greater than 1% change in Off-System Contribution Margin. Suppose, for example, the incremental cost of generating power for off-systems sales from a coal unit in a particular hour is $30/mwh (or $0.03/kwh). Also suppose that gas is on the margin in SPP-North in that hour, resulting in a market heat rate of 10,000 btu/kwh, and that the price of gas is $6.00/mmBtu (or $0.00006/btu). Then, the spot market price is by definition 10,000 btu/kwh multiplied by $0.00006/btu, and equal to $.06/kwh or $60/mwh. The margin earned by the coal unit in that hour is $30/mwh (revenues of $60 less cost of $30). If the price of gas increases by 27%, the impact on the margin is leveraged. The new price of gas is $7.62/mmBtu and the spot market price increases proportionately (assuming the market heat rate remains constant because gas is on the margin) and now equals $.0762/kwh or $76.20/mwh (calculated as 10,000 btu/kwh multiplied by $0.0000762/btu). However, the margin for that hour is now $46.20/mwh (revenues of $76.20 less cost of $30), an increase of 54%, which is in fact double the increase in the gas price. The size of the leverage in any hour where gas is on the margin varies depending on the size of the original margin compared to the incremental cost. In the simple example described above, the margin of $30/mwh was equal to the incremental cost, resulting in a doubling of the impact of the gas price increase. If the original incremental cost had been $45/mwh, and the margin only $15/mwh, the impact of this leverage would have been an increase of 108% (i.e., to quadruple the price effect of the natural gas increase).

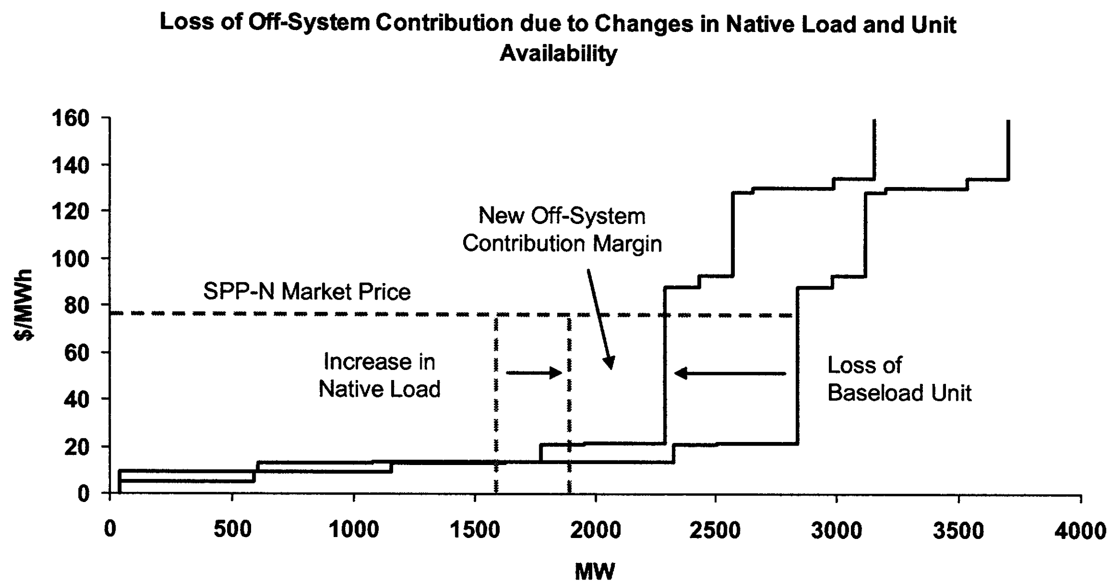
Q: Please explain the volatility impact on price and on the Off-System Contribution Margin from changes in the market heat rate.

A: Electricity market prices are the product of natural gas prices and the market heatrate in a given period. The market heatrate is simply the ratio relating gas prices to electricity prices but it is itself an uncertain variable. The market heat rate in SPP-North is a function of the regional supply-demand balance in SPP-North in any given hour (See Figure 2 for an illustration of this). Depending on load levels and the availability of generating units, the point at which supply and demand intersect can change significantly from hour to hour and year to year. Put another way, which units (peakers, gas combined cycles, coal, etc.) set the regional market price, and how often a given type of unit sets the price is uncertain. If demand is high (or supply low due to unit outages), a relatively high heatrate unit will set the price, while if demand is low a low-cost coal unit will set the price. Even if there is no gas price volatility, changes in the supply demand-balance will result in different units being on the margin in different time periods and consequently electricity prices will fluctuate. This uncertainty is driven by several underlying factors: coal and emission allowance prices, weather (relatively extreme temperatures elevate demand), fluctuations in economic activity and demographics, unit availability (particularly extended outages), and construction/retirement of generating units throughout SPP.

Q: Please explain the volatility impact on the Off-System Contribution Margin from changes in the sales quantity.

A: As total off-system revenues are the product of the price realized times the quantity available for sale, variability in available sales quantity can also significantly affect Off-System Contribution Margin. The two biggest factors in the quantity available for sale are unit availability and KCPL's Native Load. As shown in Figure 6 below, a unit outage and/or an increase in Native Load can reduce the size of the Off-System Contribution Margin.

Figure 6 – Impact of Loss of Baseload Unit and Increase in Native Load



Q: **How does the loss of a baseload generation unit in a given hour reduce the potential contribution margin in that hour?**

A: Compare the illustrative KCPL supply curve in Figure 6 to to the supply curve shown in Figure 1. Assuming a large baseload unit is unavailable because of planned maintenance or a forced outage, the supply curve shifts to the left, decreasing the area under the horizontal SPP-North market price line and to the right of the vertical KCPL Native Load line. Other higher-priced KCPL units are available, but are not economic to dispatch at that particular market price.

Q: **How does the increase in Native Load in a given hour reduce the potential contribution margin in that hour?**

A: Again, compare the illustrative KCPL supply curve in Figure 6 to that in Figure 1. If the Native Load and "Firm" wholesale sales volumes increase, then all other things equal, there will be a smaller amount of economic output available for off-system sale at market prices. Mr. Burton Crawford's testimony discusses the nature of these "supply" risks to KCPL's Off-System Contribution Margin in greater detail.

Q: Can you provide an illustration of how these uncertainties can cause actual annual Off-System Contribution Margin to be different than the contribution level that would have been forecast at the beginning of the prior year?

A: Yes. I performed an historical analysis of the off system contribution for each of the years 2002 to 2005 to take account of the natural gas price forecast risk only. For each year, I compared the actual average annual spot price for natural gas to the forward price for that year in January of the preceding year. For example, I compared the actual average annual spot price in 2002 ($3.69/mmBtu) to the January 2001 forward price for calendar 2002 deliveries ($4.27/mmBtu). I prepared a "forecast" of the Off-System Contribution Margin as of January of the preceding year by adjusting the actual margin to account for the difference between the forward price data and the actual spot price data. This "forecast" implicitly assumes perfect foresight with respect to the market heat rate and the sale quantity, and takes account only of the fact that a forecast in January of the prior year would be based on forward price data available at that time.

The results, as detailed in Schedule MMS-2, show that a forecast 12 months prior to the calendar year in question could have overestimated or underestimated the level of actual Off-System Contribution Margin by as much as 141%, depending on the degree to which gas prices fluctuated between the time of the forecast and the realized sales. The results are also summarized in Table 1 below.

Table 1

[CONFIDENTIAL]

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

As Table 1 shows, in each of the 4 years, average spot prices turned out to be significantly different than the forward prices in January of the preceding year – ranging from 14 percent lower in 2002, to 76 percent higher in 2005. As a result, "forecast" off system margin would have been significantly different than the actual margin in each year, with an average "error" of 78 percent. And this illustrative analysis accounts only for natural gas price uncertainty. The error band could well have been wider if market heat rate and sales volume uncertainty had been incorporated.

Q: Do past realized Off-System Contribution Margins provide a good prediction for the future?

A: In general, no. The Company's future Off-System Contribution margins will depend on future electricity and gas prices, loads, fuel prices, and unit availability. As Figure 4 shows for natural gas prices, relatively recent past prices (over 2002-2004 for example) provide a very poor prediction for the current level of prices. Basing a future prediction of Off-System Contribution Margin on historical margins realized during a period of much lower gas prices could produce a very inaccurate result. The best current predictor of future commodity prices and the associated future Off-System Contribution Margin are visible forward market prices. A forecast of Off-System Contribution Margin that takes into account all available forward market information provides the most accurate, unbiased prediction of future Off-System Contribution Margins. That is not to say that actual results will not turn out to be different – they likely will – but a forecast based on forward price data is the best that can be done.

III. QUANTIFICATION OF VOLATILITY

Q: Please elaborate on your second overall conclusion.

A: Generally, the volatility of the Off-System Contribution Margin depends on gas prices, market heat rate and sales quantity. I prepared an estimate of the probability distribution of 2007 Off-System Contribution Margin using a simplified forecast and dispatch model. The results, as detailed in Schedule MMS-3, show a very broad probability distribution ranging from **[redacted]** at the 5% and 95% confidence levels, respectively. This means that there is a 90% likelihood that the Off-System Contribution Margin will be between **[redacted]**, and a 5% chance that the margin will be less than **[redacted]** and a 5% chance that the margin will be greater than **[redacted]**. The 70% confidence interval is not much narrower **[redacted]**.

Q: Please describe the methodology used to develop the distribution of 2007 Off-System Contribution Margin.

A: My methodology had five primary steps. First, I used the energy price, fuel price, and load forecasts and volatilities to develop 200 equally-likely scenarios for each variable. I also constructed 200 equally-likely forced outage scenarios for each generating unit in KCP&L's supply portfolio. The scenarios incorporate the correlation between variables, such that if natural gas prices and oil prices are highly correlated, a high gas price scenario will correspond to a high oil price scenario. Second, for each of the 200 scenarios I calculated a daily dispatch cost for each of KCPL's units. Sorting these dispatch costs from least to greatest, I developed the optimal dispatch order of units for each scenario. Third, I calculated the total available capacity for each unit, taking into account both planned outages and scenario-specific forced outages, as well as any long-term sales agreements and call obligations that could reduce the capacity available to serve KCPL's native load. Fourth, starting with the most economic unit, I compared each unit's dispatch costs and available capacity with the hourly market prices and native load, respectively. For all units with a dispatch cost less than the market price, the available capacity was assigned to serve first up to 100% of native load with any excess capacity assigned to off-system sales. Fifth, I calculated the hourly contribution margin by subtracting the dispatch cost from the hourly market price and multiplying by the available capacity. The 200 scenarios of hourly contribution margin data were aggregated to daily, monthly and annual estimates. Finally, I estimated a distribution of 2007 Off-System Contribution Margin based on the characteristics of the 200 equally-likely scenarios. A description of the key inputs to the analysis is set out in Schedule MMS-4.

IV. RISK AND VOLATILITY

Q. Please elaborate on your third conclusion.

A: The significant risk from volatility in Off-System Contribution Margin described above must be borne by either shareholders or customers, or be shared between them. Any mechanism that places this risk on customers in order to insulate shareholders from earnings volatility during the construction of Iatan Unit 2 would necessarily result in significant retail rate volatility. The potential types of mechanisms the Company considered are described by Mr. Giles in his testimony. The Company has chosen a proposed mechanism that establishes the offset to test year revenue requirements below the median value of the probability distribution shown in Schedule MMS-3. Mr. Giles proposes to establish the offset at the 25^{th} percentile of this distribution as shown in Schedule MMS-5. The Company's proposal places the risk from volatility in the Off-System Contribution Margin, and the cost and responsibility for hedging this risk, with the shareholders.

Q: How could the Company hedge its risk?

A: Because of the absence of a liquid forward electricity market in SPP-North, the opportunities to hedge spot market price risk by selling electricity forward are limited. KCPL could either construct a gas hedge by selling NYMEX gas contracts forward, or attempt to enter into bilateral electricity forward sale contracts. I have attempted to estimate the effects of implementing each of these hedge strategies.

Q: Please explain the methodology used to determine potential hedging strategies.

A: The overall objective of a financial hedge would be to minimize the variance, or spread, of the 2007 Off-System Contribution Margin. The hedge can be viewed as a separable financial product that produces cash flows that are negatively correlated with Off-System Contribution Margin. That is, the hedge produces negative cash flows when margin is relatively high and positive cash flows when margin is relatively low. To develop a hedging strategy, I solved for the quantity of monthly natural gas or electricity forward sales that minimized the variance of Off-System Contribution Margin in each month. The degree to which a given hedge reduces variance is a function of how well correlated the hedging instrument is with the Off-System Contribution Margin. For example, electricity prices are more strongly correlated with the margin and therefore hedging with electricity forward products reduces the variance to a greater degree than hedging with natural gas forwards. However, as noted earlier, there is no liquid forward electricity market in SPP.

Q: What instruments did you use to construct a hedge for the 2007 Off-System Contribution Margin?

A: I employed, separately, NYMEX natural gas forwards and assumed SPP bilateral power sales. Schedule MMS-6 shows the effect of these forward sales on the distribution of 2007 Off-System Contribution Margin. Hedging costs are not incorporated in my analysis, and therefore the median or 50th percentile of the three distributions remains unchanged from the original **[redacted]**. What does change is the variance, or spread of the outcomes. Using NYMEX natural gas forwards as a hedge increases the Off-System Contribution Margin at the 5% level from **[redacted]**. The SPP bilateral power sales, to the extent they are available, are more highly correlated to the Off-System Contribution Margin and thus are a more effective hedge. Using the SPP bilateral power sales hedge, the Off-System Contribution Margin at the 5% level increases to **[redacted]**. However, the ability of the Company to enter into these bilateral sales is not certain.

Q: How does the Company's proposed off-system sales offset of **[redacted] compare to the resulting hedged distributions?**

A: Schedule MMS-7 shows the original 2007 margin distribution and the two hedging cases and the Company's proposed off-system sales offset of **[redacted]**. As discussed previously, the original 2007 distribution implies that there is a 25% chance that the margin will fall below **[redacted]**. Hedging minimizes the variance and reduces the probability that the **[redacted]** will not be realized. Using NYMEX natural gas forwards and SPP bilateral power sales reduces the probability to 19% and 11%, respectively.

Q: What is the likely cost of entering into hedge strategies described above?

A: I have calculated a preliminary estimate of a $3 million annual cost for the NYMEX gas hedge strategy based on brokerage costs incurred when entering and exiting contracts, bid/ask spreads, as well as margin and mark-to-market security requirements. The costs of a bilateral hedge are much more difficult to estimate given the lack of an organized term market and the potential counter-party credit risk, but these costs should be no less than the costs of the gas hedge and could be significantly greater.

Q: Does this conclude your testimony?

A: Yes.

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 Begin the Implementation of Its Regulatory Plan	)))	Case No. ER-2006-____

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 Lincoln, 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 Direct Testimony on behalf of Kansas City Power & Light Company consisting of twenty (20) pages and Schedules MMS-1 through MMS-7, all of which 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
Michael M. Schnitzer

Subscribed and sworn before me this 27th day of January 2006.

Patricia Ann Tobin
Notary Public

My commission expires: June 23, 2006

Patricia Ann Tobin
Notary Public
My Commission Expires
June 23, 2006

MICHAEL M. SCHNITZER **Director**

Michael Schnitzer is a co-founder and Director of The NorthBridge Group. He focuses on management consulting and works with clients in regulated industries to address strategy issues central to maximizing performance. Helping clients develop effective responses to increasingly deregulated markets is central to Mr. Schnitzer's work for electric and gas utilities. He has developed initiatives in marketing, pricing, regulatory relations and supply planning. He also has broad experience in utility reorganizations, having served as a financial advisor to secured parties in three utility bankruptcies and has developed and evaluated a wide array of restructuring proposals. Mr. Schnitzer's project assignments have included:

- Helped develop and analyze alternative restructuring plans, including resolution of such issues as residual vertical and horizontal market power, stranded costs, and ultimate organization of the competitive market for generation.
- Analyzed and developed various rate plans designed to return stranded costs to utilities, including appropriate length of transition periods, true-ups, access charges, and the like.
- Assessed transmission capacity and helped develop economically efficient transmission tariffs, including policies for encouraging economic transmission expansions.
- Estimated the likely price of competitive new generation for cogenerators and IPPs as a basis for assisting utilities in planning their pricing, capacity additions, and marketing plans.
- Analyzed rate levels and asset values under alternative financial structures and ratemaking treatments.
- Assessed short- and long-term opportunities in the wholesale electricity market and developed marketing plans and proposals for specific candidate buyers.

- Assisted in the development of acid rain compliance plans, including the merits of policies to require utilities to incorporate monetized environmental externalities in the resource planning process.

- Helped develop comprehensive cost recovery programs, including incentives, for utility-sponsored conservation and load management programs.

Mr. Schnitzer has testified before the public utility commissions of Arkansas, Delaware, Indiana, Maine, Maryland, Massachusetts, New Hampshire, New Mexico, New York, Ohio, Pennsylvania, Rhode Island, Texas, Vermont, and Wisconsin. He is a former adjunct research fellow at the Energy and Environmental Policy Center, John F. Kennedy School of Government, Harvard University.

Before joining NorthBridge, Mr. Schnitzer was a Managing Director at Putnam, Hayes & Bartlett, Inc., where he co-directed the firm's regulated industry practice. Prior to that he was a member of the executive staff of the Appalachian Mountain Club. His experience as assistant to the executive director included the development of financial models and organizational strategic plans, as well as the negotiation of multi-party real estate transactions and the settlement of environmental litigation.

Mr. Schnitzer received an A.B. in chemistry, with honors, from Harvard University, and an M.S. in management from the Sloan School, Massachusetts Institute of Technology.

SCHEDULE MMS-2
Pages 1-2

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SCHEDULE MMS-3

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Description of Inputs for Prospective Analysis

The primary components necessary to estimate the 2007 Off-System Contribution Margin are market electricity prices, fuel prices used to calculate the dispatch costs of KCPL's owned-generation, and native load levels. I calculated volatility and correlation parameters for each variable from historically observed prices and load levels. I then developed forecasts for each of the variables from the present through December 2007. The table describes the data used to develop the 2007 Off-System Contribution Margin distribution.

Variable	Source for Forecast	Source for Volatility and Correlation Estimates
Energy Price	Company SPP-N Regional Energy Price Forecast	Historical Megawatt Daily On-Peak and Off-Peak Day-Ahead Energy Prices
Natural Gas Price	Company SPP-N Delivered Gas Price Forecast	Historical NYMEX Henry Hub Natural Gas Forwards and Henry Hub – MidCon Basis Forwards
Coal Price	Company Delivered Coal Price Forecast	Historical Power River Basin Coal Forward Prices
Oil Price	Company Delivered Fuel Oil Price Forecast	Historical NYMEX NY Harbor No 2 Fuel Oil Forwards
SO_2 Price	Company SO_2 Allowance Price Forecast	Historical SO_2 Allowance Spot and Forward Prices
KCPL Native Load	Company Load Forecast	5 Years of Historical Hourly Company Load
Forced Outage Rate	Company Budget Assumptions	10 Years of Company Operating History
Planned Outage Rate	Company Budget Assumptions	N/A

SCHEDULE MMS-5

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