Exhibit No.:	
Issue:	Fuel Market Uncertainty and Fuel Costs; Fuel Inventory; SO_2 Emission Allowance Management Program
Witness:	Wm Edward Blunk
Type of Exhibit:	Direct Testimony
Sponsoring Party:	Kansas City Power & Light Company
Case No.:	ER-2009-____
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MISSOURI PUBLIC SERVICE COMMISSION

CASE NO.: ER-2009-____

DIRECT TESTIMONY

OF

WM. EDWARD BLUNK

ON BEHALF OF

KANSAS CITY POWER & LIGHT COMPANY

Kansas City, Missouri
September 2008

"[redacted]**" Designates "Highly Confidential" Information Has Been Removed.**
Certain Schedules Attached To This Testimony Designated "(HC)" Have Been Removed Pursuant To 4 CSR 240-2.135.

DIRECT TESTIMONY

OF

WM. EDWARD BLUNK

Case No. ER-2009-____

Q. Please state your name and business address.

A. My name is Wm. Edward Blunk. My business address is 1201 Walnut, Kansas City, Missouri 64106-2124.

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

A. I am employed by Kansas City Power & Light Company ("KCP&L" or "Company") as Manager, Fuel Planning.

Q. What are your responsibilities?

A. My primary responsibilities are to develop fuel price forecasts and strategies for fuel procurement and fuel inventory, which includes the development of strategies for and the management of KCP&L's sulfur dioxide ("SO_2") emission allowance inventory.

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

A. In 1978, I was awarded the degree of Bachelor of Science in Agriculture Cum Laude, Honors Scholar in Agricultural Economics by the University of Missouri at Columbia. The University of Missouri awarded the Master of Business Administration degree to me in 1980. I have also completed additional graduate courses in forecasting theory and applications.

Before graduating from the University of Missouri, I joined the John Deere Company from 1977 through 1981 and performed various marketing, marketing research, and dealer management tasks. In 1981, I joined KCP&L as Transportation/Special

Projects Analyst. My responsibilities included fuel price forecasting, fuel planning and other analyses relevant to negotiation and/or litigation with railroads and coal companies. I was promoted to the position of Supervisor, Fuel Planning in 1984. In 2007, my position was upgraded to Manager, Fuel Planning.

Q. Have you previously testified in a proceeding at the Missouri Public Service Commission or before any other utility regulatory agency?

A. I have previously testified before both the Missouri Public Service Commission ("MPSC") and the Kansas Corporation Commission ("KCC") in multiple cases on multiple issues regarding KCP&L's fuel prices, fuel price forecasts, strategies for managing fuel price risk, fuel-related costs, fuel inventory, and the management of KCP&L's SO_2 emission allowance inventory.

Q. On what subjects will you be testifying?

A. I will be testifying on changes in the fuel markets, fuel and fuel-related costs, fuel inventory, and KCP&L's SO_2 Emission Allowance Management Program. I will also report on the outcome of KCP&L's freight rate complaint case before the Surface Transportation Board ("STB").

I. CHANGES IN FUEL MARKETS and FUEL COSTS

Q. What is the purpose of this portion of your testimony?

A. The purpose of this portion of my testimony is to discuss historical changes in coal and natural gas fuel markets and the impact of those changes on KCP&L's cost of service ("COS").

Q. How do changes in fuel markets affect KCP&L's COS?

A. Changes in fuel markets affect KCP&L's COS in multiple ways. The first and most obvious impact is the effect of changes in fuel prices and their direct effect on fuel expense. Changes in fuel prices also affect off-system sales prices. KCP&L witness Michael Schnitzer discusses the impact of gas price uncertainty on off-system sales in his direct testimony.

Q. How have fuel prices changed since the Regulatory Plan Stipulation and Agreement was approved by the Commission in Case No. EO-2005-0329?

A. Schedule WEB-1 shows how fuel prices have changed over the past few years. The market prices for coal, natural gas and oil have increased dramatically since 2004. From December 2004 to June 2008 the mine price of Powder River Basin ("PRB") coal has increased 161%, the price of natural gas has increased 87% and the price of heating oil has increased 194%.

Q. When will fuel prices return to their historic norms?

A. While fuel prices probably will come off the levels we saw in June 2008, they may not return to the levels seen through much of the 1990s or even to those levels seen in the early part of this decade. It appears that the price of natural gas shifted up in early 2003 and has since established a new floor of about $5.60, which is more than double the average price from 1990 through 2002. Heating oil has been trading up since early 2002. Moreover the rate at which the price of heating oil is increasing has increased since about April 2004. PRB coal has been on an upward trend since June 2004.

Natural Gas Price Hedging

Q. Does KCP&L have a program for managing the price risk of natural gas?

A. Yes. In 2001, KCP&L implemented a Natural Gas Price Risk Hedging Policy approved by the KCP&L Risk Management Committee.

Q. Please describe KCP&L's natural gas price hedging program.

A. In 2001, KCP&L retained Kase and Company, Inc. ("Kase and Company"), a risk management and trading technology firm, to assist in establishing a risk management program, which employs a disciplined, methodical approach to hedging. KCP&L's program is oriented toward finding a balance between the need to protect against high prices while not unreasonably limiting opportunities to purchase gas at low prices. This balance is sought through the use of Kase and Company's HedgeModel. The objective of KCP&L's price risk management program is to reduce the price risk inherent with floating with the market.

**[redacted]

[redacted]

[redacted]**

Q. How does KCP&L determine the amount of natural gas to hedge under its price risk management program?

A. **[redacted]

[redacted]**

Q. How often does KCP&L use the HedgeModel?

A. KCP&L monitors the HedgeModel daily. **[redacted]

[redacted]**

Q. How well has this program performed for KCP&L?

A. **[redacted]**

Coal Price Hedging

Q. Does KCP&L have a program for managing the price risk of coal?

A. Yes, it does.

Q. Please describe KCP&L's coal price hedging program.

A. **[redacted]**

[redacted]**

Q. How has this strategy performed for KCP&L?

A. **[redacted]**

[redacted]**

Q. How has the price of KCP&L's coal changed over the past few years?

A. **[redacted]

[redacted]**

Fuel Price Forecast

Q. What fuel prices did KCP&L use to develop its COS?

A. I provided KCP&L witness Burton Crawford projected fuel prices that he used to develop the annualized fuel expense included in COS that resulted in Adj-38, "Annualize Fuel Expense at contract prices for net system input normalized for weather and annualized for

customer growth" included in Schedule JPW-2 of the direct testimony of KCP&L witness John P. Weisensee. We expect to true-up these projected prices to actual prices during the course of this proceeding.

Q. How did you forecast the natural gas prices?

A. Natural gas prices for the 12 months from April 2008 through March 2009 were used to develop the cost of natural gas in the COS. Natural gas prices for April 2008 through July 2008 are based on the first of the month index price published in Platt's *Inside FERC*. Monthly natural gas prices for August 2008 through March 2009 are based on the average of the six (6) business days from June 30 through July 8, 2008, for the NYMEX closing prices for the August 2008 through March 2009 Henry Hub natural gas futures contracts. These monthly Henry Hub prices were then adjusted for basis using the average of the six (6) business days from June 30 through July 8, 2008, for the NYMEX ClearPort Panhandle Basis Swap futures contracts. These basis-adjusted values for August 2008 through March 2009 and the *Inside FERC* first of the month index prices for April 2008 through July 2008 were used to develop the cost of natural gas in the COS. Natural gas transportation and hedging related costs were included in the COS as "fuel adders." We expect to true-up natural gas prices to actual during the course of this proceeding.

Q. How did you forecast the oil prices?

A. Oil prices are handled differently than natural gas because KCP&L uses oil differently. Oil is used primarily for flame stability and start-up at coal units. The price of oil used for flame stability and start-up is based on the average of the six (6) business days from June 30 through July 8, 2008, for the NYMEX closing prices for the March 2009 heating

oil futures contract. The heating oil futures contract price is adjusted for basis and transportation to determine the station specific delivered cost. Northeast, on the other hand, uses oil as a primary fuel. For modeling purposes, Northeast was dispatched using replacement fuel prices like those used for flame stability and start-up. Northeast fuel expense, however, was determined using Northeast's projected average inventory value. We expect to true-up oil prices to actual during the course of this proceeding.

Q. How did you forecast the coal prices?

A. The March 2009 delivered prices of PRB coal were forecast as the sum of mine price and transportation rate. **[redacted]**

About five (5) percent of KCP&L's expected coal requirements for 2009 have not been committed. The price for that portion of KCP&L's coal purchases was based on the average of the six (6) business days from June 30 through July 8, 2008, for the average of the bid and ask prices for calendar year 2009 8400 PRB coal as reported by TFS Energy.

Freight rates for those shipments of PRB coal that are under contract with a railroad were forecast by using indices forecast by Global Insight to drive the contractual pricing mechanism. For those shipments under STB prescription, the freight rates are those published pursuant to the STB rate prescription order.

The March 2009 price for KCP&L's long-term bituminous coal contract was the contractually specified price for 2009.

We expect to true-up coal prices and freight rates to actual during the course of this proceeding.

Q. Are there costs related to fuel and included in Adj-38 that are not included in the price of fuel?

A. Yes. Generally those costs fall into two categories: "fuel adders" and "fuel additives." The fuel adders include unit train lease expense, unit train maintenance, unit train property tax, unit train depreciation, natural gas hedging costs, and costs associated with transporting natural gas. Fuel additives include ammonia, lime, limestone, and sulfur which are used to control emissions. We expect to true-up these costs to actual during the course of this proceeding.

Q. Please describe the unit train-related expenses.

A. Unit-train related expenses included in Adj-38 are as follows:

- Unit train lease expense which is disaggregated into two components:
  - Long-term unit train lease expense; and
  - Short-term unit train lease expense.
- Unit train maintenance expense consisting of:
  - Foreign car repair;

Shared expenses; and

Maintenance and repair of KCP&L's railcar fleet.

Long-Term Unit Train Lease Expense: The amount presented here for unit train lease expense reflects KCP&L's share of the long-term lease payments that will be made for unit trains that will be in KCP&L's service in March 2009.

Short-Term Unit Train Lease Expense: Short-term unit train lease expense has two subcomponents. The first reflects our estimate of KCP&L's net lease expense under our unit train exchange agreement. That agreement allows us to exchange trainsets among the different plants within our system recognizing that ownership interests in Iatan and LaCygne are different from those of Hawthorn and Montrose. The other subcomponent is our estimate of railcar capacity that will be acquired through the short-term railcar lease market to move KCP&L's coal requirements.

Foreign Car Repair: This represents the cost of repairing railcars that are running in service for KCP&L but are not owned by or under a long-term lease to KCP&L.

Shared Expenses: These are costs for things like Association of American Railroads ("AAR") publications, Universal Machine Language Equipment Register ("UMLER") fees, and railcar management software fees that cannot be assigned to an individual car.

Maintenance and Repair of KCP&L's Railcar Fleet: These repair values reflect KCP&L's projection for 2009 given the age and makeup of the railcar fleet.

Q. Are there unit train-related expenses that are not included in Adj-38?

A. Yes, unit-train related expenses for ad valorem private car line taxes and railcar depreciation are not included in Adj-38. Ad valorem private car line taxes are included in Adj-33B. Depreciation for railcars is included in Adj-98A.

Q. How did you determine the natural gas hedging costs?

A. The natural gas hedging costs are the actual costs incurred to hedge natural gas for summer 2008.

Q. How did you determine the settlement values for the natural gas hedge program?

A. The natural gas hedge program settlement values were calculated based on our existing natural gas hedge portfolio and the natural gas price forecast described above.

Q. What are the costs associated with transporting natural gas?

A. The costs components for transporting natural gas include the following: reservation, commodity, minimum annual payment, commodity balancing fees, transportation charges, access charges, mileage charges, fuel and loss reimbursement, FERC annual charge adjustment, storage fees, and parking fees.

Q. How did you determine the costs associated with transporting natural gas?

A. I disaggregated the costs of transporting natural gas into its various components. For those items specifically defined by tariff or contract, we used the defined mechanism. I estimated parking fees based on prior period actuals. Those subcomponents were then aggregated and added to the specific tariff costs to determine the total cost of transportation. These costs are included in KCP&L's COS as fuel adders.

Q. What are fuel additives?

A. Fuel additives, which include pollution control reagents, are commodities that are consumed in addition to the fuel either through combustion or chemical reaction. For example, ammonia is added to a stream of flue gas where it reacts with NOx as the gases pass through a catalyst chamber. Lime (or limestone) is added to the flue gas stream in a flue gas desulfurization module to "scrub" SO_2. Sulfur is added to the flue gas stream to

act as a conditioning agent which reduces the resistivity of the flyash enabling electrostatic precipitators to operate at higher power levels enhancing collection of the flyash and reduction of opacity.

Q. How did you determine the cost of the fuel additives?

A. The cost was determined as the quantity times price where price was the value projected for the true-up and quantity was normalized based on historical usage. For additives that lack historical data we estimated normal usage. We expect to true-up these costs to actual during the course of this proceeding.

Q. What is "Adj-62 STB Litigation" as shown in the Summary of Adjustments in Schedule JPW-2, attached to the direct testimony of KCP&L witness John P. Weisensee?

A. The Company filed a rate complaint case on October 12, 2005, with the STB. In that rate complaint, KCP&L charged that Union Pacific Railroad ("UP") rates for the movement of coal from origins in the PRB of Wyoming to KCP&L's Montrose Generating Station were unreasonably high. Adj-62 has two components related to this rate complaint case, one affecting rate base and the other affecting operating income. KCP&L witness John P. Weisensee discusses these adjustments in his direct testimony.

Q. Why did KCP&L file a rate complaint with the STB?

A. KCP&L's Montrose Station is captive to UP; that is, UP is the only railroad that holds out to provide coal delivery service from Southern Powder River Basin ("SPRB") to the Montrose Station. In anticipation of the need for unit train coal service to Montrose Station after 2005, KCP&L expressed to UP its desire to negotiate an extension of the 1995-2005 contract or a new contract. Consistent with the public pronouncements made

at the unveiling of its Circular 111 (tariff) program in March 2004, UP insisted that it would only transport SPRB coal to Montrose Station after December 31, 2005, under rates and terms set forth in Circular 111. According to UP's 2004 Annual Report, this tariff was intended to be a "new coal pricing mechanism for all shipments from Southern Powder River Basin (SPRB) in Wyoming...." In the absence of a successor agreement to its existing contract, KCP&L had no means to procure SPRB coal delivery service to the Montrose Station other than under the terms of UP's common carrier Circular 111 even though KCP&L did not consider the rates and service terms in the Circular to be equitable or reasonable. KCP&L accepted the terms of UP's Circular 111 under duress and subsequently filed a rate complaint with the STB, the agency that governs captive shipper rail rates.

Q. What is the status of the STB case?

A. On May 16, 2008, the STB found that the rates for Montrose exceeded 180% of the variable cost of providing service, which is the statutory floor for regulatory relief set forth in 49 U.S.C. 10707. Upon finding that the challenged rates exceeded the regulatory floor, the STB prescribed the maximum lawful rate where the revenue-to-variable-cost ratio ("R/VC ratio") equals 180% until the end of 2015. In addition, UP was ordered to reimburse KCP&L for amounts previously collected above that level. The Board estimated that such reimbursement of the overpayment for shipments made in 2006 would be $2.9 million. Our calculations show that overpayment is closer to $2.8 million.

Q. When did the new rate take effect?

A. July 18, 2008.

Q. When will you know how much was overpaid for shipments in 2007 and the first part of 2008?

A. The calculation of the overpayments on 2007 and 2008 shipments is waiting on actual cost data. Typically the actual costs are known and the rate can be calculated in third quarter of the year following shipment. 2006 was a bit unusual. Actual costs for 2006 could not be determined until April 2008 after the STB determined the railroad's cost of capital for 2006. We expect the STB will determine the railroad's cost of capital for 2007 in third quarter 2008. Assuming the STB follows that schedule, we expect to be able to determine the amount of overpayment for 2007 shipments shortly thereafter. The amount of overpayment for 2008 shipments will likely be determined in third quarter 2009.

Q. When do you expect to receive reimbursement for the overpayments?

A. We expect to receive reimbursement of the $2.8 million for 2006 overpayments by October this year. We expect to know the amount of overpayment for 2007 shipments and to receive reimbursement for such before the true-up in this proceeding. We estimate that additional reimbursement for 2007 overpayments will be $0.5 million.

II. FUEL INVENTORY

Q. What is the purpose of this portion of your testimony?

A. The purpose of this portion of my testimony is to explain the process by which KCP&L determines the amount of fuel inventory to keep on hand and how the level of fuel inventory impacts KCP&L's COS.

Q. Why does KCP&L hold fuel inventory?

A. KCP&L holds fuel inventory because of the uncertainty inherent in both fuel

requirements and fuel deliveries. Both fuel requirements and deliveries can be impacted by weather. Fuel requirements can also be impacted by generating unit availability; both the availability of the unit holding the inventory and the availability of other units in KCP&L's system. Fuel deliveries can also be impacted by breakdowns at a mine or in the transportation system. Events like the flood of 1993 and the 2005 joint line derailments interrupt the delivery of coal to KCP&L's plants. Fuel inventories are insurance against events that interrupt the delivery of fuel or unexpectedly increase the demand for fuel. All of these factors vary randomly. Fuel inventories act like a "shock absorber" when fuel deliveries do not exactly match fuel requirements. That is, they are the working stock that enables KCP&L to continue generating electricity between fuel shipments.

Q. How does KCP&L manage its fuel inventory?

A. Managing fuel inventory involves ordering fuel, receiving fuel into inventory, and burning fuel out of inventory. KCP&L controls inventory levels primarily through our fuel ordering policy. That is, we set fuel inventory targets and then order fuel to achieve those targets. We define inventory targets as the inventory level that we aim to maintain on average during "normal" times. In addition to fuel ordering policy, plant dispatch policy can be used to control inventories. For example, KCP&L might reduce the operation of a plant that is low on fuel in order to conserve inventory. Of course, this might require other plants in the system to operate more and to use more fuel than they normally would, or it might require either curtailing generation or purchasing power in the market. One can view this as a transfer of fuel "by wire" to the plant with low

inventory. To determine the best inventory level, KCP&L balances the cost of holding fuel against the expected cost of running out of fuel.

Q. What are the costs associated with holding fuel inventory?

A. Holding costs reflect cost of capital and operating costs. Holding inventories requires an investment in working capital. That requires providing investors and lenders those returns that constitute the cost of capital. It also includes the income taxes associated with providing the cost of capital. The operating costs of holding inventory include costs other than the cost of the capital tied up in the inventories. For example, we treat property tax as an operating cost.

Q. Please explain what you mean by the expected cost of running out of fuel?

A. The cost of running out of fuel at a power plant is the additional cost incurred when KCP&L must use replacement power instead of operating the plant. If the plant runs out of fuel and replacement power is unavailable, KCP&L could fail to meet customer demand for electricity. The cost of replacement power depends on the circumstances under which the power is obtained. We would expect replacement power (and the opportunity cost of forgone sales) to cost less at night than during the day and less on weekends than during the week. In other words, replacement power costs (and opportunity costs of forgone sales) are cyclical. A varying replacement power cost (or opportunity cost of forgone sales) translates directly into a varying shortage cost. As a result, if KCP&L was running low on fuel it could mitigate the shortage cost by selectively reducing burn when the cost of replacement power is lowest. During any significant period of disruption, we would expect many replacement power cost cycles.

Q. How does KCP&L determine the best inventory level, *i.e.*, the level that balances the cost of holding fuel against the expected cost of running out?

A. KCP&L uses the Electric Power Research Institute's ("EPRI") Utility Fuel Inventory Model ("UFIM") to identify those inventory levels with the lowest expected cost. UFIM identifies an inventory target as a concise way to express the following fuel ordering rule:

Current Month Order = (Inventory Target – Current Inventory)
+ Expected Burn this Month
+ Expected Supply Shortfall.

That is, UFIM's target assumes all fuel on hand is available to meet expected burn. "Basemat" is added to the available target developed with UFIM to determine KCP&L's inventory target. Generally, and in the rest of my testimony, references to inventory targets mean the sum of fuel readily available to meet burn plus basemat.

Q. What is basemat?

A. Basemat is the quantity of coal occupying the bottom eighteen inches of our coal stockpiles' footprint. It may or may not be useable due to contamination from water, soil, clay, or fill material on which the coal is placed. Because of this uncertainty about the quality of the coal, it is not considered readily available, but because it is dynamic and it can be burned, although with difficulty, it is not written off nor considered sunk. Eighteen inches was identified in previous KCP&L cases as being the error range for placement of a dozer blade or scraper on a coal pile and the appropriate depth for basemat. For determining basemat under our compacted stockpiles, we only consider the area of a pile that is thicker than nine inches. The area of the coal piles that covers either a hopper or concrete slab is not included in the calculation of basemat. The basemat

may need to lease additional trainsets. Those lease costs cause the marginal cost of fuel above normal levels to be slightly higher than the normal cost of fuel.

Q. What was the normal cost of fuel?

A. The normal fuel prices underlying all of the fuel supply cost curves were the same March 2009 projected prices I discussed earlier and that were used to determine the fuel expense in the COS, which KCP&L witness Burton Crawford discusses in his direct testimony.

Q. What did you use for the costs of running out of fuel?

A. There are several components to the cost of running out of fuel. The first cost is the opportunity cost of forgone non-firm off-system power sales. I developed that cost by constructing a price duration curve derived from the distribution of monthly non-firm off-system MWh sales for 2005 through 2007. I supplemented those points with estimates for purchasing additional energy and using oil-fired generation. The last point on the price duration curve is the socio-economic cost of failing to meet load for which I used KCP&L's assumed cost for unserved load. These price duration curves are referred to in UFIM as burn reduction cost curves. These burn reduction cost curves can vary by inventory, location and disruption.

Q. What fuel requirement distributions did you use?

A. In his testimony KCP&L witness Burton Crawford discusses how KCP&L uses the MIDAS^{TM} model as its production cost computer modeling tool for developing generation levels and resulting fuel expenses. The fuel requirement distributions used to develop the fuel inventory targets presented here were based on the burn projections underlying the fuel expenses discussed by Mr. Crawford.

Q. What do you mean by "normal" supply uncertainty?

A. We normally experience random variations between fuel burned and fuel received in any given month. These supply shortfalls or overages are assumed to be independent from period to period and are not expected to significantly affect inventory policy. To determine these normal variations, I developed probability distributions of receipt uncertainty based on the difference between historical burn and receipts.

Q. What are disruptions?

A. A disruption is any change in circumstances that persists for a finite duration and significantly affects inventory policy. A supply disruption might entail a complete cut-off of fuel deliveries, a reduction in deliveries, or an increase in the variability of receipts. A demand disruption might consist of an increase in expected burn or an increase in the variability of burn. Other disruptions might involve temporary increases in the cost of fuel or the cost of replacement power. Different disruptions have different probabilities of occurring and different expected durations.

Q. What disruptions did KCP&L use in developing its inventory targets?

A. KCP&L recognized three types of disruptions in development of its inventory targets:

- PRB capacity constraints;
- Fuel yard failures; and
- Major floods.

Q. Please explain what you mean by disruptions related to PRB capacity constraints.

A. Supply capacity is the ultimate quantity of coal that can be produced, loaded, and shipped out of the PRB in a given time period. Constraints to supply capacity can come from either the railroads or from the mines, but regardless of which of these is the constraint

source, the quantity of coal that can be delivered is restricted. A constrained supply caused by railroad capacity constraints can come from an inability of the railroad to ship a greater volume of coal from the PRB. A scenario such as this can arise from not having enough slack capacity to place more trains in service. It can also come from an infrastructure failure such as the May 2005 derailments on the joint line in SPRB I mentioned earlier. A constrained supply caused by the mines can come from situations such as there not being enough available load-outs, or not enough space to stage empty trains, or reaching the productive limits of equipment such as shovels, draglines, conveyors, and trucks or the mine reaching the production limits specified in its environmental quality permits.

Q. Please explain what you mean by disruptions related to fuel yard failures.

A. KCP&L and other utilities have experienced major failures in the equipment used to receive fuel. Perhaps KCP&L's most significant fuel yard failure occurred in 1986 when a conveyor belt caught fire at Hawthorn. The ensuing fire destroyed Hawthorn's normal facilities for unloading coal received by train. As used here, "disruption" is designed to cover a variety of circumstances that could result in a significant constraint on a plant's ability to receive fuel.

Q. Please explain what you mean by "Major flood" disruptions.

A. The third disruption we recognized in developing targets for this case was modeled after the 1993 flood. A large flood such as the flood of 1993 can lengthen railroad cycle times and curtail the deliveries of coal to generating stations. For example, at Iatan Station the average standard deviation in cycle time for the flood year is nearly double the standard

deviation of the year before or after the flood, and during the months most affected by flooding, the differences are even more substantial.

Q. How does KCP&L manage disruptions?

A. The target inventory levels presented here assume KCP&L will actively manage its fuel inventory. That is, the Company would take whatever actions were deemed appropriate to ensure an adequate supply of fuel was kept on hand for generating energy necessary to serve native load. If KCP&L runs low on fuel, it might secure additional train sets, if available, or it might choose to curtail generation and reduce burn. KCP&L would manage the cost of any such disruption to take advantage of replacement power cost cycles. This assumption allows us to operate with lower inventory targets.

Q. What are the coal inventory targets used in this case?

A. The coal inventory targets resulting from application of UFIM and their associated value for incorporation into rate base are shown in the attached Schedule WEB-3 (HC) and are the values used to determine Adj-51, "Adjust Fossil Fuel Inventories to required levels" included in the Summary of Adjustments in Schedule JPW-2 of the direct testimony of KCP&L witness John P. Weisensee. Since these coal inventory targets are a function of fuel prices, cost of capital and other factors that may be adjusted or trued-up in the course of this proceeding, we expect to adjust the coal inventory targets as necessary.

Q. How were the inventory values for ammonia, lime, limestone, and oil determined?

A. With the exception of ammonia and limestone for the Iatan Air Quality Control System ("AQCS") expected to be in service in early 2009, inventory values for ammonia, oil, lime and limestone were calculated as the average month-end quantity on hand for the 13-month period June 2007 through June 2008 multiplied by the June 2008 per unit

value, *i.e.*, the price for inventory per the Company's accounting records. The Iatan AQCS does not yet have an operational history with ammonia or limestone. Therefore the quantities of ammonia and limestone for Iatan were estimated. We expect to true-up inventory values and replace the estimated values with historical averages during the course of this proceeding. The inventory values for ammonia, lime, limestone, and oil are shown in Schedule WEB-3 (HC) and were included in the derivation of Adj-51.

III. KCP&L'S SO_2 EMISSION ALLOWANCE MANAGEMENT PROGRAM

Q. What is the purpose of this portion of your testimony?

A. The purpose of this portion of my testimony is to describe how KCP&L's SO_2 emission allowance management program impacts KCP&L's COS and rate base, to review the actions KCP&L has taken under its initial SO_2 Plan, and to describe KCP&L's 2008 SO_2 Plan.

Q. How does KCP&L's SO_2 allowance management program impact KCP&L's COS and rate base?

A. KCP&L was first authorized to manage its SO_2 emission allowance inventory, including the sales of such allowances, under the Stipulation and Agreement in Case No. EO-95-184. That Stipulation and Agreement and a similar Stipulation and Agreement under Case No. EO-2000-357, required KCP&L to record all SO_2 emission allowance sales proceeds as a regulatory liability in Account 254, Other Regulatory Liabilities. The Stipulation and Agreement concerning KCP&L's Regulatory Plan, which was approved by the MPSC in Case No. EO-2005-0329 ("Regulatory Plan Stipulation and Agreement") included a SO_2 Emission Allowance Management Policy ("SEAMP"), which provided for KCP&L to sell SO_2 emission allowances in accordance

with the initial SO_2 Plan submitted to the MPSC Staff, Office of Public Counsel ("OPC") and other parties in January 2005. While the Regulatory Plan Stipulation and Agreement also requires KCP&L to record all SO_2 emission allowance sales proceeds as a regulatory liability in Account 254, it further provides that KCP&L may recommend an appropriate amortization period for SO_2 emission allowance sales proceeds that have been booked to Account 254 to be included in the 2009 rate case revenue requirement.

Q. In the SEAMP included in the Regulatory Plan Stipulation and Agreement, KCP&L agreed to provide MPSC Staff and OPC an SO_2 Plan by December 31 each year. Did KCP&L submit a new SO_2 Plan prior to December 31, 2007?

A. Yes, we did. We submitted a "2008 SO_2 Plan" to MPSC Staff and OPC in December 2007.

Q. Describe how you developed the 2008 SO_2 Plan that KCP&L submitted in December 2007.

A. ** [redacted]

[redacted]

[redacted]

[redacted]

- [redacted]**

Q. Does the methodology you used to develop the 2008 SO_2 Plan meet the requirements defined in the SEAMP?

A. Yes, it does.

Q. Describe the proposed actions to be taken in 2008 by the 2008 SO_2 Plan.

A. **[redacted]

[redacted]

[redacted]**

Q. When is the 2008 SO_2 Plan effective?

A. The SEAMP states that the annual SO_2 Plan will be submitted by December 31 of each calendar year to be effective for the period commencing April 1 of the following year and ending March 31 of the next subsequent year. Consequently, the 2008 SO_2 Plan is effective from April 1, 2008 through March 31, 2009.

Q. How were the proceeds from the 2008 SO_2 Plan reflected in the COS?

A. **[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]**

Q. Please explain how Adj-28, "Deferred Gain on Emission Allowance Sales" was determined.

A. **[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]**

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-____

AFFIDAVIT OF WILLIAM EDWARD BLUNK

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

William Edward Blunk, appearing before me, affirms and states:

1. My name is William Edward Blunk. I work in Kansas City, Missouri, and I am employed by Kansas City Power & Light Company as Manager, Fuel Planning.

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-seven (27) 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 affirm and state 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.

William Edward Blunk

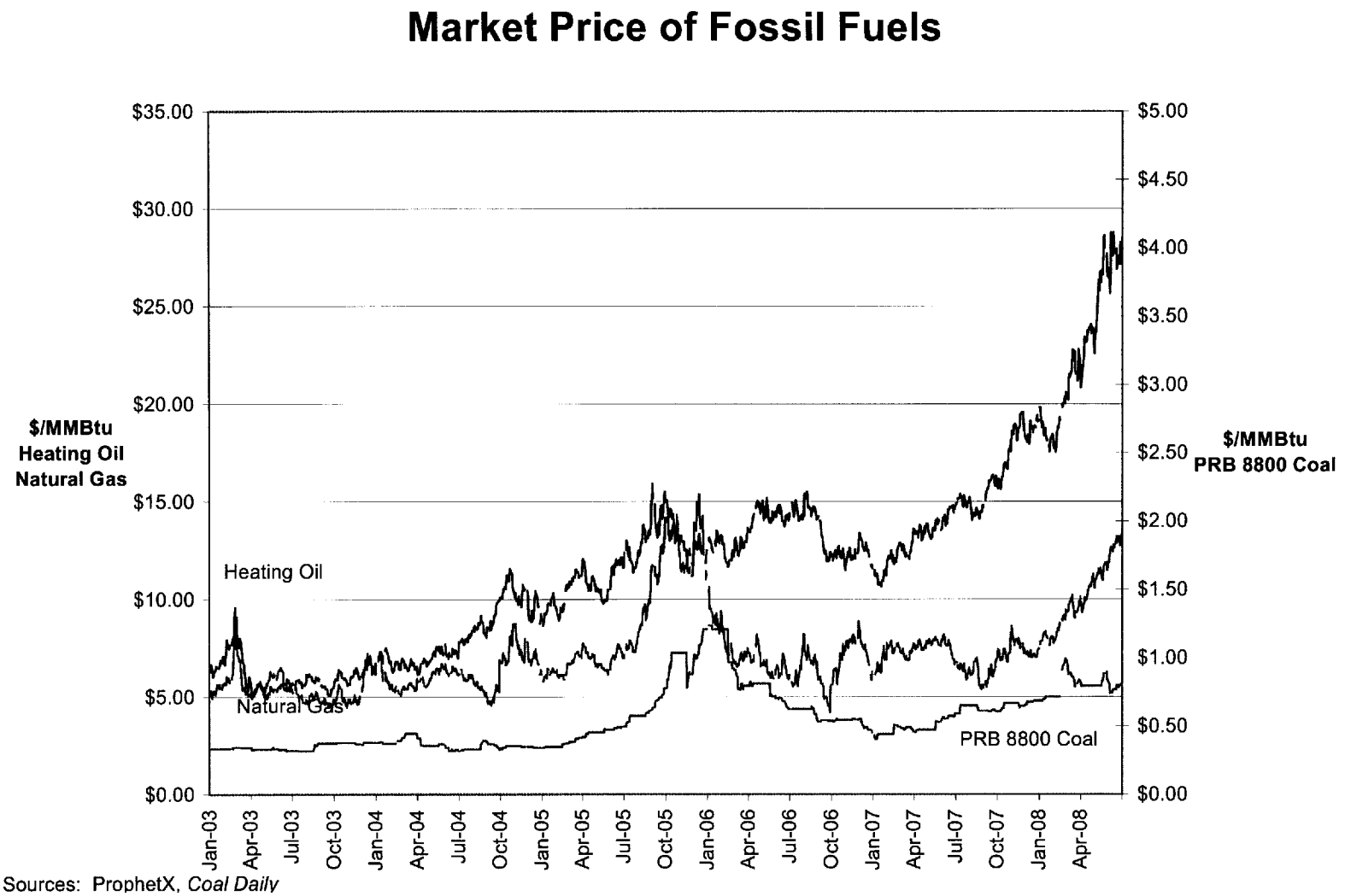
Subscribed and affirmed before me this 5th day of ~~August~~ September 2008.

Nicol A. Wehry
Notary Public

My commission expires: Feb. 4 2011

" NOTARY SEAL "
Nicole A. Wehry, Notary Public
Jackson County, State of Missouri
My Commission Expires 2/4/2011
Commission Number 07391200

Schedule WEB-1
shows how fuel prices have changed over the past few years



Sources: ProphetX, *Coal Daily*

SCHEDULES WEB-2 AND WEB-3

THESE DOCUMENTS CONTAIN HIGHLY CONFIDENTIAL INFORMATION NOT AVAILABLE TO THE PUBLIC