PRUDENCE REVIEW OF COSTS
RELATED TO THE FUEL ADJUSTMENT CLAUSE
FOR THE ELECTRIC OPERATIONS
OF
KCP&L GREATER MISSOURI OPERATIONS COMPANY

June 1, 2009 through November 30, 2010

MISSOURI PUBLIC SERVICE COMMISSION
STAFF REPORT

FILE NO. EO-2011-0390

Jefferson City, Missouri
November 28, 2011

****<u>Denotes Highly Confidential Information</u>****

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Prudence Review of Costs Report

I. Executive Summary

The Missouri Public Service Commission ("Commission") first authorized a Fuel Adjustment Clause ("FAC") for Aquila, Inc. ("Aquila") in Case No. ER-2007-0004. The Commission approved the acquisition of Aquila, by Great Plains Energy, Inc. and subsequently Aquila was renamed KCP&L Greater Missouri Operations Company ("GMO" or "Company")[1]. This acquisition became effective July 14, 2007. Since then, the Commission has approved continuation of GMO's FAC with modifications in its orders in the Company's general rate cases, Case No. ER-2009-0090 and File No. ER-2010-0356.

Missouri statute and Commission rule, Section 386.266.4(4) RSMo (Supp. 2010), and 4 CSR 240-20.090(7), respectively, require prudence reviews of an electric utility's FAC no less frequently than at 18-month intervals. In this prudence review Staff analyzed items affecting GMO's cost of fuel, purchased power, net emissions allowances, and revenues from off-system sales for the fifth, sixth and seventh six-month accumulation periods of GMO's FAC ("prudence review period"). The fifth accumulation period started June 1, 2009 and ended November 30, 2009, the sixth accumulation period started December 1, 2009 and ended May 31, 2010, and the seventh accumulation period started June 1, 2010 and ended November 30, 2010. Thus, the 18-month prudence review period that is documented in this Prudence Review Report is from June 1, 2009 through November 30, 2010. This is Staff's third Prudence Review Report for GMO's FAC.

Staff filed its first Prudence Review Report in File No. EO-2009-0115. That report covered the first two six-month accumulation periods of GMO's FAC—the period June 1, 2007 through May 31, 2008. Staff filed its second Prudence Review Report in File No. EO-2010-0167. That report covered the third and fourth six-month accumulation periods of GMO'S FAC—the period June 1, 2008 through May 31, 2009.

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[1] In Case No. EN-2009-0164 the Commission recognized, by order dated November 20, 2008 and made effective December 3, 2008, the name change of Aquila, Inc. d/b/a KCP&L Greater Missouri Operations Company to KCP&L Greater Missouri Operations Company. At different points in time the company now named KCP&L Greater Missouri Operation Company was known as, or did business in Missouri as, Aquila, Inc., Aquila Networks-MPS, Aquila Networks-L&P and KCP&L Greater Missouri Operations Company. For ease, in this report the Company will be uniformly referred to as "GMO" or "Company."

In evaluating prudence, Staff reviews whether a reasonable person making the same decision would find both the information the decision-maker relied on and the process the decision-maker employed was reasonable based on the circumstances at the time the decision was made, *i.e.*, without the benefit of hindsight. The decision actually made is disregarded and the review is an evaluation, instead, of the reasonableness of the information the decision-maker relied on and the decision-making process the decision-maker employed. If either the information relied upon or the decision-making process employed was imprudent, then Staff examines whether the imprudent decision caused any harm to ratepayers. Only if an imprudent decision resulted in harm to ratepayers, will Staff recommend a refund.

Staff analyzed a variety of items in examining whether GMO was prudent when making decisions related to costs and revenues associated with its FAC for the period June 1, 2009 to November 30, 2010.

Staff has found GMO was imprudent in its use of natural gas hedges to mitigate risk associated with its future purchases in the spot power market. Staff recommends the Commission order GMO to refund the amount of ** ________ **, plus interest at the Company's short-term borrowing rate through the time the refund is made, in the context of Cost Adjustment Factor ("CAF") filing number eight. CAF filing number eight is scheduled to be made January 1, 2012. It has an associated recovery period of March 1, 2012 to February 28, 2013.

II. Introduction

A. General Description of GMO's FAC

For each accumulation period, GMO's Commission-approved FAC allows GMO to recover (if the net costs exceed) or refund (if the net costs are less than) to its ratepayers ninety-five percent (95%) of the "net fuel cost" defined as the difference between its prudently incurred variable fuel, purchased power and net emissions costs plus off-system sales revenue, and the base energy cost amount. GMO accumulates variable fuel, purchased power and net emissions costs plus off-system sales revenue during six-month accumulation periods. Each six-month accumulation period is followed by a twelve-month recovery period where the over- or under-recovery during the previous six-month accumulation period relative to the base energy cost amount is flowed through to ratepayers by an increase or decrease in the

FAC CAF. An adjustment to the CAF is designed to offset that over- or under-recovery for a given accumulation period ("AP") by the end of the twelve-month recovery period ("RP"). Because the CAF rarely, if ever, will exactly match the required offset, GMO's FAC is designed to true-up the difference between the revenues billed and the revenues authorized for collection during recovery periods. Any disallowance the Commission orders as a result of a prudence review shall include interest at the Company's short-term interest rate[2] and will be accounted for as a true-up item.

The following three tables summarize the net fuel cost, true-up amounts and interest amounts for AP 5, AP 6 and AP 7 respectively. In general, revenues authorized for collection, but not billed, during a previous recovery period (true-up) are added to the net fuel costs of a future accumulation period. Interest is applied to net fuel costs, beginning with the month after the fuel costs occurred, and to the true-up for a recovery period, beginning with the month after the recovery period ends.

Table 1		
Fuel Adjustment: AP5 File No. EO-2010-0191		
True-Up: RP2 Case No. EO-2008-0415		
Rate Cases: Case Nos. ER-2007-0004 and ER-2009-0090		
Calendar Period: June 1, 2009 - November 30, 2009		
	Rate District	
Cost Component	MPS	L&P
95% Net Fuel Cost	$8,448,250	$177,607
True-Up	$804,362	$125,393
Interest	$216,064	$14,822
Total	$9,468,676	$317,822

[2] Rule 4 CSR 240-20.090(7)(A).

Table 2		
Fuel Adjustment: AP6 File No. ER-2010-0385		
True-Up: RP3 File No. ER-2010-0254		
Rate Case: Case No. ER-2009-0090		
Calendar Period: December 1, 2009 - May 31, 2010		
	Rate District	
Cost Component	MPS	L&P
95%Net Fuel Cost	$15,094,285	$2,554,639
True-Up	$768,873	$377,151
Interest	$421,355	$41,847
Total	$16,284,513	$2,973,637

Table 3		
Fuel Adjustment: AP7 File No. ER-2011-0179		
True-Up: RP4 File No. ER-2011-0180		
Rate Case: Case No. ER-2009-0090		
Calendar Period: June 1, 2010 - November 30, 2010		
	Rate District	
Cost Component	MPS	L&P
95% Net Fuel Cost	$16,189,677	$1,710,512
True-Up	-$185,256	$35,349
Interest	$559,589	$66,475
Total	$16,564,010	$1,812,336

Each total is the fuel and purchased power adjustment ("FPA") amount for the accumulation period which is used to determine the current period CAF for each subsequent recovery period. A period CAF rate is calculated for each recovery period by dividing the FPA amount by forecasted retail net system input (kWh) during the recovery period, rounded to the nearest $0.0001. The annual CAF rate is the sum of the applicable current and previous period CAF rates. A separate line item appears on each retail customer's bill with the label "FAC." That line item represents the charge to that customer to recover from that customer, that customer's share of the FPA for the applicable periods plus interest. Tables 4 and 5 show

GMO's CAF rates per kWh for AP 5, AP 6 and AP 7 for the MPS and L&P customers, respectively.

Table 4 : MPS			
Accumulation Period	AP 5	AP 6	AP 7
CAF Primary and above	$0.0070	$0.0065	$0.0054
CAF Secondary	$0.0071	$0.0065	$0.0055

Table 5 : L&P			
Accumulation Period	AP 5	AP 6	AP 7
CAF Primary and above	$0.0012	$0.0022	$0.0022
CAF Secondary	$0.0012	$0.0022	$0.0023

B. Prudence Standard

In *State ex rel. Associated Natural Gas Co. v. Public Service Com'n of State of Mo.*, 954 S.W.2d 520, 528-29 (Mo. App. W.D., 1997) the Western District Court of Appeals stated the Commission's prudence standard as follows:

> The PSC has defined its prudence standard as follows:
>
> [A] utility's costs are presumed to be prudently incurred.... However, the presumption does not survive "a showing of inefficiency or improvidence."
>
> ... [W]here some other participant in the proceeding creates a serious doubt as to the prudence of an expenditure, then the applicant has the burden of dispelling these doubts and proving the questioned expenditure to have been prudent. (Citations omitted).
>
> *Union Electric*, 27 Mo. PSC (N.S.) 183, 193 (1985) (quoting ***529** *Anaheim, Riverside, Etc. v. Fed. Energy Reg. Com'n*, 669 F.2d 799, 809 (D.C.Cir.1981). In the same case, the PSC noted that this test of prudence should not be based upon hindsight, but upon a reasonableness standard:
>
> [T]he company's conduct should be judged by asking whether the conduct was reasonable at the time, under all the circumstances, considering that the company had to solve its problem prospectively rather than in reliance on hindsight. In effect, our responsibility is to determine how reasonable people would have performed the tasks that confronted the company.
>
> *Union* Electric, 27 Mo. P.S.C. at 194 (quoting *Consolidated Edison Company of New York, Inc.* 45 P.U.R. 4th 331 (1982)).

In reversing the Commission in that case, the Court did not criticize the Commission's definition of prudence, but held, in part, that to disallow a utility's recovery of costs from its ratepayers based on imprudence, the Commission must determine the detrimental impact of that imprudence on the utility's ratepayers. *Id*. at 529-30

This is the prudence standard Staff has followed in this review.

III. Fuel and Purchased Power

The cost of fuel and purchased power for the purpose of GMO's FAC is comprised of four major components: Fuel Costs, Purchased Power Costs, Off-System Sales Revenue and Net Emission Allowances Costs.

A. Utilization of Generation Capacity

1. Description

GMO generates much of its own power. The following generating station units provided base load energy during the Prudence Review Period: Sibley 1, 2, and 3; Lake Road 4/6; Jeffrey Energy Center[3] 1, 2, and 3; and Iatan 1.[4] GMO's remaining units provided intermediate and peak energy. Those units are Greenwood 1, 2, 3 and 4; South Harper 1, 2, and 3; Ralph Green 3; Lake Road 1, 2, 3, 5 and 7; Nevada; and KCI 1 and 2. During 2010, Kansas City Power & Light Company was completing construction and startup of Iatan 2[5]. Iatan 2 began commercial operations in December 2010, which is one month beyond the period of this prudence review. A capacity balance sheet is included as Attachment 1.

2. Summary of Cost Implications

Staff reviewed the generation assets of GMO, and how GMO met its required load and reserve margin during the audit period. If GMO had been imprudently managing its generation capacity, *e.g.*, using its peaking units to serve base load demand, ratepayers could be harmed by increased fuel costs recovered through GMO's FAC.

3. Conclusion

Staff found no indication GMO imprudently dispatched its units during the Prudence Review Period.

4. Documents Reviewed

a. Commission Report and Order in File No. ER-2010-0356;

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[3] GMO is joint owner (8%) of the Jeffery Energy Center units.
[4] GMO is joint owner (18%) of Iatan 1.
[5] GMO is joint owner (18%) of Iatan 2.

b. GMO responses to Staff Data Request Nos. 0011, 0014, 0015, 0016, 0017, 0018, 0019, 0020, 0023, 0024, 0036, 0049 issued in this case; and

c. Monthly generation data GMO submitted in compliance with 4 CSR 240-3.190.

Staff Expert: Leon C. Bender

B. Utilization of Purchased Power Agreements

1. Description

In addition to obtaining power from the generating units it owns during the prudence review period, GMO received energy and capacity through three long-term purchased power agreements ("PPA"). GMO had two baseload PPAs with the Nebraska Public Power District and a wind energy PPA with Gray County Wind Farm. GMO also had a tolling agreement with Crossroads Energy Center ("Crossroads"). Crossroads is a four-unit generating station consisting of four combustion turbines ("CT") with a total capacity of approximately 300 MWs that is located in Clarksdale, Mississippi. It was originally built by Aquila Merchant Services Inc. as a merchant plant. GMO's tolling agreement entitled it to the capacity and the energy output of Crossroads in exchange for payments sufficient to cover the fixed and variable costs, "the toll", incurred to produce the energy output and maintain and operate Crossroads. In GMO's most recent general electric rate case, File No. ER-2010-0356, the Commission ordered the Crossroads station to be added to GMO's rate base in May 2011, well after the end of this prudence review period.

In addition to the three long-term PPAs, GMO had three short-term PPAs during the prudence review period for energy and capacity. These agreements were with Westar Energy for energy and capacity from the Dogwood combined cycle unit; Associated Electric Cooperative, Inc.; and Public Service Company of Colorado d/b/a Xcel Energy (both of which are system agreements).

2. Summary of Cost Implications

If GMO imprudently entered into one or more PPAs for additional energy to meet its demand, evidence of imprudence regarding the resulting purchased energy would only be found if the cost of the energy obtained through the PPA(s) exceeded the cost of generating the energy by GMO generating capacity or the cost of purchasing the energy on the spot market. If GMO imprudently entered into PPAs, ratepayer harm could result from an increase in costs to be collected through the FAC.

3. Conclusion

Staff found GMO's long-term, base-load agreements to be reasonable as they are below both the cost of generating power with its own peaking units and the cost of purchased power. Staff found GMO's short-term contracts to be reasonable as they were used to meet GMO's short-term peaking capacity requirements at a cost below the cost of generating power of GMO's highest cost peaking generating units. Staff found no indication of imprudence by GMO for entering into long-term and short-term purchased power contracts.

4. Documents Reviewed

a. GMO Responses to Staff Data Requests Nos., 0011, 0014, 0015, 0016, 0017, 0018, 0019, 0020, 0023, 0024 and 0049 in this case; and

b. Monthly purchases and sales data GMO submitted in compliance with 4 CSR 240-3.190.

Staff Expert: Leon Bender

C. Purchased Power Costs

1. Description

Staff reviewed spot market purchases and the results of GMO's natural gas hedging activities linked to spot market purchases.

In addition to the PPAs discussed above, GMO also purchases hourly energy in the market from other electric suppliers to help meet GMO's load during times of forced or planned plant outages and during times when the market price is below both the marginal cost of providing that energy from GMO's generating units and purchased power contracts.

GMO's FAC tariff defines the Purchase Power Costs ("PP") components as:

PP = Purchased Power Costs:

- Purchased power costs reflected in FERC Account Numbers 555, 565, and 575: Purchased power costs, settlement proceeds, insurance recoveries, and subrogation recoveries for increased purchased power expenses in Account 555, excluding SPP and MISO administrative fees and excluding capacity charges for purchased power contracts with terms in excess of one (1) year.

In its review of GMO's spot market costs for the review period, Staff found that GMO included in its spot market costs, along with the spot market energy costs, hedging losses associated with natural gas future contracts that it incurred in an effort to mitigate risk associated with purchasing spot market power. In a response to Staff's Data Request No. 56

directed to GMO, Mr. Ed Blunk of GMO explains GMO's purpose for linking natural gas future contracts to on-peak purchases of power in the following answer:

> ** ____ **

2. **Summary of Cost Implication**

Staff alleges GMO imprudently linked natural gas future contracts with spot market purchases for purchased power and sought recovery for the resulting hedging gains and/losses through the FAC. If GMO is allowed to recover these losses through the FAC, ratepayer harm will result from an increase in costs collected through the FAC.

3. **Conclusion**

The Staff does not find GMO's actions related to PPA costs to be imprudent; however, after reviewing the "PP" component of GMO's FAC, Staff does not find that the costs of hedging natural gas costs to mitigate risk associated with purchases of spot market power are recoverable as a component of "PP" in GMO's CAF calculation. As a result of reviewing GMO's FAC tariff sheets for this prudence review period, Staff finds that it was imprudent for GMO to include its hedging costs associated with purchases of natural gas futures contracts to mitigate risk associated with its on-peak spot market purchases in its fifth, sixth and seventh accumulation period CAFs. Staff knows of no formal organized market that allows for spot purchased power to be hedged which would aid GMO in mitigating the risk associated with buying spot market purchased power. It appears in the absence of such a formal market GMO has tried to create its own purchased power hedge market by purchasing NYMEX natural gas futures contracts to offset its risk in the spot market for purchased power. Staff concludes that purchasing natural gas futures contracts to mitigate risk associated with the purchase of spot purchase power is imprudent. The two markets (NYMEX Natural Gas and Purchase Power

Markets) are not directly linked sufficiently that a prudent person would use option purchases in the natural gas futures market to prudently offset the risk of price volatility in the spot purchased power market. Under GMO's concept, GMO's actions are akin to placing a bet in the stock market in hopes of generating enough cash to pay for a future variable expense. GMO's "hedging" practice actually increases GMO's risk exposure, to the detriment of GMO's ratepayers; GMO must guess right when placing the bet, otherwise the initial risk exposure to volatile spot purchase power market remains. GMO's linking of natural gas futures contracts with purchases it makes in the spot market for purchased power is imprudent.

Staff has determined GMO's total purchased power expense, that GMO is seeking to be recovered for the 18-month period reviewed, including hedging losses, is approximately ** ___________ **. In GMO's response to Staff's Data Request No. 0056, it reports the amount of hedging losses related to hedges placed to protect on-peak purchased power to be ** _______ ** for the period June 1, 2009 through November 30, 2010. GMO also reports, for the same period, its cost for purchases to be ** ___________ **.

Staff recommends the Commission find it was imprudent for GMO to link natural gas futures purchase contracts with spot market purchases for purchased power during the audit period of June 1, 2009 through November 30, 2010, and order GMO to refund the amount of ** _______ **, plus interest at the Company's short-term borrowing rate through the time the refund is made, in the context of CAF filing number eight. CAF filing number eight is scheduled to be made January 1, 2012. It has an associated recovery period number eight of March 1, 2012 to February 28, 2013

4. Documents Reviewed

a. GMO's responses to Staff Data Request Nos. 1, 2, 20, 55, 56, 58 & 59 in File No. EO-2011-0390 and GMO's responses to Staff Data Request No. 20 in File No. EO-2010-0167; and
b. GMO's filings in this case and FAC tariff sheets.

Staff Expert: Dana Eaves

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D. Plant Outages

1. Description

Outages occurring at any generating unit can have an impact on how much GMO will pay for fuel and purchased power, and could result in the Company incurring more fuel cost than necessary. Outages can be either planned or unplanned. Staff examined the outages and the timing of the outages to determine if the outages were prudent. An example of an imprudent outage would be planning an outage of a large coal unit during a peak demand period.

2. Summary of Cost Implications

An imprudent outage could result in GMO purchasing expensive spot market power or running its more expensive gas units to meet demand thereby causing the Company to incur higher fuel costs than it would otherwise have incurred. If GMO was imprudent in when it incurred its plant outages, ratepayer harm could result from an increase in the fuel costs that are collected through GMO’s FAC.

3. Conclusion

Staff found no indication GMO’s plant outages were imprudent during the time period examined in this prudence review.

4. Documents Reviewed

a. GMO responses to Staff Data Requests Nos. 0003, 0004, 0005, 0026, 0037 and 0050; and
b. Monthly Outage data submitted by GMO in compliance with 4 CSR 240-3.190.

Staff Expert: Leon Bender

E. Hedging Activities

1. Description

GMO’s natural gas hedging activities can be divided into two separate areas. The first can be described as a traditional natural gas price hedge plan. The second is best described as non-traditional hedging activities related to spot market purchased power.

In the first instance, through the use of financial hedges, GMO attempts to reduce the risk of operating natural gas generation plants by hedging against the fluctuations in price of natural gas used to generate electricity.

> Hedging is defined as:
>
> **hedging,** method of reducing the risk of loss caused by price fluctuation. It consists of the purchase or sale of equal quantities of the same or very similar commodities, approximately simultaneously, in two different markets with the expectation that a future change in price in one market will be offset by an opposite change in the other market.[6]

2. GMO's Natural Gas Hedging Practice

In response to Staff's data request No. 0055 Ed Blunk describes changes to GMO's hedging practice:

> KCP&L GMO (formerly Aquila) has been employing a natural gas hedging strategy developed by Kase and Company, Inc. since July 2007. In December 2010, [Kansas City Power & Light Company] consolidated its and GMO's natural gas hedge strategies. The consolidated hedge strategy is not significantly different than Aquila's July 2007 strategy.

Kansas City Power & Light Company's (KCPL) and GMO's joint Natural Gas Price Hedge Plan describe how Kase and Company, Inc. (Kase) assists KCPL and GMO with price risk management as follows:

> Kase and Company, Inc. (Kase) assisted KCPL and GMO in establishing natural gas price risk management programs, which employ disciplined, methodical approaches to hedging, This Price Hedge Plan combines both the KCPL and GMO (formerly Aquila) programs into one program. It is to be executed with ongoing consultation from Kase to ensure the models are being correctly applied and actions are filtered by sound business judgment. The 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 balanced approach is sought by apportioning the Hedge Volume between two different methodologies for evaluating current market prices. Those programs are Kase's HedgeModel and ezHedge.
>
> While both of Kase's models are effective there are differences between the two. HedgeModel is used to place hedges on any of the hedge strips using both fixed price instruments and options. HedgeModel also offers exit points that can be used to remove and restructure hedges. It offers the user some discretion in hedge placement and hedge instruments. ezHedge generates buy signals that can be embedded in physical purchases or executed via swaps or futures. It uses only one hedge length rather than the several used by HedgeModel. With ezHedge, positions are held to expiration, unless they are shifted to the HedgeModel positions.

[6] http://www.britannica.com/EBchecked/topic/259286/hedging.

Objective

> The objective of this price risk management program is to reduce the price risk inherent with floating with the market without substantively degrading the Company's overall competitiveness. The program's goals are to 1) protect the Company and its customers from large upward fluctuations in the price of natural gas and 2) assure a reasonable probability that budgets are met in a cost-effective manner.

Staff reviewed GMO's natural gas hedging activities against the stated objectives contained within GMO's natural gas price hedge plan.

3. Hedging activities for Purchased Power

GMO utilizes the same price risk management strategies to purchase natural gas future contracts[7] in an effort to mitigate risk associated with purchasing spot power in the market when either GMO is unable to meet its native load with its own generation or when the market price is lower than the cost of GMO's own generation.

4. Summary of Cost Implications

As a result of its natural gas hedging activities, GMO had a net loss, *i.e.*, it purchased natural gas future contracts at a price higher than the market price, of approximately ** ________ ** for the June 1, 2009 to November 30, 2010, time period of this review. In response to Staff Data Request No. 58, GMO stated that approximately ** ________ ** of this amount is directly related to its hedging activities for its own generation of electricity. The remaining approximately ** ________ ** is directly related to its natural gas hedging activities associated with spot market purchases. Because the Company's financial hedging program is used to avoid market fluctuations in natural gas prices, there will be times when GMO benefits and times when it does not. If GMO has imprudently made financial hedges to mitigate risk in its spot market natural gas fuel purchases, ratepayer harm could result from an increase in the fuel costs GMO recovers through its FAC.

5. Conclusion

Staff found GMO's hedging activities related to natural gas used for electric generation to be in compliance with GMO's natural gas price hedge plan. However, Staff

[7] Natural gas future contracts are marketed thru New York Mercantile Exchange (NYMEX). These can be classified as financial hedges, only a financial transaction occurs and no physical gas commodity will change hands between the parties.

finds GMO's actions imprudent as related to the use of futures contracts to purchase natural gas as a means of mitigating risk associated with spot market purchased power. This issue was discussed previously in the Purchased Power Costs section of this report.

6. Documents Reviewed

a. GMO's responses to Staff Data Requests Nos. 1, 2, 55, 58, & 59; and
b. GMO's filings in this case and FAC tariff sheets.

Staff Expert: Dana Eaves

F. Natural Gas Costs

1. Description

For the prudency review period approximately 6% of the electricity GMO generated to serve its customers came from natural gas. Staff concluded that approximately ** _______ ** of GMO's fuel cost was associated with the natural gas used in generating electricity. The cost of natural gas includes various miscellaneous charges such as firm transportation service charges and other fuel handling expenses.

2. Summary of Cost Implications

If GMO was imprudent in its purchasing decisions relating to natural gas, rate payer harm could result from increased FAC charges.

3. Conclusion

Staff found no indication GMO's purchases of natural gas for the fifth, sixth and seventh accumulation periods reviewed in this case were imprudent.

4. Documents Reviewed

a. GMO's responses to Staff Data Request Nos. 1, 2, and 31 related to GMO's hedging of natural gas prices from June 1, 2009 to November 30, 2010; and
b. GMO's General Ledger, cost adjustment factor calculation ("CAFC"), and other work papers from this case to determine the amount that GMO paid for natural gas as compared to the total cost of natural gas that GMO incurred during its fifth, sixth and seventh accumulation periods.

Staff Expert: Dana Eaves

G. Coal Costs

1. Description

For the prudence review period approximately 90% of the electricity GMO generated to serve its customers came from coal. Staff concluded that approximatelv

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** __________ ** of GMO's fuel cost was associated with the coal used in generating electricity. The cost of coal includes various miscellaneous charges such as rail and other ground transportation service charges, and other fuel handling expenses.

2. Summary of Cost Implications

If GMO was imprudent in its decisions relating to purchasing coal, rate payer harm could result from an increase in FAC charges.

3. Conclusion

Staff found no indication GMO's purchases of coal for the fifth, sixth and seventh accumulation periods of GMO's FAC from June 1, 2009 to November 30, 2010 were imprudent.

4. Documents Reviewed

a. GMO's fixed coal contracts in place for the delivery of coal to each of its generating units;
b. GMO's responses to Staff Data Request Nos. 1, 2 and 4; and
c. GMO's General Ledger, CAFC, and other work papers to determine the amount that GMO paid for coal as compared to the total cost of coal that GMO incurred during its fifth, sixth and seventh accumulation periods.

Staff Expert: Dana Eaves

H. Fuel Oil Costs

1. Description

For the prudency review period approximately 0.45% of the electricity GMO generated to serve its customers came from fuel oil. Staff concluded that approximately ** ________ ** of GMO's fuel cost was associated with the fuel oil used in generating electricity. The cost of fuel oil includes various miscellaneous charges, such as rail and/or ground transportation service charges and other miscellaneous fuel handling expenses.

2. Summary of Cost Implications

If GMO imprudently purchased fuel oil, rate payer harm could result from increased FAC charges.

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3. Conclusion

Staff found no indication GMO's costs associated with its fuel oil contracts in place for June 1, 2009 to November 30, 2010, the prudence review period in this case, were imprudent.

4. Documents Reviewed

a. GMO's General Ledger;
b. GMO's responses to Staff Data Request Nos.1, 2, 4, and 30; and
c. CAFC and other supporting work papers in this case to determine the amount GMO paid for fuel oil as compared to the total cost of fuel oil GMO incurred during its fifth, sixth and seventh accumulation periods.

Staff Expert: Dana Eaves

I. Alternative Fuels

1. Description

At GMO's Sibley Generating Station, which has cyclone-fired boilers, two types of alternative fuel were burned during the prudence review period—tire-derived fuel ("TDF") and biomass. Sibley Unit 3 has been burning TDF since 1997, and TDF is considered part of the normal fuel supply. TDF is a higher energy value fuel than the bituminous coal used at Sibley. TDF increases the overall heat input to the boiler. Cyclone-fired units require a certain amount of ash content in the fuel to maintain a slag layer in the cyclone unit. TDF is low in ash and therefore the amount of TDF that can be blended with coal is limited. Prior to the installation of the Selective Catalytic Reducer (SCR) to Sibley Unit 3 in late 2008, the maximum blend ratio was ** ____________________ **. The maximum blend ratio was reduced to less than ** ____ ** after installation of the SCR. The cost of TDF includes material, transportation, labor and equipment for material handling at the plant, including personnel to manage and load TDF during normal weekday hours.

At Unit 4/6 at the Lake Road Generating Station, TDF is the only type of alternative fuel that was burned during the prudence review period. Lake Road Unit 4/6 has been burning TDF since 2004 and is currently using a maximum blend ratio of ** ____ **.

GMO conducted a biomass test burn at Sibley Unit 2 in December 2009. The purpose of the test burn was to determine the maximum amount of biomass that could be combusted without causing operational problems or a decrease in unit performance. Parameters that were evaluated at different amounts of biomass combustion included boiler efficiency, heat rate, boiler cleanliness, emissions, ash resistivity, ammonia in ash, and overall ash characteristics. The biomass used during the test burn was a pelletized fuel consisting of grass, weed seed, and a small amount of storm damaged wood. The test burn met all of the data gathering objectives for operating the unit with a biomass/coal fuel blend.

For the 18-month period ending November 30, 2010, used for the Staff review, GMO's alternate fuel expense used for generation was approximately ** ________ **.

2. Summary of Cost Implications

If GMO's use of alternative fuels was imprudent, ratepayer harm could result from an increase in FAC charges.

3. Conclusion

Staff found no indication GMO's use of alternate fuels for the time period June 1, 2009 through November 30, 2010, was imprudent.

4. Documents Reviewed.

a. Company response to Staff's Data Requests Nos. 0001, 0007 and 00047; and
b. Staff workpapers from Case No. ER-2009-0090.

Staff Expert: David Roos

J. SO_2 Allowances

1. Description

The U.S sulfur dioxide (SO_2) emission allowance trading program was established by Title IV of the 1990 Clean Air Act Amendments ("CAAA"). The program is intended to reduce environmental and human health impacts associated with the release of sulfur emissions from coal-fired electric power plants. CAAA requires electric utilities to reduce their SO_2 emissions by about 50% from 1980 levels, or purchase allowances to meet this standard.

Under CAAA power plants are allocated a 30-year stream of tradable allowances, each worth one ton of SO_2. The allocation of allowances is based on an average capacity factor from the period 1985 to 1987. Allowances are awarded by the Environmental Protection Agency ("EPA") every year, and are designated by vintage year. The vintage year denotes the first year the allowances may be used for compliance. Unused allowances can be sold or banked for use in subsequent years.

The US EPA's Clean Air Interstate Rule ("CAIR"), issued in 2005, was developed to address the transport of pollutants from upwind to downwind states. States in the eastern half of the country were required, over a six-year compliance period (2009-2015), to participate in a federal program intended to reduce emissions of SO_2 by 57% from 2003 levels and Nitrogen Oxide (NO_X) by 61% from 2003 levels.

However, a number of petitions for judicial review of CAIR were filed in the D.C. Circuit Court, and on July 11, 2008, the D.C. Circuit Court of Appeals vacated the CAIR. A December 2008 court decision temporarily kept the requirements of CAIR in place and directed EPA to issue a new rule to implement Clean Air Act requirements concerning the transport of air pollution across state boundaries. On July 6, 2011, the EPA finalized the Cross-State Air Pollution Rule ("CSAPR") that regulates power plant emissions of SO_2, NO_X, ozone and fine particulates. The requirements of CAIR were in effect during the prudence review period. The requirements of CSAPR were not in effect during the prudence review period; however, CSAPR requirements affect future accumulation periods.

The primary mechanism of CAIR is a cap-and-trade program that allows a major source of NO_X and/or SO_2 to trade excess allowances when its emissions of a specific pollutant fall below its cap for that pollutant. EPA issued a model cap-and-trade program for power plants, which could have been used by states as the primary control mechanism under CAIR. Under CAIR, starting in 2010, owners of power plants are required to submit two SO_2 allowances for each ton of SO_2 emitted. This ratio is further tightened in 2015 to 2.86 allowances for each ton of SO_2 emitted.

Since the 1980's, the Sibley and Lake Road plant capacities have more than doubled; Iatan 1 had a slight increase in capacity, while the Jeffrey Energy Center had a slight decrease in capacity. In addition, GMO's purchased power contract with the Nebraska Public Power District's Gerald Gentleman power plant requires GMO to supply SO_2 allowances. The net effect is that GMO does not have enough allowances to cover its SO_2emissions requirements, and must purchase SO_2 allowances.

To comply with CAIR, GMO has established an SO_2 inventory. This inventory is tracked in Account 158100 Emissions Allowance Inventory. The cost for SO_2 allowances is tracked in FERC account 509. A true-up for account 509 coincides with the EPA yearly award of additional SO_2allowances.

For the 18 months of the prudence review period ending November 30, 2010, GMO's SO_2 allowance expense was approximately ** ________ **.

2. Summary of Cost Implications

If GMO imprudently used, purchased or banked it SO_2 allowances, ratepayer harm could result from an increase in GMO's FAC charges.

3. Conclusion

Staff found no indication GMO was imprudent in its purchases, banking or usage of SO_2 allowances. Based on the documents reviewed, it appears that the variations from the baseline set in the rate case are caused by changes in the price per SO_2 allowance and the number of allowances used during the accumulation periods. The number of allowances used is a function of the tons of coal burned during the accumulation periods and the sulfur content of the coal.

4. Documents Reviewed

a. Company response to Staff's Data Request Nos. 0001, 0012, 0038, 0040, 0041 and 0043; and
b. GMO monthly reports for the time period June 1, 2009 through November 30, 2010, required by 4 CSR 240-3.161(7).

Staff Expert: David Roos

K. Environmental Work at Sibley and Jeffrey

1. Description

Several regulatory-driven air pollution control projects were in various phases of construction and operation during the 18-month prudence review period ending November 30, 2010. These projects include:

Sibley Unit 3:	Selective Catalytic Reducer (SCR)
Sibley Units 1 and 2:	Selective Non-Catalytic Reducer (SNCR)
Jeffrey Energy Center:	Replacing / rebuilding three scrubbers

The SCR for Sibley Unit 3 and the SNCR for Sibley Units 1 and 2 became operational in late 2008. The three scrubbers at the Jeffery Energy Center were completed November 24, 2008, January 6, 2009, and July 22, 2010. GMO's FAC does not allow for the recovery of construction or operational costs for these environmental projects and no expenses from these projects have passed through GMO's FAC.

2. Summary of Cost Implications

If GMO had included the costs of environmental work at Sibley and Jeffrey in its FAC, ratepayer harm would result from an increase in GMO's FAC charges.

3. Conclusion

Staff found no indication GMO included in its FAC charges any costs for the air pollution control projects at Sibley and Jeffrey Energy Center during the three six-month accumulation periods from June 1, 2009 through November 30, 2010.

4. Documents Reviewed

a. GMO responses to Staff Data Request Nos. 001, 0012, 0047; and
b. GMO monthly reports for the time period June 1, 2009 through November 30, 2010, required by 4 CSR 240-3.161(7).

Staff Expert: David Roos

L. Iatan 2 Fuel and Purchased Power Costs

1. Description

On August 18, 2010, the Commission approved the terms of a *Nonunanimous Stipulation and Agreement/Proposed Procedural Schedules* in File No. ER-2010-0356 in which GMO agreed to request an Accounting Authority Order to use construction accounting for Iatan 2 and Iatan Common Plant. Construction accounting is defined in the agreement as follows:

> The Signatory Parties agree that GMO should be allowed to treat the Iatan 2 project under "Construction Accounting" to the effective date of new rates in the 2010-11 Rate Case. Construction Accounting will be the same treatment for expenditures and credits consistent with the treatment for Iatan 2 prior to Iatan 2's commercial in service operation date. Construction Accounting will

> include treatment for test power and its valuation consistent with the treatment of such power prior to Iatan 2's commercial in service operation date with the exception that such power valuation will include off-system sales.

As required by the agreement, GMO requested, in File No. EU-2011-0034, authority to use construction accounting from the in-service date of Iatan 2 until the effective date of the rates in File No. ER-2010-0356, and the Commission issued an Accounting Authority Order granting GMO's request on October 8, 2010.

2. Summary of Cost Implications

Iatan 2 was deemed "in-service" August 26, 2010, during Accumulation Period 7 (June 1, 2010 through November 30, 2010). Under "Construction Accounting" the fuel costs for Iatan 2 are deferred to a regulatory asset account until June 25, 2011, the effective date of the rates the Commission approved in File No. ER-2010-0356 by order issued May 4, 2011. For the period of this prudence review, GMO deferred approximately ** ________ ** of test fuel under "Construction Accounting" from July 2010 through November 2010; *i.e.* energy from Iatan 2 was valued at ** ________ ** in the fuel costs for the prudence review period. For the period December 1, 2010 through June 25, 2011, Staff will review the fuel and purchased power costs under "Construction Accounting" for Iatan 2 in its next prudence review. On June 25, 2011, and thereafter, the fuel and purchased power costs related to Iatan 2 will flow through GMO's FAC, and Staff will review those costs for Iatan 2 in its next prudence review.

3. Conclusion

Staff found no indication GMO was imprudent with regard to its fuel and purchased power associated with Iatan 2 for the fifth, six, and seventh accumulation periods of GMO's FAC which cover the period June 1, 2009 to November 30, 2010.

4. Documents Reviewed

Staff reviewed the following documents and its attachments in data request 0051:

a. Nonunanimous Stipulation and Agreement/Proposed Procedural Schedules in Case No. EO-2005-0329;
b. Report and Order issued July 28, 2005 in Case No. EO-2005-0329;
c. Application of KCP&L Greater Missouri Operations Company for Approval of An *Accounting Authority Order* in File No. EU-2011-0034;

d. Order Granting Accounting Authority Order issued September 28, 2010, in File No. EU-2011-0034;

e. Iatan Fuel Spreadsheet in response to Staff Data Request No. 0051;

f. Iatan 2 Test Energy White Paper authored by Roberta Hunter, with Great Plains Energy written June 15, 2010, in response to Staff Data Request 0051; and

g. Iatan 2 Test Energy White Paper Amendment authored by Roberta Hunter written November 17, 2010, in response to Staff Data Request 0051.

Staff Expert: Matthew Barnes

M. Off-System Sales Revenue

1. Description

Off-system sales revenues ("OSSR") are a component in the calculation of GMO's FAC charges to its customers. They are defined in GMO's FAC Tariff Schedule No. 1 Original Sheet No. 127.3 as follows:

OSSR = Revenues from Off-System Sales:

- Revenues from Off-system Sales shall exclude long-term full & partial requirements sales associated with GMO.

For the prudence review period of June 1, 2009 to November 30, 2010, Staff found that GMO's level of off-system sales revenue was approximately ** ________ **.

Staff reviewed the off-system sales quantities and revenues over the prudence review period.

2. Summary of Cost Implications

GMO's revenues from off-system sales are offset against total fuel and purchased power costs. This is because GMO's ratepayers pay for the sources used for that energy that GMO sells off of its system.[8] If GMO was imprudent either because it made sales at a price less than the cost to generate the power sold or did not make off-system sales, ratepayers could be harmed by that imprudence by an increase in GMO's FAC charges.

3. Conclusion

Staff has not determined GMO acted imprudently in its actions relating to OSSR during the review period.

4. Documents Reviewed

a. GMO's responses to Staff Data Request Nos. 1, 2, 6, 21, & 28; and

[8] Serving those ratepayers (native load) is a higher priority than making an off-system sale.

NP

b. GMO's filings in this case and FAC tariff sheets.

Staff Expert: Dana Eaves

N. MPower Rider/Demand Response Program

1. Description

GMO offers a demand response program which is defined in GMO's MPower Rider Electric Tariff Schedule No. 1 Original Sheet No. 128 as follows:

> Purpose
> This voluntary rider (MPOWER Rider or Rider) is designed to reduce customer load during peak periods to help defer future generation capacity additions and provide for improvements in energy supply.

2. MPower Program

Staff has reviewed GMO's MPower tariff provisions and program details. Staff believes that demand response is a valuable resource and should be considered as such within GMO's portfolio of resources. In GMO's response to Staff's Data Request No. 0052 GMO states:

> The company is maintaining the existing contracts in the MPower program. As a result of market fundamentals in SPP, GMO can acquire capacity in the open market at a lower price than is available through the MPower program. GMO stopped promoting the program in August, 2009. The company established a waiting list for those customers interested in enrolling in the program.

3. Summary of Cost Implications

Although Staff understands the current economic conditions have generally depressed capacity prices and demand response may not be the least cost option currently, these conditions will surely change in the future. A robust MPower program would aid GMO in having all least-cost options available to the benefit of its customers.

4. Conclusion

Staff encourages GMO to pursue a robust MPower program that would provide adequate demand response resources for times when it would be the least cost resource. If the price that GMO is currently offering is higher than the market price, GMO can market the program to its customers on the waiting list at a lower rate and provide another option to meet demand at a lower cost.

5. Documents Reviewed

a. GMO's responses to Staff Data Requests No. 52, 53 & 54; and
b. GMO's filings in this case and FAC tariff sheets.

Staff Expert: Dana Eaves

O. C. W. Mining Cost

1. Description

This issue involves any settlement payments for a breached coal contract between GMO and C.W. Mining, and the effect any settlement payments may have on FAC-related costs. A detailed description of this issue is provided in Staff's prudence review report for GMO in Case No. EO-2009-0115. The following is a brief summary of the events related to this issue.

GMO entered into a coal supply contract with C. W. Mining in January 2004 to supply coal for the Sibley and Lake Road generating stations. In the early portion of the contract, C.W. Mining was unable to supply the contracted quantity of coal, ultimately breaching the contract. This resulted in GMO having to burn higher cost coal at these two generating stations. GMO is currently involved in litigation to recover the higher costs that it incurred as a result of the termination of the C. W. Mining coal contract.

The Stipulation and Agreement as to Certain Issues the Commission approved by its *Order Approving Stipulation and Agreement as to Certain Issues* in Case No. ER-2007-0004 effective on April 22, 2007, stated that settlement payments, net of certain GMO costs, were to flow back to customers through GMO's FAC if the Commission granted GMO a FAC. Since the Commission approved GMO's FAC with its *Report and Order* in Case No. ER-2007-0004, customers are to receive 95% of the C. W. Mining litigation proceeds, net of applicable legal and collection fees and costs as agreed to in the Stipulation and Agreement as to Certain Issues.

No garnishments or settlements from C. W. Mining have flowed through GMO's FAC as of November 30, 2010. Once all legal expenses have been recovered, 95% of any future settlements received will be refunded to customers through GMO's FAC.

2. Summary of Cost Implications

There are no cost implications to GMO's FAC from the C. W. Mining litigation during the 18-month period ending November 30, 2010. Since the C.W. Mining contract was set up to provide coal to both the Sibley and Lake Road stations, in a previous FAC Prudence Review Report (Case No. EO-2009-0115), Staff recommended, and GMO concurred in its response to Staff Data Request 0055, that any net settlement payments be split: 81% for ratepayers in the MPS rate district and 19% for ratepayers in the L&P rate district. If GMO imprudently flowed the C. W. Mining settlements through its FAC, or did not flow them through it, ratepayer harm could result from the ratepayers not receiving any of the benefit from the net settlement payments.

3. Conclusion

Staff found no indication GMO has acted imprudently regarding the C. W. Mining settlements with respect to its FAC. Staff will continue to monitor this issue in future GMO FAC prudence audits. If GMO receives any future settlement proceeds, the appropriate allocation of the settlement amount between MPS and L&P rate districts will be reviewed at the time the settlement proceeds are flowed through GMO's FAC.

4. Documents Reviewed

a. Direct Testimony of Staff witness Cary Featherstone in Case No. ER-2007-0004;
b. *Stipulation and Agreement as to Certain Issues* filed April 4, 2007, in Case No. ER-2007-0004;
c. *Order Approving Stipulation and Agreement as to Certain Issues* entered in Case No. ER-2007-0004, effective April 27, 2007;
d. GMO Monthly and Quarterly Reports submitted in compliance to 4 CSR 240-3.161(5) and (6); and
e. GMO responses to Staff Data Request, No. 0046.

Staff Expert: David Roos

P. Interest Cost

1. Description

During each accumulation period GMO is required to calculate a monthly interest amount based on GMO's short-term debt borrowing rate that is applied to the under-recovered or over-recovered fuel and purchased power costs. The short-term debt is GMO's $400 million revolving credit facility and the borrowing rate is based on the 1-month London Interbank Offered Rate (LIBOR) plus an investment grade margin. The investment grade margin is determined by the bank issuing the short-term debt and the Company's long-term credit rating. For the period in review, GMO's interest amount applied to the under-recovered or over-recovered fuel and purchased power costs were $1,400,932 and $154,846 for MPS and L&P respectively. The interest amount is component "I" of the CAFC.

2. Summary of Interest Implications

If GMO imprudently calculated the monthly interest amounts or used short-term debt borrowing rates that did not fairly represent the actual cost of GMO's short-term debt, ratepayers could be harmed by FAC charges that are too low or too high.

3. Conclusion

Staff found no evidence GMO imprudently determined the monthly interest amount that was applied to the under-recovered or over-recovered fuel and purchased power costs.

4. Documents Reviewed

a. GMO's interest calculation work papers in support of the interest calculation amount on the under-recovered or over-recovered balance.

Staff Expert: Matthew Barnes

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Third Prudence Review of Costs Subject to the Commission-Approved Fuel Adjustment Clause of KCP&L Greater Missouri Operations Company	)))))	Case No. EO-2011-0390

AFFIDAVIT OF MATTHEW J. BARNES

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

Matthew J. Barnes, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Staff Report in pages 20-22 and 25-26; that he has knowledge of the matters set forth in such Report; and that such matters are true to the best of his knowledge and belief.

Matthew J. Barnes

Matthew J. Barnes

Subscribed and sworn to before me this 28th day of November, 2011.

SUSAN L. SUNDERMEYER
Notary Public - Notary Seal
State of Missouri
Commissioned for Callaway County
My Commission Expires: October 03, 2014
Commission Number: 10942086

Susan L Sundermeyer

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Third Prudence Review of Costs Subject to the Commission-Approved Fuel Adjustment Clause of KCP&L Greater Missouri Operations Company	)))))	Case No. EO-2011-0390

AFFIDAVIT OF LEON C. BENDER

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

Leon C. Bender, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Staff Report in pages 6-8 and 11; that he has knowledge of the matters set forth in such Report; and that such matters are true to the best of his knowledge and belief.

Leon C. Bender

Leon C. Bender

Subscribed and sworn to before me this 28th day of November, 2011.

SUSAN L. SUNDERMEYER
Notary Public - Notary Seal
State of Missouri
Commissioned for Callaway County
My Commission Expires: October 03, 2014
Commission Number: 10942086

Susan L. Sundermeyer

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Third Prudence Review of Costs Subject to the Commission-Approved Fuel Adjustment Clause of KCP&L Greater Missouri Operations Company	)))))	Case No. EO-2011-0390

AFFIDAVIT OF DANA E. EAVES

STATE OF MISSOURI)
) **ss**
COUNTY OF COLE)

Dana E. Eaves, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Staff Report in pages 5-6, 8-10, 11-16, and 22-24; that he has knowledge of the matters set forth in such Report; and that such matters are true to the best of his knowledge and belief.

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Dana E. Eaves
Dana E. Eaves

Subscribed and sworn to before me this 28th day of November, 2011.

SUSAN L. SUNDERMEYER
Notary Public - Notary Seal
State of Missouri
Commissioned for Callaway County
My Commission Expires: October 03, 2014
Commission Number: 10942086

Susan L. Sundermeyer
Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Third Prudence Review of Costs Subject to the Commission-Approved Fuel Adjustment Clause of KCP&L Greater Missouri Operations Company	)))))	Case No. EO-2011-0390

AFFIDAVIT OF DAVID C. ROOS

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

David C. Roos, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Staff Report in pages 1-5, 16-20 and 24-25; that he has knowledge of the matters set forth in such Report; and that such matters are true to the best of his knowledge and belief.

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David C. Roos
David C. Roos

Subscribed and sworn to before me this 28th day of November, 2011.

Susan L. Sundermeyer
Notary Public

SUSAN L. SUNDERMEYER
Notary Public - Notary Seal
State of Missouri
Commissioned for Callaway County
My Commission Expires: October 03, 2014
Commission Number: 10942086

MATTHEW J. BARNES

Educational and Employment Background and Credentials

I am a Regulatory Auditor IV in the Utility Operations Department, Energy Resource Analysis Section for the Missouri Public Service Commission. I accepted the position of Utility Regulatory Auditor I/II/III in June 2003. I was promoted to the position of Utility Regulatory Auditor IV in July 2008.

In December 2002, I earned a Bachelor of Science Degree in Business Administration with an Emphasis in Accounting from Columbia College. I earned a Masters in Business Administration with an Emphasis in Accounting from William Woods University in May 2005.

SUMMARY

OF

MATTHEW J. BARNES

CASE PARTICIPATION

SCHEDULE 1

Date Filed	Issue	Case Number	Exhibit	Case Name
09/08/2004	Merger with TXU Gas	GM20040607	Staff Recommendation	Atmos Energy Corporation
10/15/2004	Rate of Return	TC20021076	Supplemental Direct	BPS Telephone Company
06/28/2005	Finance Recommendation	EF20050387	Staff Recommendation	Kansas City Power and Light Company
06/28/2005	Finance Recommendation	EF20050388	Staff Recommendation	Kansas City Power and Light Company
08/31/2005	Finance Recommendation	EF20050498	Staff Recommendation	Kansas City Power and Light Company
11/15/2005	Spin-off of landline operations	IO20060086	Rebuttal	Sprint Nextel Corporation
03/08/2006	Spin-off of landline operations	TM20060272	Rebuttal	Alltel Missouri, Inc.
08/08/2006	Rate of Return	ER20060314	Direct	Kansas City Power & Light Company
09/08/2006	Rate of Return	ER20060314	Rebuttal	Kansas City Power & Light Company
09/13/2006	Rate of Return	GR20060387	Direct	Atmos Energy Corporation

SUMMARY

OF

MATTHEW J. BARNES

CASE PARTICIPATION

SCHEDULE 1

Date Filed	Issue	Case Number	Exhibit	Case Name
10/06/2006	Rate of Return	ER20060314	Surrebuttal	Kansas City Power & Light Company
11/07/2006	Rate of Return	ER20060314	True-Up Direct	Kansas City Power & Light Company
11/13/2006	Rate of Return	GR20060387	Rebuttal	Atmos Energy Corporation
11/23/2006	Rate of Return	GR20060387	Surrebuttal	Atmos Energy Corporation
12/01/2006	Rate of Return	WR20060425	Direct	Algonquin Water Resources of Missouri LLC
12/28/2006	Rate of Return	WR20060425	Rebuttal	Algonquin Water Resources of Missouri LLC
01/12/2007	Rate of Return	WR20060425	Surrebuttal	Algonquin Water Resources of Missouri LLC
02/07/2007	Finance Recommendation	GF20070220	Staff Recommendation	Laclede Gas Company
05/04/2007	Rate of Return	GR20070208	Direct	Laclede Gas Company

SUMMARY

OF

MATTHEW J. BARNES

CASE PARTICIPATION

SCHEDULE 1

Date Filed	**Issue**	**Case Number**	**Exhibit**	**Case Name**
07/24/2007	Rate of Return	ER20070291	Direct	Kansas City Power and Light Company
08/30/2007	Rate of Return	ER20070291	Rebuttal	Kansas City Power and Light Company
09/20/2007	Rate of Return	ER20070291	Surrebuttal	Kansas City Power and Light Company
11/02/2007	Rate of Return	ER20070291	True-up Direct	Kansas City Power and Light Company
02/01/2008	Finance Recommendation	EF20080214	Staff Recommendation	Kansas City Power and Light Company
02/22/2008	Rate of Return	ER20080093	Staff Report	The Empire District Electric Company
04/04/2008	Rate of Return	ER20080093	Rebuttal Testimony	The Empire District Electric Company
04/25/2008	Rate of Return	ER20080093	Surrebuttal Testimony	The Empire District Electric Company
08/18/2008	Rate of Return	WR20080311	Staff Report	Missouri-American Water Company
09/30/2008	Rate of Return	WR20080311	Rebuttal Testimony	Missouri-American Water Company

SUMMARY

OF

MATTHEW J. BARNES

CASE PARTICIPATION

SCHEDULE 1

Date Filed	Issue	Case Number	Exhibit	Case Name
10/16/2008	Rate of Return	WR2008031	Surrebuttal Testimony	Missouri-American Water Company
02/26/2010	Fuel Adjustment Clause	ER20100130	Staff Report	The Empire District Electric Company
04/02/2010	Fuel Adjustment Clause	ER20100130	Rebuttal Testimony	The Empire District Electric Company
04/23/2010	Fuel Adjustment Clause	ER20100130	Surrebuttal Testimony	The Empire District Electric Company
02/23/11	Fuel Adjustment Clause	ER20110004	Staff Report	The Empire District Electric Company
04/22/11	Fuel Adjustment Clause	ER20110004	Rebuttal Testimony	The Empire District Electric Company
04/28/11	Fuel Adjustment Clause	ER20110004	Surrebuttal Testimony	The Empire District Electric Company
05/06/11	Fuel Adjustment Clause	ER20110004	True-up Direct Testimony	The Empire District Electric Company
10/21/11	Costs for the Phase-In Tariffs	ER20120024	Direct Testimony	KCP&L Greater Missouri Operations Company
11/17/11	Rate of Return	WR20110337	Staff Report	Missouri-American Water Company

Leon Bender’s Creditials

I received a Bachelor of Science degree in Mechanical Engineering in August 1978 from Texas Tech University. I became employed by Southwestern Public Service Company (SPS) as a power generation plant design engineer in September 1978. While employed by SPS, I was lead engineer on many projects involving design and construction of new power generating stations and the upgrading of their older plants. In 1983, I became a registered Professional Engineer in the state of Texas. In 1986, I transferred to SPS’s newly formed subsidiary company, Utility Engineering Corporation, and was responsible for various projects at various other clients’ power generation plants. In June 1990, I accepted employment as a systems engineer with Entergy Operations, Inc. at the nuclear powered generating station, Arkansas Nuclear One. In December 1995, I joined the Missouri Public Service Commission (Commission). While employed by the Commission I have been responsible for determining variable fuel and purchased power cost using the production cost fuel model in numerous cases. In June 2008, I accepted employment with Kiewit Power Engineers but returned to the Commission in October 2008 where I now work in the Energy Resource Analysis section.

List of Previously Filed Testimony for Leon Bender

1.	ER-2011-0317	Union Electric Company d/b/a AmerenMissouri	FAC
2.	ER-2011-0004	The Empire District Electric Company	Rate Case
3.	ER-2011-0419	Kansas City Power & Light Company\GMO	FAC
4.	EO-2011-0271	Union Electric Company d/b/a AmerenMissouri	IRP
5.	HT-2011-0343	Kansas City Power & Light Company\GMO	QCA
6.	ER-2011-0028	Union Electric Company d/b/a AmerenMissouri	Rate Case
7.	ER-2011-0095	The Empire District Electric Company	FAC
8.	ER-2011-0018	Union Electric Company d/b/a AmerenUE	FAC
9.	HT-2010-0288	Kansas City Power & Light Company\GMO	QCA
10.	ER-2010-0275	The Empire District Electric Company	FAC
11.	ER-2010-0264	Union Electric Company d/b/a AmerenUE	FAC
12.	ER-2010-0130	The Empire District Electric Company	Rate Case
13.	ER-2010-0105	The Empire District Electric Company	FAC
14.	EO-2011-0066	The Empire District Electric Company	IRP
15.	EO-2010-0255	Union Electric Company d/b/a AmerenUE	FAC Prudence Review
16.	EO-2010-0167	Kansas City Power & Light Company\GMO	FAC Prudence Review
17.	EO-2010-0167	Kansas City Power & Light Company	FAC Prudence Review
18.	EO-2010-0084	The Empire District Electric Company	FAC Prudence Review
19.	EO-2008-0915	Kansas City Power & Light Company\GMO	FAC
20.	EO-2008-0415	Kansas City Power & Light Company\GMO	FAC
21.	EE-2009-0237	Kansas City Power & Light Company\GMO	IRP
22.	EE-2008-0034	Kansas City Power & Light Company	IRP
23.	ER-2008-0093	The Empire District Electric Company	Rate Case\Fuel Expense
24.	ER-2008-089	Kansas City Power & Light Company	Rate Case\Fuel Expense
25.	ER-2007-0291	Kansas City Power & Light Company	Rate Case\Fuel Expense
26.	ER-2007-0004	Aquila, Inc.	Rate Case\Fuel Expense
27.	ER-2007-0002	Union Electric Company d/b/a AmerenUE	Rate Case\Fuel Expense
28.	ER-2006-0314	Kansas City Power & Light Company	Rate Case\Fuel Expense
29.	EA-2006-0309	Aquila, Inc.	Rate Case\Fuel Expense
30.	ER-2005-0436	Aquila, Inc.	Rate Case\Fuel Expense
31.	ER-2004-0570	The Empire District Electric Company	Rate Case\Fuel Expense
32.	ER-2004-0034	Aquila, Inc.	Rate Case\Fuel Expense
33.	EC-2002-0001	Union Electric Company d/b/a AmerenUE	Complaint Case\Fuel Expense
34.	ER-2001-0299	The Empire District Electric Company	Rate Case\Fuel Expense
35.	EM-97-0515	Kansas City Power & Light Company	Merger Case\Fuel Expense
36.	ER-97-0394	Utilicorp United, Inc.	Rate Case\Fuel Expense
37.	EC-97-0362	Utilicorp United, Inc.	Complaint Case\Fuel Expense

DANA EAVES
CAREER EXPERIENCE

Missouri Public Service Commission, Jefferson City, Missouri

Utility Regulatory Auditor III April 23, 2003– Present
Utility Regulatory Auditor II April, 2002 – April, 2003
Utility Regulatory Auditor I April, 2001 – April, 2002

Perform rate audits and prepare miscellaneous filings as ordered by the Commission. Review all exhibits and testimony on assigned issues from the most recent previous case and the current case. Develop accounting adjustments and issue positions which are supported by workpapers and written testimony. Prepare Staff Recommendation Memorandum for filings that do not require prepared testimony. Act as Lead Auditor for small to middle size rate cases and certificate cases as assigned by management. I have testified under cross-examination as an expert witness for litigated rate cases.

Midwest Block and Brick, Jefferson City, Missouri

Accountant December 2000 – March 2001
CIS/Accounting Assistant July 2000 – December 2000

Practice Management Plus, Inc., Jefferson City, Missouri

Vice President Operations October 1998 – May 2000

Capital City Medical Associates (CCMA), Jefferson City, Missouri

Director of Finance March, 1995-October, 1998

ADDITIONAL EXPERIENCE

Wright Camera Shop/Sales	1987-1995
Movies To Go, Inc/Store Manager	1984-1987
Butler Shoe Corp./Store Manager	1982-1984
Southeastern Illinois College/Student	1979-1982
Kassabaum's Bicycle Shop/Store Manager	1977-1979

EDUCATION

Bachelor of Science, Business Administration; Emphasis Accounting (1995)
COLUMBIA COLLEGE, JEFFERSON CITY, MO

CASE PROCEEDING PARTICIPATION

DANA E. EAVES

PARTICIPATION		TESTIMONY
COMPANY	**CASE NO.**	**ISSUES**
Empire District Electric Company	EO-2011-0285	Prudency Review
AmerenUE	EO-2010-0255	Prudency Review
Empire District Electric Company	EO-2010-0084	Prudency Review
Missouri American Water Company	WR-2008-0311	*Pension and Other Post-Retirement Employee Benefits Costs, Annual Incentive Plan Pay-out Based Upon Meeting Financial Goals and Customer Satisfaction Survey, Labor and Labor-Related Expenses, Rate Case Expenses, Insurance Other than Group, and Waste Disposal Expense*
Empire District Electric Company	ER-2008-0093	Fuel and Purchased Power, Fuel Inventories, FAS 87 (pension), FAS 106 (OPEBS), Expenses and Regulatory Assets, Off System Sales, Transmission Revenue, SO2 Allowances, Maintenance Expense
Laclede Gas Company	GR-2007-0208	Accounting Schedules Reconciliation
Empire District Electric Company	ER-2006-0315	Direct - Jurisdictional Allocations Factors, Revenue, Uncollectible Expense, Pensions, Prepaid Pension Asset, Other Post-Employment Benefits Rebuttal - Updated: Pension Expense, Updated Prepaid Pension Asset, OPEB's Tracker, Minimum Pension Liability
Missouri Gas Energy (Gas)	GR-2004-0209	Direct – Cash Working Capital, Payroll, Payroll Taxes, Incentive Compensation, Bonuses, Materials and Supplies, Customer Deposits and Interest, Customer Advances and Employee Benefits Surrebuttal – Incentive Compensation

PARTICIPATION		TESTIMONY
COMPANY	CASE NO.	ISSUES
Aquila, Inc. d/b/a Aquila Networks-MPS & L&P (Natural Gas)	GR-2004-0072	Direct - Payroll Expense, Employee Benefits, Payroll Taxes Rebuttal – Payroll Expense, Incentive Compensation, Employer Health, Dental and Vision Expense
Aquila, Inc. d/b/a Aquila Networks-MPS (Electric)	ER-2004-0034	Direct - Payroll Expense, Employee Benefits, Payroll Taxes Rebuttal – Payroll Expense, Incentive Compensation, Employer Health, Dental and Vision Expense
Aquila, Inc. d/b/a Aquila Networks-L&P (Electric & Steam)	HR-2004-0024	Direct - Payroll Expense, Employee Benefits, Payroll Taxes
Osage Water Company	ST-2003-0562 WT-2003-0563	Direct - Plant Adjustment, Operating & Maintenance Expense Adjustments
Empire District Electric Company	ER-2002-0424	Direct - Cash Working Capital, Property Tax, Tree Trimming, Injuries and Damages, Outside Services, Misc. Adjustments
Citizens Electric Corporation	ER-2002-0297	Direct - Depreciation Expense, Accumulated Depreciation, Customer Deposits, Material & Supplies, Prepayments, Property Tax, Plant in Service, Customer Advances in Aid of Construction
UtiliCorp United Inc, d/b/a Missouri Public Service	ER-2001-672	Direct - Advertising, Customer Advances, Customer Deposits, Customer Deposit Interest Expense, Dues and Donations, Material and Supply, Prepayments, PSC Assessment, Rate Case Expense

PROCEEDING PARTICIPATION

DANA E. EAVES

Schedule 2

PARTICIPATION – No direct testimony filed or NON-Case (Informal) proceeding		
COMPANY	**CASE or Tracking No.**	**ISSUES**
RDG Sanitation	SA-2010-0096	Certificate Case
Mid Mo Sanitation	SR-2009-0153	Informal General Rate Case
Highway H Utilities, Inc.	SR-2009-0392 and WR-2009-0393	Informal General Rate Case
Osage Water Company	SR-2009-0149 WR-2009-0152	General Rate Case Lead Auditor
Hickory Hills	SR-2009-0151 WR-2009-0154	General Rate Case Lead Auditor
Missouri Utilities	SR-2009-0153 WR-2009-0150	General Rate Case Lead Auditor
Roy L. Utilities	QS-2008-0001 and QW-2008-0002	General Informal Rate Case
IH Utilities, Inc.	QW-2007-0003	General Rate Case
W.P.C. Sewer Company	QS-2007-0005	Rate Case Lead Auditor
West 16th Street Sewer Company, Inc.	QS-2007-0004	Rate Case Lead Auditor

PARTICIPATION – No direct testimony filed or NON-Case (Informal) proceeding		
COMPANY	**CASE or Tracking No.**	**ISSUES**
Gladlo Water & Sewer Company, Inc.	QS-2007-0001 and QW-2007-0002	Rate Case Lead Auditor Supervised: Kofi Boateng
Taneycomo Highlands, Inc.	QS-2006-0004	Rate Case Lead Auditor
Empire District Electric	QW-2005-0013	Informal General Rate Case
Cass County Telephone Company	TO-2005-0237	Cash Flow Analysis, LEC Invoices, Bank Reconciliations, Expense Analysis
LTA Water Company	WM-2005-0058	Merger Case with Missouri American Main Issue: Plant Valuation Lead Auditor
Noel Water Company, Inc.	QW-2005-0002	Rate Case Lead Auditor Supervised: Kofi Boateng
Suburban Water and Sewer Company, Inc.	QW-2005-0001	Rate Case Lead Auditor Supervised: Kofi Boateng
Osage Water Company	WC-2003-0134	Customer Refund Review
Noel Water Company, Inc.	QW-2003-0022	Rate Case Lead Auditor Supervised: Trisha Miller
AquaSource	WR-2003-0001 and SR-2003-0002	Plant in Service, Construction Work in Progress, Payroll, Depreciation Expense
Warren County Water and Sewer Company	WC-2002-155	General
Environmental Utilities, LLC	WA-2002-65	General
Meadows Water Company	WR-2001-966 and SR-2001-967	Expense Items

David C. Roos

Present Position: I am a Regulatory Economist III in the Energy Resource Analysis Section, Energy Department, Operations Division of the Missouri Public Service Commission.

Educational Background and Work Experience:

In May 1983, I graduated from the University of Notre Dame, Notre Dame, Indiana, with a Bachelor of Science Degree in Chemical Engineering. I also graduated from the University of Missouri in December 2005, with a Master of Arts in Economics. I have been employed at the Missouri Public Service Commission as a Regulatory Economist III since March 2006. Prior to joining the Public Service Commission I taught introductory economics and conducted research as a graduate teaching assistant and graduate research assistant at the University of Missouri. Prior to the University of Missouri, I was employed by several private firms where I provided consulting, design, and construction oversight of environmental projects for private and public sector clients.

Previous Cases

Company	Case No.
Empire District Electric Company	ER-2006-0315
AmerenUE	ER-2007-0002
Aquila Inc.	ER-2007-0004
Kansas City Power and Light	ER-2007-0291
AmerenUE	EO-2007-0409
Empire District Electric Company	ER-2008-0093
Kansas City Power and Light	ER-2008-0034
Greater Missouri Operations	HR-2008-0340
Greater Missouri Operations	ER-2009-0091
Greater Missouri Operations	EO-2009-0115
Greater Missouri Operations	EE-2009-0237
Greater Missouri Operations	EO-2009-0431
Empire District Electric Company	ER-2010-0105

Greater Missouri Operations	EO-2010-0002
AmerenUE	ER-2010-0036
AmerenUE	ER-2010-0044
Empire District Electric Company	EO-2010-0084
Empire District Electric Company	ER-2010-0105
AmerenUE	ER-2010-0165
Greater Missouri Operations	EO-2010-0167
AmerenUE	EO-2010-0255
Greater Missouri Operations (Aquila)	EO-2008-0216
Ameren Missouri	ER-2011-0028
Empire District Electric Company	EO-2011-0066
Empire District Electric Company	EO-2011-0285

Attachment 1

Is Deemed

Highly Confidential

In Its Entirety