Exhibit No.:	
Issues:	Fuel Adjustment Clause
Witness:	Matthew J. Barnes
Sponsoring Party:	MO PSC Staff
Type of Exhibit:	Rebuttal Testimony
File No.:	ER-2012-0175
Date Testimony Prepared:	September 12, 2012

MISSOURI PUBLIC SERVICE COMMISSION

REGULATORY REVIEW DIVISION

REBUTTAL TESTIMONY

OF

MATTHEW J. BARNES

KCP&L GREATER MISSOURI OPERATIONS COMPANY

CASE NO. ER-2012-0175

Jefferson City, Missouri
September 2012

**** Denotes Highly Confidential Information ****

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BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority to Implement General Rate Increase for Electric Service	))))	Case No. ER-2012-0175

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 following Rebuttal Testimony in question and answer form, consisting of 5 pages of Rebuttal Testimony to be presented in the above case, that the answers in the following Rebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; 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 12th day of September, 2012.

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

REBUTTAL TESTIMONY

OF

MATTHEW J. BARNES

KCP&L GREATER MISSOURI OPERATIONS COMPANY

CASE NO. ER-2012-0175

Q. Please state your name and business address?

A. My name is Matthew J. Barnes and my business address is Missouri Public Service Commission, P.O. Box 360, Jefferson City, MO 65102.

Q. What is your position at the Commission?

A. I am a Utility Regulatory Auditor IV in the Regulatory Review Division, Tariff, Safety Economic and Engineering Analysis Department, Energy Unit, Resource Analysis Section.

Q. Are you the same Matthew J. Barnes that contributed to Staff's Cost of Service Report ("COS Report") filed on August 9, 2012, and to Staff's Rate Design and Class Cost of Service Report filed August 21, 2012?

A. Yes, I am.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is to address GMO witness Mr. Tim M. Rush's Fuel Adjustment Clause ("FAC") direct testimony in which he requests the continuation of the Company's FAC without modification. I provide rebuttal testimony to support Staff's position that the current sharing mechanism is not enough of an incentive for GMO to keep fuel and purchased power costs down.

GMO's Fuel Adjustment Clause Sharing Mechanism

Q. Did GMO provide justification for keeping the current 95%/5% sharing mechanism as part of its direct case when requesting continuation of its current FAC?

A. No.

Q. Does the 95%/5% sharing mechanism in GMO's current FAC provide GMO with the necessary incentives - in the short term - to keep its fuel and purchased power cost down?

A. No. I provide several examples in Staff's COS Report to illustrate that GMO is not properly incented by the 95%/5% sharing mechanism - in the short term - to keep its fuel and purchased power costs down.

Q. Does the 95%/5% sharing mechanism in GMO's current FAC provide GMO with the necessary incentives - in the long term - to keep its fuel and purchased power cost down?

A. No.

Q. Why not?

A. For the reasons I provided in Staff's COS Report. Also, during its limited review of GMO's Chapter 22 triennial compliance filing in File No. EO-2012-0324, Staff identified the following concern which it related on pages 20 through 22, in its report filed on September 6, 2012:

> GMO's capacity balance sheets in the Chapter 22 filing continue to reflect an overreliance on PPAs in order to meet the 12% capacity margin requirements of the Southwest Power Pool ("SPP"). Graph 1 below contains the additional PPAs in the capacity balance sheets of GMO's candidate resource plans expressed in megawatts ("MW"). Graph 2 below contains the additional PPAs in the capacity balance sheets of GMO's candidate resource plans expressed in percent (%) of required capacity. GMO's required capacity in 2012 is ** _________ ** and increases year-by-year to ** _________ ** in 2031. Required capacity includes the 12% capacity margin requirement of SPP. The dotted line in Graph 1 and Graph 2 is for the adopted preferred resource plan, Plan ACCG9, and the dashed line in Graph 1 and Graph 2 is for Plan ACCG8. Plan ACCG9 is GMO's allocated portion of combined company Plan AJDC2, and Plan ACCG8 is GMO's allocated portion of combined company Plan AGDC2.

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Graph 1 & Graph 2 Are Deemed Highly Confidential In Their Entirety

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> Graph 1 illustrates that GMO's adopted preferred resource plan, Plan ACCG9, includes additional PPAs that range from ** ____________________ ** for years 2014 through 2020.
>
> Graph 2 illustrates that GMO's adopted preferred resource plan, Plan ACCG9, includes additional PPAs as a percent of required capacity that range from ** _______________ ** for years 2014 through 2020.
>
> Addendum B is a "History of Staff's Position Regarding GMO's Capacity Additions Since 2000" and Addendum C is the Company's capacity balance sheet for its adopted preferred resource plan in GMO's 2009 Chapter 22 triennial compliance filing (File No. EE-2009-0237). Staff has contended since 2004 that GMO's reliance on short-term PPAs is short-sighted. This long term plan shows a continued overreliance on short-term additional PPAs for an extended period of time. This reliance on short-term PPAs is unnecessarily risky for ratepayers when compared to a plan to putting steel-in-the-ground. This is especially true for GMO's customers, since GMO has a Commission-approved fuel and purchased power adjustment clause ("FAC") in which customers are responsible for 95% of the difference between GMO's actual total fuel and purchased power costs plus emissions allowance costs less off-system sales revenue and GMO's base energy costs (which are billed to customers as a result of rates set by the Commission in the Company's last general rate proceeding).

Addendum B and C can be found attached to this testimony as schedules MJB-R1 and MJB-R2 respectively.

This additional evidence provides further support for Staff's position that GMO is not properly incented by the current 95%/5% FAC sharing mechanism to keep its fuel and purchased power costs down in the long-run and opposition to GMO's proposal to leave the sharing at 95%/5%. By planning to continue to rely on short-term PPAs at market prices to meet capacity in the future, GMO is unnecessarily introducing price risk to its long-run costs compared to putting steel-in-the-ground. Since GMO can pass through fuel and purchased power costs in its FAC this risk is transferred to GMO's customers. Increasing the sharing mechanism will move some of this risk to the Company.

Q. What recommendation did Staff make in its Staff Report in File No. EO-2012-0324 to resolve Staff's concern?

A. Staff made the following recommendation in its Staff Report on pages 20 through 22, in File No. EO-2012-0324:

> To resolve Staff's concern, GMO should only include short term PPAs in its 20-year candidate resource plans' capacity balance sheets at a maximum amount of four percent (4%) of its required capacity annually. The longest that time period over which GMO should plan on relying on short term PPAs to meet its capacity requirements should be three (3) years. During this time period the Company should be constructing new generation or entering into contracts for long-term firm base, intermediate or peaking capacity in excess of four percent (4%) of its required capacity annually.

Q. What is Staff's recommendation concerning GMO's FAC?

A. Staff continues to recommend the Commission change GMO's FAC sharing mechanism to 85%/15%. Staff's evidence in this case supports its position that by changing GMO's FAC sharing mechanism to 85%/15%, the Company will have the incentive to properly keep its fuel and purchased power costs down.

Q. Does this conclude your rebuttal testimony?

A. Yes it does.

Staff Exhibit No. 4
Date 8/4/11 Reporter JL
File No. EE-2008-0237

Filed
August 17, 2011
Data Center
Missouri Public
Service Commission

History of Staff's Position Regarding

GMO's Capacity Additions Since 2000

In 2000, Aquila, Inc. ("Aquila") entered into a five-year purchased power agreement ("PPA") to obtain capacity and energy from the exempt wholesale generator Aries Plant owned by Aquila Merchant and Calpine. At the time when Aquila was planning to replace the power and energy provided through this agreement, Aquila met with Staff and the Office of the Public Counsel twice a year to update them on Aquila's resource needs and plans to meet those needs. The only information given to Staff at those meetings was Aquila's presentation material. Staff provided feedback based on the presentation materials and statements made during the presentations. Staff did not do a formal or informal review of the resource plan updates presented at the meetings. Sometimes, if Staff felt that it was warranted, Staff would respond to Aquila after a meeting by a letter expressing its concerns.

Aquila issued a Request For Proposals ("RFP") in the spring of 2001 for capacity for the delivery of energy in June 2005. The proposals Aquila received included purchased power offers respecting merchant coal, combustion turbine ("CT") and combined cycle ("CC") plants. However, the electric industry changed considerably when Aquila was reviewing the proposals in 2002, so at the urging of Staff, Aquila reissued the RFP in early 2003. At the June 26, 2003 resource planning update meeting with Staff and Office of Public Counsel, Aquila presented the results of its analysis of the bids it received from this second RFP. Included in the responses were proposals for wind, coal, CTs, and CCs. All of the proposals except one were purchased power agreements. Aquila reviewed the bids and then contacted neighboring utilities to see

Staff Exhibit No. 4

Schedule LMM-1

Schedule MJB-R1-1

what other supply options might be available. All of the proposals, including available capacity that Aquila learned of from talking with neighboring utilities, were evaluated against the option of Aquila building a CT/CC plant.

At this June 26, 2003 meeting, Aquila told Staff that an "undisclosed" bidder had offered it an excellent bid for 600 MW, but Aquila could not tell Staff much about the bid at that time. Because this would be more than enough to cover its needs, Aquila felt that no other capacity was needed. Staff filed rebuttal testimony on September 10, 2003 in EF-2003-0465 stating its concerns regarding Aquila's need to replace the Aries contract. Staff learned in a data request response from Aquila in this case that this bid withdrawn and a substitute proposal was not offered to Aquila.

On January 27, 2004, Aquila again met with Staff, this time not in a resource planning meeting, but in a meeting to let Staff know about Aquila's power supply acquisition process for the next five years. **In this meeting, Aquila's preferred/proposed resource plan over the short term was to build three combustion turbines and to enter into three-to-five year PPAs based off of the bids to the 2003 RFP.** Staff was concerned regarding the short-term nature of Aquila's preferred/proposed plan, so three days later on January 30, 2004, Staff responded with a letter to Mr. Dennis Williams of Aquila in which Staff, expressed its concern regarding Aquila's short-sightedness. Staff also explained in the letter that **it was Staff's belief that Aquila needed to be looking at base-load generation because Aquila should not become overly dependent upon short-term PPAs.**

Aquila met with Staff on February 9, 2004 to provide its semi-annual resource update. This update, which took into consideration events over a twenty-year time horizon, showed that Aquila's least cost plan was to build five 105 MW CTs in 2005 and to purchase a small amount of capacity on the market in 2005. Then, between 2005 and 2009, Aquila would meet its growth through purchases on the market; build a CT in 2009 and another in 2010. It also called for Aquila to pursue base load capacity for 2010. Aquila's preferred plan differed from the least cost plan only in that instead of building five 105 MW CTs in 2005, Aquila would build three 105 MW CTs in 2005 and enter into a 200 MW PPA in 2005.

At the next semi-annual update on July 9, 2004, Aquila still showed that the five 105 MW CTs plan was least cost; however the three 105 MW CTs with PPAs was still its preferred plan. Aquila had found a very good 75 MW PPA with Nebraska Public Power District ("NPPD"), but it was still pursuing the other PPAs upon which it had received bids. At subsequent resource planning update meetings Aquila provided updates on the three 105 MW CTs and Aquila's pursuit of PPAs. Other than the 75 MW PPA with NPPD, Aquila was unable to enter into a PPA of more than a few months duration.

Aquila followed its preferred plan by building three 105 MW CTs at its South Harper site near the City of Peculiar and **entering into a short-term purchased-power contract for power (capacity and/or energy) from another plant** owned by Aquila Merchant - the 300 MW Crossroads plant in Mississippi - to meet its capacity needs for 2005.

In Aquila's first general electric rate increase case after the expiration of the Aries PPA, Case No. ER-2005-0436, Staff asserted that, given the information available to Aquila from its resource planning process when Aquila decided how it would replace the power it was obtaining through the Aries capacity contract, Aquila should have built five

105 MW CTs. In that case, it was Staff's position that utilities should carefully do risk and contingency analysis of their resource plans and chose a resource plan that is robust across many scenarios of possible future events. That is still Staff's position. Prudently building and owning generation, whether it is base load, intermediate or peaking, provides price stability for Missouri consumers. PPAs are useful tools and are typically less expensive than building generation in the short-term, but they should not be relied upon as long-term solutions to capacity needs in the planning process without a firm long-term contract in hand. It was Staff position that, instead of relying on short-term PPAs, Aquila should have had five 105 MW CTs built by 2005 and that it then would have had that capacity available to serve its customers for the next thirty years.

This was the first case, Case No. ER-2005-0436, where, in lieu of costs based on Aquila's three 105 MW CTs South Harper power plant and a purchased power agreement, Staff included the costs of a new site with five installed 105 MW CTs in its case to approximate a self-build option for MPS. At that time there was ongoing litigation involving the South Harper power plant, so Aquila was again using short-term purchased power contracts to meet its capacity needs. The parties in Case No. ER-2005-0436 entered into a Stipulation and Agreement regarding fuel and purchased power expenses. The Stipulation and Agreement was silent regarding how Aquila should meet its capacity requirements.

In Aquila's next rate increase case, Case No. ER-2007-0004, Aquila was still relying on the three 105 MW CTs at South Harper and short-term PPA. Due to Aquila's continued litigation regarding the South Harper power plant, in this case Staff took the position that Aquila should have built five 105 MW CTs in 2005 to meet its capacity and energy needs, which was consistent with Staff's position in Aquila's preceding rate case. In this case Staff and other parties entered into another Stipulation and Agreement regarding fuel and purchased power expenses that was silent on how Aquila should meet its capacity requirements.

Staff's position remained that Aquila should have built five 105 MW CTs early enough to meet its capacity needs in 2005. In 2008, Section 393.171 RSMo. was passed which allowed the Commission to grant Aquila a certificate of convenience and necessity ("CCN") for South Harper and the substation associated with it. The Commission granted Aquila a CCN for South Harper and the substation effective March 28, 2009 in Case No. EA-2009-0118.

Aquila obtained this CCN during the pendency its next rate increase case (Case No. ER-2009-0090). By that time Great Plains Energy had acquired Aquila and had renamed it KCP&L – Greater Missouri Operations Company ("GMO"). Once the legal issues surrounding South Harper were resolved and the Commission had granted Aquila a CCN for South Harper, Staff's position changed and Staff included the capacity and running costs of the three 105 MW CTs at South Harper in its cost of service determination for GMO, but Staff maintained its position that Aquila should have built five 105 CTs in 2005, not three. Again, in Case No. ER-2009-0090, Staff and other parties entered into another Non-Unanimous Stipulation and Agreement regarding fuel and purchased power expense which was silent on how GMO should meet its capacity requirements.

As a part of this Non-Unanimous Stipulation and Agreement filed on May 22, 2009 in Case No. ER-2009-0090, GMO did agree to provide an analysis to be conducted by GMO regarding the Crossroads units and capacity additions for the Company. GMO provided this analysis to Staff and parties on May 31, 2010. This study was based on adding capacity at 2009 costs and included the generic CTs at 2009 costs. However, the time GMO needed capacity was the summer peak season of 2005, at the same time as when the Aries PPA expired. Aquila's least cost plan was to build five CTs instead of the three Aquila built at South Harper to be in service during summer of 2005. So GMO's analysis provided to Staff on May 31, 2010, was not useful for determining the prudency of Aquila's actions in 2005.

Staff Expert: Lena M. Mantle

Schedule MJB-R2

Is Deemed

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In Its Entirety