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*Issue:* *Crossroads Energy Center &  
Resource Planning*  
*Witness:* *Cary G. Featherstone*  
*Sponsoring Party:* *MoPSC Staff*  
*Type of Exhibit:* *Surrebuttal Testimony*  
*Case No.:* *ER-2016-0156*  
*Date Testimony Prepared:* *September 2, 2016*

**MISSOURI PUBLIC SERVICE COMMISSION**

**COMMISSION STAFF DIVISION**

**AUDITING DEPARTMENT**

**SURREBUTTAL TESTIMONY**

**OF**

**CARY G. FEATHERSTONE**

**KCP&L GREATER MISSOURI OPERATIONS COMPANY**

**CASE NO. ER-2016-0156**

*Jefferson City, Missouri*  
*September 2, 2016*

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

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CARY G. FEATHERSTONE  
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1 **SURREBUTTAL TESTIMONY**

2 **OF**

3 **CARY G. FEATHERSTONE**

4 **KCP&L GREATER MISSOURI OPERATIONS COMPANY**

5 **CASE NO. ER-2016-0156**

6 Q. Please state your name and business address.

7 A. Cary G. Featherstone, Fletcher Daniels State Office Building, 615 East 13<sup>th</sup> Street,  
8 Kansas City, Missouri.

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

10 A. I am a Regulatory Auditor with the Missouri Public Service  
11 Commission ("Commission").

12 Q. Are you the same Cary G. Featherstone who filed direct and rebuttal testimony for  
13 Staff in this proceeding?

14 A. Yes, I am. I contributed to Staff's Cost of Service Report filed on July 15, 2016,  
15 (COS Report) in regard to KCP&L Greater Missouri Operations Company's ("GMO" or  
16 "Company") rate case filed on February 23, 2016. I also filed rebuttal testimony on August 15,  
17 2016 on the issue of electric rates comparisons and Crossroads Energy Center.

18 Q. What is the purpose of your surrebuttal testimony?

19 A. I address various aspects of the rebuttal testimony of GMO witness Burton L.  
20 Crawford, GMO's Director, Energy Resource Management, on the issue of Crossroads Energy  
21 Center ("Crossroads").

22 I also respond to the rebuttal testimony of GMO witness Tim M. Rush, GMO's  
23 Director, Regulatory Affairs, concerning transmission costs relating to Crossroads.

1 Q. In your rebuttal testimony you referred to GMO by the different names it was  
2 known by in the past, will you do that in this testimony too?

3 A. Yes. When I discuss historical aspects of GMO capacity planning I will use the  
4 names GMO was using at the time, UtiliCorp (UtiliCorp United, Inc.) before early 2002 and  
5 Aquila (Aquila, Inc.) during the period early 2002 to mid-2008. I will refer to the former  
6 operating divisions of Aquila-Aquila Networks-MPS and Aquila Networks-L&P, as MPS and  
7 L&P, respectively, when discussing GMO during this period when it was named Aquila, i.e.,  
8 before it was acquired by Great Plains Energy Incorporated (Great Plains) on July 14, 2008.

9 **EXECUTIVE SUMMARY**

10 Q. Would you please summarize your rebuttal testimony?

11 A. In opposition to Staff's exclusion of Crossroads transmission costs and in support  
12 of its inclusion of incremental Crossroads transmission costs, as it has in past rate cases, GMO  
13 continues to advocate that Crossroads was the least cost option when Aquila (GMO's  
14 predecessor) made the decision to use Crossroads as a generating resource within the regulated  
15 operations of MPS. Staff does not agree. Staff has maintained over numerous rate proceedings  
16 that Aquila had many opportunities to replace the Aries purchased power agreement that ended  
17 in May 31, 2005 with "owned" generation, but made deliberate decisions not to do so. While  
18 Aquila had many options to replace the Aries power agreements in 2005, it was aware of a  
19 specific response to a request for proposal ("RFP") from a 2005 self-build option internally  
20 developed by Aquila itself for generating capacity installed in 2007. The cost associated with the  
21 self-build option was lower than the installed costs of Crossroads. The biggest advantage of this  
22 option was that there would have been no transmission costs associated with it. In every rate  
23 case where it was an issue—Case Nos. ER-2010-0356 (the "2010 rate case") and ER-2012-0175

1 (the “2012 rate case”)— the Commission has excluded all of GMO’s transmission costs relating  
2 to Crossroads. GMO is proposing the increase transmission costs associated with Crossroads  
3 since its last rate case be allowed in rates in this rate case, but the Commission made clear its  
4 decision that none of these transmission costs were to be included in rates.

5 **CROSSROADS ENERGY CENTER**

6 Q. What is GMO’s position regarding its Crossroads Energy Center in this  
7 rate proceeding as presented in the rebuttal testimony of GMO witness Crawford and GMO  
8 witness Rush?

9 A. As support for its argument against Staff’s recommendation that GMO should not  
10 recover those transmission costs and as support for its argument that the Commission should  
11 allow GMO to recover the increase in the costs it incurs for transmitting electricity from  
12 Crossroads to its retail customers since its last rate case, Mr. Crawford presents in his rebuttal  
13 testimony his contention that the Crossroads Energy Center (“Crossroads”) was the least cost  
14 option in 2007 for GMO generation needs compared to various other resource options.  
15 Mr. Crawford states at page 3 of his rebuttal testimony that “at the time the decision was made to  
16 add Crossroads facility to GMO’s generating portfolio, it was the lowest cost alternative for  
17 GMO retail customers, and as such was a prudent decision.” Mr. Crawford indicates an annual  
18 level of transmission costs up to \$12 million were included in the 2007 analysis. At page 4 of his  
19 rebuttal, Mr. Crawford indicates the Crossroads value was \$383 per kilowatt, which was the  
20 lowest cost option in 2007.

21 At pages 7 and 8 of his rebuttal testimony, Mr. Rush also argues an increment of  
22 the Crossroads increased transmission costs be included for recovery through GMO’s fuel  
23 adjustment clause. Mr. Rush also states at page 8 of his rebuttal testimony that the Crossroads

1 transmission costs were included in the 2007 least cost study. GMO's position in this case  
2 respecting transmission costs incurred for Crossroads is:

3 GMO does not agree increased transmission costs resulting from  
4 Entergy Arkansas integration into MISO should be excluded. In  
5 the Company's direct case, the Company proposed that all costs  
6 for the transmission of electricity by others (with the exception of  
7 certain transmission costs related to the Crossroads generating  
8 station that have previously been disallowed by the Commission),  
9 be included in the FAC. These costs represent the transportation of  
10 electricity, are largely outside the control of the Company, and are  
11 volatile. While the cost of electric transmission for Crossroads is  
12 higher than it would be if the plant were located in the GMO area,  
13 these additional costs were included in the evaluation of the facility  
14 which determined that Crossroads was the lowest cost plan for  
15 GMO.<sup>1</sup>

16 **Crossroads Was Not the Lowest Cost Option Available to Aquila**

17 Q. Does Staff agree that the 2007 study shows that Crossroads was the lowest cost  
18 option for GMO?

19 A. No. As explained in Staff's Cost of Service Report and my rebuttal testimony, the  
20 2007 GMO study is flawed because it is based on a decision to add capacity in late 2007<sup>2</sup>, not  
21 when Aquila needed to add generating capacity for MPS at the expiration of the Aries purchased  
22 power agreement on May 31, 2005.

23 Q. Is it GMO's position that the 2007 Crossroads study conducted by Aquila took  
24 into account transmission costs, but still showed Crossroads to be the least cost option?

25 A. Yes. Both Mr. Crawford at page 6 and Mr. Rush at page 8 state that transmission  
26 costs were included in Aquila's analysis to determine that Crossroads was the lowest cost option  
27 to use for generating capacity. Mr. Crawford indicates at page 6 of his rebuttal testimony that

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<sup>1</sup> Rush rebuttal, pages 7 and 8.

<sup>2</sup> The analysis by Aquila concerning Crossroads was conducted in late August 2007.

1 the 2007 study assumed \$12 million of annual transmission cost for Crossroads and was still the  
2 lowest cost amount compared to other options.

3 Even if Aquila considered this generating facility its lowest cost option in 2007,  
4 with \$13 million of annual transmission costs currently, and with those costs expected to  
5 increase over next several years, Crossroads is a very expensive power plant to operate,  
6 especially considering the level of generating output GMO obtains from this facility and the level  
7 it is projected to obtain from this facility.<sup>3</sup> Adding in the firm gas transportation costs referenced  
8 by Mr. Rush at page 8 of his rebuttal, has the impact of increasing the operating costs of  
9 Crossroads even more.

10 Q. Does Staff agree with Mr. Crawford's rebuttal testimony on pages 4 and 5 that  
11 Crossroads' installed cost is \$383 per kilowatt?

12 A. No. Staff is of the opinion that Crossroads has a higher cost than the 2007 Study  
13 of \$383 per kilowatt amount identified in Mr. Crawford's rebuttal testimony. At the time of the  
14 Aquila acquisition in July 2008, Crossroads had a cost of \$469 per kilowatt including the  
15 transmission capital costs based on September 30, 2008 plant amounts (the approximate values at  
16 the time of the July 2008 Aquila acquisition by Great Plains). Even excluding transmission  
17 investment, the installed cost—\$396 per kilowatt<sup>4</sup>—is greater than GMO's \$383 per kilowatt  
18 asserted value. The following table identifies Crossroads plant costs at the time Aquila was  
19 acquired by Great Plains Energy at the full value GMO argued for in the 2009 rate case (it should  
20 be noted these values were challenged and the Commission valued Crossroads using two Illinois  
21 natural gas-fired facilities, not those shown below):

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<sup>3</sup> See Crawford direct testimony in Case No. ER-2016-0156, Highly Confidential Schedule BLC-5.

<sup>4</sup> Crossroads had a \$118.8 million value at September 30, 2008 (approximate value at time of the July 2008 closing of Aquila acquisition – time period used by the Commission to assign valuation for Crossroads in Case No. ER-2010-0356) [\$118.8 million divided by 300 MWs = \$396 per kilowatt]. Including transmission upgrades of \$21.9 million [\$118.8 + 21.9 million = \$140.7 million divided by 300 MWs = \$469 per kilowatt].

Surrebuttal Testimony of  
Cary G. Featherstone

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<b>Production Plant</b>	<b>September 30, 2008 (approximates the July 2008 Aquila acquisition date) (A)</b>	<b>Installed Cost per Kilowatt (assumes 300,000 kw)</b>	<b>Aquila's 2007 Study Value</b>	<b>Installed Cost per Kilowatt (assumes 308,000 kw)(B)</b>	<b>Aquila's 2007 Study Value</b>	<b>Installed Cost per Kilowatt (assumes 300,000 kw typical rating GE turbines)</b>
Plant	\$118.8 million	\$396/ kW	\$117.9 million	\$382.79/ kW (Crawford rebuttal)	\$117.9	\$393/ kW
Less: Reserve	(21.2 million)					
Net Production	\$97.6 million					
<b>Transmission Plant</b>						
Plant Account 303.02	\$21.9 million		\$21.9 million (assumes 9/30/08 cost)		\$21.9 million (assumes 9/30/08 cost)	
Less: Reserve	(3.1 million)					
Net Transmission	\$18.8 million					
<b>Total Production &amp; Transmission</b>						
Plant	\$140.7 million	<b>\$469/ kW</b>	<b>\$139.8 million</b>	<b>\$453.90/ kW</b>	<b>\$139.8 million</b>	<b>\$466/ kW</b>
Less: Reserve	(24.3 million)					
Net Crossroads	\$116.4 million					

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(A) Source: Accounting Schedule 3, pages 1 & 3 and Schedule 6, pages 1 & 2 in Case No. ER-2009-0090  
(B) Crawford rebuttal, page 4 General Electric model 7 EAs – Note- typically four units total 300 MWs (Aquila used 308 MWs in its 2007 Study)

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While GMO contends the Crossroads plant value is \$383 per kilowatt, when the cost of transmission plant upgrades is appropriately considered this facility had a higher cost of \$469 per kilowatt. Aquila Merchant incurred these transmission upgrade capital costs in August 2002 to allow the transmission of electricity from Crossroads when the unit was built in August 2002.

9  
10

Q. Did Aquila use a different capacity level for Crossroads turbines in the 2007 Study?



1           A.     Yes.   When the 2007 Study was developed, Aquila used a 308 megawatt  
2 capacity level for Crossroads' four units. The General Electric model 7 EAs were typically rated  
3 at 300 megawatts for four turbines (75 megawatts each). Using the 308 megawatts for the total  
4 station gave a lower cost per kilowatt resulting in GMO's \$383 per kilowatt amount. However,  
5 if the typical output for this General Electric model of generating unit of 75 megawatts each unit,  
6 Crossroads would have 300 megawatts of total station generation. Assuming this level of station  
7 output, Crossroads installed cost per kilowatt is \$393 instead of the \$383 per kilowatt amount  
8 referenced by Mr. Crawford.

9           Q.     Why did Aquila Merchant need to upgrade transmission plant for Crossroads?

10          A.     Since Aquila Merchant built Crossroads in a region of the country with  
11 transmission constraints, and because it was a non-regulated merchant plant built well outside  
12 MPS' service territory, Crossroads had no Aquila transmission interconnection to the electric  
13 network. Crossroads was a completely isolated power plant.

14                 Aquila Merchant had to build upgrades to Entergy's transmission facilities to be  
15 able to connect Crossroads to Entergy's transmission system. Because the upgrades were  
16 connected to non-Aquila plant facilities, Aquila treated those investment costs as intangible plant  
17 instead of as traditional transmission plant. Had Crossroads been built as a regulated plant in  
18 MPS' service territory, the transmission connections would have been part of the substation and  
19 transmission plant, and not part of the Crossroads' plant costs. However, since Crossroads was  
20 completely isolated from Aquila's network, the cost of these transmission upgrades should be  
21 considered part of the Crossroads plant costs as these transmission upgrades are exclusive to  
22 Crossroads generation and the ability to transmit power from Crossroads to other regions,  
23 including to Missouri.

1 Q. Does Staff have any other support for why these transmission upgrade costs  
2 should be considered when valuing Crossroads?

3 A. Yes. In the supply-side analysis for integrated resource planning I have reviewed,  
4 capital costs for transmission plant to connect the generation side of the power plant to the  
5 transmission system are included in those studies. Crossroads had to have significant upgrades  
6 at non-Aquila property (third party) to be able connect to the transmission network.

7 Q. How is the value of these Crossroads-related transmission upgrades recorded  
8 by GMO?

9 A. The transmission investment plant made for Crossroads is recorded as intangible  
10 plant property (FERC Account 303.02), and is included in rate base as plant-in-service.

11 Q. How did Aquila support its claim that Crossroads was the lowest cost option it  
12 had to add generating capacity to the MPS system?

13 A. Aquila issued a RFP in 2007 for generating capacity to meet future system load  
14 requirements. It received several responses including a self-build option from Aquila itself. This  
15 self-build option was developed internally for Aquila by Aquila personnel in its Engineering  
16 Group. Aquila was proposing to provide installation of four General Electric model 7 EA  
17 combustion turbines like those at Crossroads for \$637 per kilowatt. This compared to the  
18 installed costs of Crossroads at \$383 per kilowatt.

19 **Aquila Self-Build Options Proposed for MPS To Replace Aries Capacity**

20 Q. Would you elaborate on the option for Aquila to build a generating facility in  
21 2007 that GMO witness Mr. Crawford refers to on at page 5 of his rebuttal testimony?

22 A. Mr. Crawford's reference to the 2007 Study included an option to build  
23 generating facility to serve Aquila's retail customers in Missouri. To justify the use of

1 Crossroads in regulated operations after Great Plains announced its acquisition of Aquila, Aquila  
2 internally developed a self-build proposal in 2007 to build four General Electric 7 EAs  
3 combustion turbines (the “GE turbines”) for \$637 per kilowatt installed cost.<sup>5</sup> GMO compares  
4 this cost to the Crossroads installed cost of \$383 per kilowatt. However, the \$637 per kW  
5 installed cost for the four GE turbines was determined in 2007, when the turbine market had  
6 rebounded from a “buyers’ market” of just two and three years earlier. According to the  
7 publication *Turbine World*, turbine prices increased 30 percent from 2004-2005 to 2007.<sup>6</sup> So the  
8 self-build costs were higher in 2007 than they were in 2004-2005 when Aquila needed and  
9 should have built new generating capacity to replace the 500 megawatt Aries agreement.

10 Q. Did Aquila perform any other self-build generation analyses between 2004  
11 and 2007?

12 A. Yes. In responding to a January 17, 2006 Request for Proposal for Capacity  
13 issued by Aquila Networks, on February 22, 2006, attached as Highly Confidential Surrebuttal  
14 Schedule CGF-s3, Aquila’s Regulated Generation Services Group proposed to build 300  
15 megawatts of natural gas-fired combustion turbines planned for installation by June 2008.<sup>7</sup>  
16 While several options of this nature were provided, one of the proposed options had an installed  
17 cost in early 2006 of \*\* \_\_\_\_\_ \*\* per kilowatt.<sup>8</sup> While this 2006 self-build  
18 option was higher than the \$383 per kilowatt installed amount Mr. Crawford identifies in his  
19 rebuttal testimony (page 4), it is lower than the result when the upgraded transmission capital  
20 costs are added to the generating facility’s total costs for Crossroads of \$453.90 per kilowatt.

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<sup>5</sup> Crawford rebuttal testimony, page 5, line 7.

<sup>6</sup> Rebuttal Schedule CGF-r2, pages 8 and 9 GE model 7 EA 75 MW turbine per unit price at 2006 \$19.2 million compared to 2004-2005 \$14.8 million, 30% increase.

<sup>7</sup> Aquila’s 2007 rate case-- Case No. ER-2007-0004- Data Request No. 0206. Highly Confidential Surrebuttal Schedule CGF-3.

<sup>8</sup> Aquila’s 2007 rate case Case No. ER-2007-0004- Data Request No. 206 Aquila Regulated Generation February 22, 2006 (page 2) response to Aquila RFP dated January 17, 2006.

1 Aquila's February 2006 self-build option would have been built in a location within MPS service  
2 territory with the exact turbines that were considered in the 2007 Study referenced in  
3 Mr. Crawford's rebuttal. Because of its location, Aquila would not have incurred transmission  
4 costs with Aquila's self-build proposal, unlike Crossroads' extremely high transmission costs.  
5 Thus, the 2006 Aquila self-build option of \*\* \_\_\_\_\_ \*\* per kilowatt is actually less than the  
6 Crossroads cost of \$469 per kilowatt (installed cost plus transmission upgrades cost).

7           The difference in costs shown between the 2007 Study identified in  
8 Mr. Crawford's direct and rebuttal testimony and the February 2006 RFP response by Aquila's  
9 Regulated Services Group was that the turbine prices had been increasing since the 2006 time  
10 period. The 2007 Study would have reflected those higher turbine costs. However, if Aquila  
11 would have purchased the turbines when it needed the capacity in 2005 to replace the Aries  
12 power agreement, those turbine costs would have been even lower because those years featured  
13 the lowest turbine pricing over the last 15 years. Aquila also had several buying opportunities  
14 for turbines owned by Aquila in 2003 to 2006 time frame that would have been less costly than  
15 Crossroads.

16           In a November 2004 self-build option presented to Aquila by its  
17 Regulated Generation Group, discounted turbines were quoted for installed cost of between  
18 \*\* \_\_\_\_\_ \*\* per kilowatt, far below the \$383 per kilowatt Crossroads cost identified in  
19 Mr. Crawford's rebuttal.

20           In 2002, Aquila Merchant offered KCPL General Electric turbines or Siemens  
21 Westinghouse new turbines at steep discount which would have resulted in less costs than  
22 Crossroads. Those generating units were not sold to KCPL and, eventually the Siemens turbines

1 were installed at South Harper. The General Electric turbines sold to Colorado and Nebraska  
2 utilities identified in my rebuttal testimony would also result in much less cost than Crossroads.<sup>9</sup>

3 See Highly Confidential Surrebuttal Schedules CGF-s1 and s2 for a more detailed  
4 discussion and comparisons of turbine costs and installed cost per kilowatt options available to  
5 Aquila to replace the 2005 500 megawatt Aries capacity agreement.

6 Q. Where did Aquila propose to site the self-build generating units?

7 A. All the self-build options proposed by Aquila's Regulated Generation Service  
8 Group for MPS generation (regulated) were on power plant sites within the service territory of  
9 MPS. More importantly, all of these self-build options would have been located in the same  
10 regional transmission organization; thus, none would incur any annual transmission costs.

11 Q. Has the Commission previously addressed GMO's argument that Crossroads was  
12 the least cost option in GMO rate cases?

13 A. Yes., in GMO has consistently presented its view Crossroads was the low cost  
14 option in each of its previous rate cases starting with the 2009 rate case. In both the 2010 and  
15 2012 cases the Commission valued Crossroads at a lower cost than the \$383 per kilowatt  
16 Mr. Crawford presents in his rebuttal testimony. The following table is taken out of the  
17 Commission's Order in Case No. ER-2010-0356 that identified ". . . the installed cost per  
18 kilowatt of 17 of the combustion turbines Aquila Merchant bought and took delivery of, and the  
19 price per kilowatt it received when it disposed of them:"

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22 *continued on next page*

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<sup>9</sup> See Rebuttal Schedule CGF-r2, page 10

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Installed site	No. of Turbine	Date Installation / Sold	Cost	Capacity	Price per kilowatt
<b>Raccoon Creek</b>	4	2003 installed	\$175 million	850,000 kW	<b>\$205.88</b>
<b>Goose Creek</b>	6	2006 sold to Ameren			
<b>South Harper</b>	3	2001 Purchased 2005 installed	At Dec 31, 2010 Plant \$120.4 million Reserve \$24.4 Net \$95.9	315,000 kW	<b>\$382.16</b>
<b>Crossroads</b>	4	2002 installed 2008 transferred to MPS regulated	At Dec 31, 2010 Plant \$119.2 million Reserve 32.1 Net \$87.1 million  Transmission upgrades (intangibles) Plant \$22.5 million Reserve 4.4 Net \$18.1 million  Total Plant \$141.7 million Reserve 36.5	300,000 kW	<b>\$427.46</b>

2 Source: Commission's Order in Case No. ER-2010-0356- page 80 [Footnote 286-- In Case No. ER-2010-0356  
3 Ex. GMO 215, p. 51; Ex. GMO 262, Staff MPS Accounting Schedules 3-1, 3-2, 6-1 and 6-2.]

4 The total installed cost for Crossroads is identified in the Commission's 2010  
5 order as \$427.46 per kilowatt. When the transmission facilities are included, the total installed  
6 cost is \$472.33 per kilowatt.

7 Q. Did Aquila have other options besides Crossroads to meet its 2005 load  
8 requirements after the Aries purchased power agreement ended?

9 A. Yes. On November 22, 2004, Aquila received a response to a RFP that provided  
10 combustion turbines to meet system load requirements with an expected in-service date in 2007  
11 that was less costly than Crossroads. The response to the 2005 RFP is attached as Highly  
12 Confidential Surrebuttal Schedule CGF s4.

1           The estimated installed costs for this self-build facility using discounted turbine  
2 equipment were \*\* \_\_\_\_\_ \*\* per kilowatt using  
3 turbines purchased at the then market discounted prices in 2005. When additional cost for  
4 interconnections such as transmission, natural gas and water are considered, those prices  
5 produced \*\* \_\_\_\_\_ \*\* This compares to the \$383  
6 installed cost in the 2007 Study identified in Mr. Crawford's rebuttal.<sup>10</sup> When transmission  
7 capital cost upgrades are considered with the installed cost of Crossroads at the time of the  
8 August 2007, Aquila acquisition is \$469 per kilowatt. Additionally, when the \$13 million per  
9 year of current transmission costs are considered for Crossroads' operating costs, there is no  
10 question this alternative self-build option using discounted turbines in 2005 was far less costly  
11 than Crossroads.

12           Q.     Since 2007, what transmission cost has GMO incurred for transmitting energy  
13 from Crossroads?

14           A.     Since 2007 through 2015, GMO has experienced over \$53.2 million in  
15 transmission costs.

16           Q.     What does Staff expect GMO's future Crossroads transmission costs to be?

17           A.     Assuming Crossroads operates the next 30 years and transmission costs remain at  
18 \$13 million per year, the approximate level for 2015, transmission costs will be over  
19 \$390 million—the majority of which would be charged to customers under GMO's proposed  
20 rate treatment.

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<sup>10</sup> Crawford rebuttal testimony, pages 4, line 17 and 5, line 8.

**Great Plains Had No Definite Plans To Use Crossroads As Regulated Generating Unit**

Q. When Great Plains Energy announced the acquisition of Aquila, did it plan on using Crossroads as a regulated generating facility?

A. No. Mr. Crawford claims at page 4 of his rebuttal testimony, the October 2007 study showed Crossroads was low cost option. Yet, during the time of the regulatory approvals for the Aquila acquisition in 2007, Great Plains did not in fact have a plan to use Crossroads as a regulated power plant.

In Form 425, filed with the Securities Exchange Commission (“SEC”) on February 8, 2007, Great Plains included a transcript of a joint webcast call by Great Plains Energy Incorporated, Aquila, Inc. and Black Hills Corporation that occurred on February 7, 2007. Mr. Terry Bassham, then Great Plains’ Executive Vice-President and Chief Financial Officer, and currently Chief Executive Officer, stated that it was Great Plains’ intention to “monetize” or sell Crossroads. The relevant portion of this transcript is reflected below:

**Mike Chesser:** Operator, we'd like to take one more question if we could because you all might expect we have quite a busy schedule ahead of us today.

**Operator:** Michael Lapidés of Goldman Sachs.

**Michael Lapidés:** Easy one. Mike, Terry, what are your thoughts on the peaking plant, the gas plant that Aquila owns?

**Mike Chesser:** At this stage as you know it is in litigation. And it has been appealed or it has been ruled on and appealed and it's being re-appealed. We have done quite a bit of due diligence around the potential outcomes on that and we have factored that impact into our purchase price.

**Michael Lapidés:** I'm thinking not the regulated one but the merchant one.

**Terry Bassham:** Crossroads.

**Michael Lapidés:** My apologies for not being –

**Terry Bassham:** That is okay, Michael. As Mike said we looked at (indiscernible) from a Crossroads perspective. We looked at the ability to utilize that or sell it. **Our preference would be probably to get value through monetizing it.** But if not we've looked at other options as well.

[Emphasis added]



1 Q. What is the significance of the fact that Great Plains' preference was to sell  
2 Crossroads after acquiring Aquila?

3 A. Great Plains intended to sell Crossroads, and identified the amount that it  
4 expected to receive from that sale.

5 Q. Was there continued uncertainty surrounding the disposition of Crossroads during  
6 the regulatory proceedings for approval of the acquisition of Aquila by Great Plains?

7 A. Yes. As late as April 2008, during the hearings in Case No. EM-2007-0374, the  
8 case regarding the acquisition of Aquila by Great Plains Energy, one of KCPL's vice presidents  
9 indicated he did not know how Crossroads was going to be used or if it would ever be used in the  
10 regulated rate base. Under cross examination, Mr. Chris B. Giles, then KCPL's Vice President-  
11 Regulatory Affairs, testified in an In-Camera portion of the hearings:

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Surrebuttal Testimony of  
Cary G. Featherstone

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[Attached as Highly Confidential Surrebuttal  
Schedule CGF s5-- EFIS #351-- Case No. EM-2007-0374,  
Evidentiary Hearing In-Camera Proceedings April 22, 2008  
Volume 12 Transcript 1474-1477; emphasis added]

28 At the time of the April 22, 2008 hearings, Mr. William Riggins was Great Plains Energy and  
29 KCPL's General Counsel and Chief Legal Officer.

30 Q. Was additional testimony given by Great Plains during the hearings on Aquila  
31 acquisition concerning Crossroads?

1           A.     Yes. In the same hearing, just six days later, Mr. Terry Bassham, who was Great  
2 Plains' Vice President and Chief Financial Officer at the time, testified during a confidential  
3 portion of the hearings regarding Crossroads:

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15                               [EFIS #378-- Case No. EM-2007-0374, Evidentiary  
16                               Hearing In-Camera Proceedings April 28, 2008 Volume 18  
17                               Transcript 2338; emphasis added]

18 The testimony given to the Commission in the Aquila acquisition case cited above, by two  
19 different Great Plains' officers and its General Counsel, demonstrates the continued uncertainty  
20 surrounding the use of Crossroads as late as April 2008, just three months before the July 2008  
21 close of the acquisition. This uncertainty relating to Crossroads is in contrast to GMO's position  
22 that Great Plains had already made the decision for GMO to use this facility in its regulated  
23 operations in October 2007.

24                               In GMO's first rate case after the acquisition, filed in September 2008, GMO  
25 proposed that Crossroads be included in its rate base. GMO prepared a memorandum to justify  
26 the decision and provide the history of this generating facility. This memorandum is attached as  
27 Surrebuttal Schedule CGF s6.

1 GMO's Position on Crossroads Transmission Costs Presented in GMO Witness

2 Rush's Rebuttal Testimony

3 Q. What does GMO witness Rush argue in response to Staff's recommendation that  
4 the Commission continue to disallow GMO rate recovery of all Crossroads transmission costs?

5 A. Mr. Rush states at page 8 of his rebuttal testimony that:

6 While the Company has accepted the fact that the  
7 Commission has excluded a substantial portion of both  
8 plant and transmission costs in the last rate case, the  
9 Company does not believe that it is reasonable, nor  
10 appropriate to continue to increase the level of exclusions  
11 from recovery and yet require the Company to maintain the  
12 facility to serve its customers. The increased costs are due  
13 to Entergy's entrance into MISO and are the result of  
14 MISO's FERC-approved tariff rate for transmission  
15 service.

16 What Mr. Rush and GMO fail to understand or accept is that the Commission said nothing in its  
17 orders in GMO's 2010 and 2012 rate cases about placing a limit or ceiling on the transmission  
18 cost disallowance relating to Crossroads. The Commission disallowed all of Crossroads  
19 transmission costs, not just a "portion" as Mr. Rush suggests. In every case where recovery of  
20 Crossroads transmission costs was disputed— both of the most recent GMO rate cases, the  
21 Commission did not allow recovery of any transmission costs GMO incurred for the Crossroads  
22 generating facility. The Commission stated at page 59 of its 2012 Order:

23 Therefore, the Commission concludes that including the  
24 Crossroads transmission costs does not support safe and  
25 adequate service at just and reasonable rates, and the  
26 Commission will deny those costs.

27 Specifically, at page 8 of his rebuttal testimony, Mr. Rush is supporting the inclusion of  
28 Crossroads' transmission costs in GMO's fuel adjustment clause.<sup>11</sup> The Commission addressed

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<sup>11</sup> Mr. Rush rebuttal testimony at pages 7 through 9.

1 the inclusion of Crossroads transmission costs in the fuel adjustment clause in its 2012 Order at  
2 page 64:

3 Crossroads Transmission.

4 ...Insofar as the Commission has determined that no  
5 transmission costs from Crossroads will enter GMO's MPS  
6 rates, there is no further dispute, and no further findings of  
7 fact and conclusion of law are required. The Commission  
8 will order GMO's FAC clarified to state that GMO's FAC  
9 excludes transmission costs related to Crossroads.

10 The Commission recognized the only reason GMO incurred any transmission costs for  
11 Crossroads was because the power plant was located in Mississippi, over 500 miles from GMO's  
12 customers. The Commission concluded that use of Crossroads as a generating resource was  
13 prudent decision as long as the rate base value was adjusted and none of the transmission costs  
14 were included in rates.

15 The Commission concluded that it was unreasonable for GMO's retail customers  
16 to pay for firm transmission costs to transport power from Mississippi to western Missouri. The  
17 Commission stated the following in 29 Conclusion of Law – Crossroads, at page 99 of its Order  
18 in GMO's 2010 rate case:

19 In addition to the valuation, the Commission concludes that  
20 but for the location of Crossroads customers would not  
21 have to pay the excessive cost of transmission. Therefore,  
22 transmission costs from the Crossroads facility, including  
23 any related to OSS [off-system sales] shall be disallowed  
24 from expenses in rates and therefore also not recoverable  
25 through GMO's fuel adjustment clause ("FAC").

26 Q. Has the Commission recognized that GMO's transmission costs for obtaining  
27 energy from Crossroads were ongoing?

1 A. Yes. In its order for GMO's 2010 rate case the Commission stated at page 87:

2 This **higher transmission cost is an ongoing cost that will**  
3 **be paid every year that Crossroads is operating to**  
4 **provide electricity to customers located in and about**  
5 **Kansas City, Missouri.** GMO does not incur any  
6 transmission costs for its other production facilities that are  
7 located in its MPS district that are used to serve its native  
8 load customers in that district. This ongoing transmission  
9 cost GMO incurs for Crossroads is a cost that it does not  
10 incur for South Harper, and is the cause of one of the  
11 biggest differences in the on-going operating costs between  
12 the two facilities.

13 It is not just and reasonable to require ratepayers to pay for  
14 the added transmission costs of electricity generated so far  
15 away in a transmission constricted location. Thus, the  
16 Commission will exclude the excessive transmission costs  
17 from recovery in rates.

18 [emphasis added]

19 Q. Is it true, as Mr. Rush testifies, that The Empire District Electric Company  
20 ("Empire") receives rate treatment of its transmission costs for a power plant it partially owns  
21 that is sited in the MISO footprint, even though Empire is in the SPP footprint?

22 A. Yes. What Mr. Rush is indicating on page 9 of his rebuttal testimony is that  
23 Empire gets rate recovery of its base load coal-fired generating facility, Plum Point. The facts  
24 surrounding Empire's choice to use Plum Point as a generating resource and the unique  
25 circumstances of Crossroads make the two situations completely different, resulting in the two  
26 plants getting different rate recoveries for each of those facilities. I identify the reasons why  
27 Plum Point gets rate recovery and Crossroads does not in my rebuttal testimony. (see pages 29  
28 to 32 of my rebuttal testimony)

29 Q. What is Staff's response to page 8 of Mr. Rush's rebuttal testimony, "the cost of  
30 firm gas transportation to the Crossroads generation facility is significantly less than it would

1 have been had the facility been located in GMO territory, if firm gas transportation would be  
2 available at all. It would not be reasonable for GMO's retail customers to enjoy the benefits of  
3 lower firm gas transportation costs at the Crossroads location, while at the same time avoiding  
4 the cost of firm electric transmission that allows GMO to use the less expensive gas."?

5 A. Staff agrees that the firm gas transportation costs for Crossroads were less than  
6 the firm gas transportation costs for South Harper facility in GMO's last rate case in 2012. Other  
7 GMO natural gas peaking units do not have the need for firm gas transportation. Greenwood  
8 does not need firm gas transportation service and neither does Lake Road or Ralph Green. Some  
9 of KCPL's peaking units, such as West Gardner and Osawatomie, also do not have firm gas  
10 transportation. The Hawthorn station has firm gas transportation service for Hawthorn 5 as a  
11 start-up fuel. This natural gas supply also fuels Hawthorn Units 6 and 9, 7 and 8.

12 In GMO's 2012 rate case, Lake Road had firm gas transportation service in  
13 addition to South Harper. KCPL's West Gardner and Hawthorn turbine units had firm gas  
14 transportation service. Attached as Surrebuttal Schedule CGF s7 is response to GMO's response  
15 to Data Request 70.2 which identifies the power plants having firm gas transportation service  
16 and the reasons for such service. In addition, this response also identifies the reasons why firm  
17 gas transportation service is no longer needed at plants such as West Gardner and Lake Road.  
18 Nowhere in this response does GMO indicate that firm gas transportation is not available in the  
19 Kansas City area.

20 Comparing South Harper's firm gas transportation costs, there is approximately  
21 \$3 million annually paid for this service. Crossroads transmission annual transmission costs are  
22 \$13 million and expected to increase.



Surrebuttal Testimony of  
Cary G. Featherstone

1           Q.     Is the natural gas GMO purchases for use at Crossroads less expensive than the  
2 natural gas it purchases for its other energy centers?

3           A.     No. The cost of natural gas for Crossroads historically has been higher. I address  
4 the higher gas cost for Crossroads in my rebuttal testimony at pages 20 through 22 and Rebuttal  
5 Schedule CGF-r7.

6           Q.     Does this conclude your surrebuttal testimony?

7           A.     Yes.

**BEFORE THE PUBLIC SERVICE COMMISSION**

**OF THE STATE OF MISSOURI**

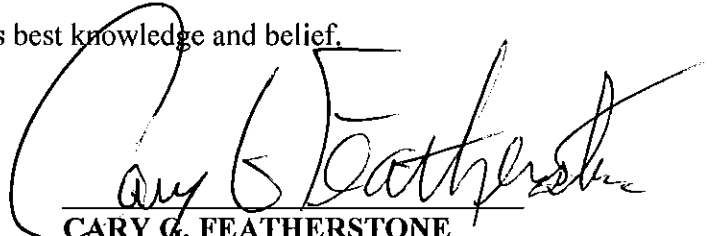
In the Matter of KCP&L Greater Missouri )  
Operations Company's Request for Authority ) Case No. ER-2016-0156  
to Implement A General Rate Increase for )  
Electric Service )

**AFFIDAVIT OF CARY G. FEATHERSTONE**

STATE OF MISSOURI )  
 ) ss.  
COUNTY OF COLE )

**COMES NOW CARY G. FEATHERSTONE** and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing Surrebuttal Testimony and that the same is true and correct according to his best knowledge and belief.

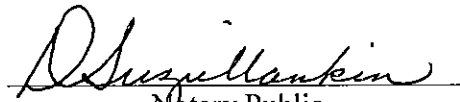
Further the Affiant sayeth not.

  
\_\_\_\_\_  
**CARY G. FEATHERSTONE**

**JURAT**

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 2nd day of September, 2016.

D. SUZIE MANKIN  
Notary Public - Notary Seal  
State of Missouri  
Commissioned for Cole County  
My Commission Expires: December 12, 2016  
Commission Number: 12412070

  
\_\_\_\_\_  
Notary Public

**KCP&L Greater Missouri Operations  
Case No. ER-2016-0156**

**CROSSROADS ENERGY CENTER**

Mr. Crawford states at page 7 of his rebuttal that “any other option for adding capacity to the GMO supply portfolio would have cost more than adding Crossroads. No one has demonstrated otherwise.” I do not believe this is a statement correct

GMO has presented its view that Crossroads was determined in an analysis performed in 2007 to be the lowest cost option in each of its last three rate cases starting with the 2009 rate case (ER-2009-0090). In each of those rate cases, and again in this case, Staff disputed and continues to dispute this claim.

The Commission determined there were other lower cost options to add capacity generation besides Crossroads. The Commission relied on two former Aquila Merchant combustion turbine facilities sold to Ameren Missouri (Union Electric) in 2006 to value Crossroads in GMO’s 2010 rate case and also the 2012 rate case. The Commission used the value of \$205.88 per kilowatt as the basis of its decision in both of these cases. Contrary, to Mr. Crawford’s belief that no one has demonstrated any lower cost option than Crossroads, this is an example of a lower cost option than Crossroads that was used by the Commission in each of GMO’s last two rate cases.

The basis for the Commission’s findings in the 2010 rate case was the selling of these generating facilities by Aquila Merchant to Union Electric for \$175 million. The total generating capacity for these two facilities was 850 megawatts (850,000 kilowatts) resulting in the \$205.88 per kilowatt installed costs the Commission used as basis to value Crossroads. This is a substantial cost reduction to the \$383 per kilowatt cost identified in Mr. Crawford’s rebuttal testimony. Clearly, the Commission demonstrated Crossroads was not the least cost generation option when it determined the reduced value was the appropriate cost to be included in rates.

As discussed in my rebuttal testimony, there have been many other options that demonstrate better choices at reduced costs had Aquila took advantage of the numerous opportunities to add generating capacity from 2004 to 2007. Aquila simply did not make proper decisions regarding capacity planning. Ignoring those other options to replace the Aries capacity in 2005 and even options in 2006, directly places GMO in the unfortunate position it finds itself today incurring imposing transmission costs. Highly Confidential Surrebuttal Schedule **CGF-s2** is a table identifying many different options available to Aquila, many demonstrating a lower cost option to Aquila. Had Aquila acted on some of these options, GMO would not find itself in the situation it is today incurring transmission costs relating to a peaking generating facility located outside the regional transmission organization.

Mr. Crawford claims at page 7 of his rebuttal testimony that “any other option for adding capacity to the GMO supply portfolio would have cost more than adding Crossroads.” Aquila determined in January and July 2004 and presented at the integrated resource planning meetings

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with Staff, that its least cost option was the building of five combustion turbines to replace the Aries purchased power agreement. These power plant additions totaled 525 megawatts of capacity that would have replaced all of the 500 megawatts of Aries power agreement.<sup>1</sup> Attached as **Highly Confidential Schedule CGF s8 is the Resource Planning presentation made to Staff on July 9, 2004 that supported the 5 combustion turbine addition.** Of course, these generating units would have been built in Missouri and would have had no transmission costs that would have to be paid over the 40 or more years expected life of the facility.

Also, the above referenced self-build option in the 2005 Aquila study adding four combustion turbines like those installed at Crossroads to Aquila's fleet in 2007 was at a lower cost than Crossroads-- \*\* \_\_\_\_\_ \*\* per kilowatt compared to Crossroads at \$383 per kilowatt. When transmission plant is added the total installed costs increases to \*\* \_\_\_\_\_ \*\* per kilowatt. Even without the Crossroads transmission plant added which results in \$453.90 per kilowatt compared to the \$383 per kilowatt cited by MR. Crawford, other new generating plant options would have been far more attractive to Aquila and its customers. And none of these new generating plant additions would have any annual transmission expenses charged to the Company and its customers.

Many other options available to Aquila to replace the 2005 Aries capacity agreement that would have been less cost than Crossroads were identified in my rebuttal testimony. (see pages 24 to 27 of rebuttal and Highly Confidential Rebuttal CGF r2 for other capacity options)

A summary of the different costs of Aquila's self-build options that were available to Aquila is identified in a table in Highly Confidential Surrebuttal **Schedule CGF-s2** that demonstrates Aquila had many low cost options to replace the 500 megawatt Aries agreement in 2005, even as late as 2006 and early 2007.

Aquila could have used for its retail customers four General Electric model 7 EAs (the same generators installed at Raccoon Creek, Goose Creek and Crossroads) sold to two separate utilities in Nebraska and Colorado at an average price of \*\* \_\_\_\_\_ \*\* per turbine. If those turbines would have been installed for MPS customers, the estimate of its installed costs would have been \$369 per kilowatt, well below the \$453.90 per kilowatt of Crossroads with transmission facilities added to its cost, and even below what GMO contends is Crossroads cost at \$383 per kilowatt. (see Rebuttal CGF- r2, page 10).

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<sup>1</sup> Both the July 9, 2004 Resource Plan and the February 9, 2004 Resource Plan attached as HC Rebuttal Schedule CGF r8 found least cost plan was installation of 5 combustion turbines in MPS service territory.

<sup>2</sup> Highly Confidential 2007 IRP Request for Proposals for Capacity and Energy for Aquila Networks – Missouri Issued: October 15, 2004 Aquila Regulated Generation response dated November 22, 2004

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In November 2004, Aquila determined it could install self-build option using three Siemens generating units for \*\* \_\_\_\_\_ \*\* per kilowatt at an existing site. Again below Crossroads cost of \$453.90 per kilowatt (with transmission investment).

In 2002, Aquila Merchant offer to sell four 75 megawatt General Electric model 7 EAs for \*\* \_\_\_\_\_ \*\* each unit and three 105 MW Seimens 501 D5A for \*\* \_\_\_\_\_ \*\* (These units are currently installed at South Harper and included in rate base at \$66,760,000 at \$211.94/ kW or \$22,253,000 per unit.) Source: August 7, 2002 letter from Aquila Merchant to KCPL– CGF-r9, page 49

At time in 2002 when it was offering to other utilities deeply discounted turbines and when Aquila needed capacity for its MPS division Aquila Merchant was negotiating with MPS for a 20 year PPA for peaking capacity using three 501 D units called Aries II. After the collapse of the power markets in mid-2002, and the announced discontinued operations of Aquila Merchant those three generating units were eventually installed for MPS in June 2005 at South Harper.

**Resource Planning Presentations**

Mr. Crawford indicates at page 4 of his rebuttal testimony the analysis used by Aquila to justify using the merchant Crossroads plant located in Mississippi in rate base, was made in October 2007.

Just before the Aquila acquisition by Great Plains Energy announced February 2007, Aquila made another presentation resource plan to Staff on February 2, 2007. In this February 2007 analysis, Aquila indicated its preferred plan based on the lowest 20-year net present value of revenue requirement was 300 megawatts of purchased power agreements for 2008 and 2009 with 225 megawatts installed combustion turbines in 2010. This presentation was made by Scott Heidbrink, then Aquila’s Vice President, Energy Resources and GMO’s current Executive Vice President and Chief Operating Officer.

Crossroads was not considered as an option in this February 2007 presentation. At that time, Aquila was developing a site in Sedalia to add generating capacity to meet its shortfall. This site was the only one discussed with Staff until the late 2007 presentation when Crossroads was first mentioned to be used as a generating asset.

The February 2007 resource plan was attached to my rebuttal testimony as Highly Confidential Schedule CGF r6. See page 7 of this schedule for the “Least Cost/ Preferred” plan.

The resource planning process at the time, and for several years, Aquila/ UtiliCorp made presentations to Staff and Public Counsel twice a year, as did the other Missouri electric utilities. I attended most of the meetings for Empire, KCPL and Aquila/ UtiliCorp. These meetings were intended to provide updates to resource planning that included load forecasting, demand side

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management and energy efficiency and supply resources (generation) on a more frequent basis than the IRP process. The two times a year meetings were part of agreements reached with the electric utilities operating in Missouri in lieu of the integrated resource planning filings.

Public Counsel witness Lean Mantle, then employed with Staff, was instrumental in creating and conducting these meetings on behalf of Staff. Ms. Mantle did extensive work in the resource planning process and facilitated the meetings.

**SCHEDULE CGF-s2**

**through**

**SCHEDULE CGF-5**

**HAVE BEEN DEEMED**

**HIGHLY CONFIDENTIAL**

**IN ITS ENTIRETY**

**KCP&L Greater Missouri Operations  
Case No. ER-2016-0156**



**To:** Files  
**From:** Ron Klote, Senior Manager Regulatory Accounting  
**CC:** Darrin Ives  
**Date:** October 31, 2008  
**Subject:** Crossroads Energy Center Transfer to the KCP&L Greater Missouri Operations Company Regulated Jurisdiction's MOPUB Business Unit

**Purpose:**

To document the reason for and the timing of the property accounting move of the Crossroads Energy Center to the books and records of KCP&L Greater Missouri Operations Company's ("GMO") MOPUB business unit. In addition, documenting the recording of the Crossroads Energy Center as a capital lease and how the accumulated deferred income taxes ("ADIT") should be treated associated with the plant.

**Relevant Guidance Researched:**

Code of Federal Regulations Title 18 Part 101

**Background:**

The Crossroads Energy Center is an approximately 300MW combustion turbine power plant consisting of four General Electric 7EA units. It was built in 2002 by a non-regulated subsidiary of Aquila, Inc. titled Aquila Merchant Services. It is located in Mississippi and is owned by the City of Clarksdale for property tax abatement purposes. GMO holds a purchase option that provides the opportunity for GMO to purchase the plant from the City of Clarksdale at any time for \$1,000. This purchase would eliminate the property tax abatement treatment of the plant. The Crossroads Energy Center is controlled by GMO through a long-term tolling agreement. The plant is recorded as a capital lease on the books and records of MOPUB.

The placement of the Crossroads Energy Center on the books and records of Aquila, Inc. was as follows. In October 2002, the Crossroads Energy Center was moved from business unit MEP (Merchant Energy Partners Investment LLC) CWIP account into business unit ACEC (Crossroads Energy Center) plant accounts. ACEC was a business unit under the non-regulated subsidiary of MEP. In March 2007, due to the wind down of Aquila's Merchant operations and their inability to effectively dispatch power from the Crossroads Energy Center, there was a negotiation of the rights and obligations of the plant to Aquila, Inc. This transfer was governed by a Master Transfer Agreement dated March 31, 2007. Aquila, Inc. paid \$117.9 million to Aquila Merchant which was equivalent to the net book value of Crossroads at this time. Rather than pay a cash purchase price, the purchase price took the form of a credit that reduced the amount of indebtedness owed by Aquila Merchant to Aquila parent. On March 31, 2007, Crossroads Energy Center was recorded at Net Book Value to a nonregulated business unit CECAQ (Crossroads Energy Center Aquila) where it resided at the time of the acquisition of Aquila, Inc. by Great Plains Energy (GPE).

On March 19, 2007, the regulated jurisdictional operations of GMO issued a request for proposal for a long-term supply option. The Crossroads Energy Center was bid into the request for proposal at net book value to satisfy the long-term supply option. The candidates submitting bids for the long-term supply option were evaluated and the Crossroads Energy Center was selected as the least cost and preferred option for long-term supply. The evaluation process and selection of the Crossroads Energy Center as the preferred option was presented to the Missouri Public Service Commission Staff on October 31, 2007.



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On approximately May 14, 2008 Aquila's management presented a review of the IRP process presented to Staff in October 2007 with GPE management. During this presentation, the Request for Proposal process was discussed with GPE management and Aquila's decision to select Crossroads as the least cost and preferred option was reviewed. At this meeting, GPE concurred with Aquila's recommendation to use Crossroads as a long-term supply option. (Added by Tim Rush on 1/6/09: Attendees, Todd Kobayashi, Kevin Bryant, Tim Rush, Scott Heldtbrink, Davis Rooney, Gall Allen, Gary Clemens, Denny Williams, Jeremy Morgan. As a note, in the initial evaluation of the acquisition of Aquila, GPE had not made a decision on how it would address the Crossroads facility.)

On August 31, 2008 the Crossroads Energy Center was moved from GMO's business unit NREG, where it was recorded after the acquisition of Aquila, Inc. by Great Plains Energy on July 14, 2008, to MOPUB's books and records. MOPUB is the regulated business unit which previously served the territory known as Missouri Public Service. On September 5, 2008 GMO regulated jurisdictions filed a rate case including the Crossroads Energy Center in MPS's rate base at net book value.

**Conclusion:**

The following actions regarding the accounting of the Crossroads Energy Center are appropriate:

1. The Crossroads Energy Center should be recorded at net book value on the books and records of KCP&L Greater Missouri Operations Company's MOPUB business unit.
2. August 2008 was the appropriate time to move the Crossroads Energy Center to the MOPUB business unit.
3. The Crossroads Energy Center is appropriately recorded as a capital lease as part of the continuing property records.
4. The ADIT associated with the time period that the Crossroads Energy Center was recorded on the non-regulated subsidiary of Aquila, Inc. should be recorded on the non-regulated business unit AQP (GMO's non-regulated subsidiary). The ADIT balances from March 2007 when the Crossroads Energy Center was moved to a business unit under Aquila, Inc. parents books and records until the present should be recorded on the business unit MOPUB.

**Support of Conclusion:**

*Recorded at Net Book Value on MOPUB's Books and Records*

The support for the decision by GPE's management to record the Crossroads Energy Center at net book value can be directly linked to the Request for Proposal process by GMO. As discussed in the background section above, on March 19, 2007 the regulated jurisdictional operations of GMO sent out a Request for Proposal to evaluate and choose a long-term supply option. Aquila, Inc. bid the Crossroads Energy Center into the Request for Proposal process at net book value. All bids were accumulated and evaluated. The Crossroads Energy Center was selected as the least cost and most preferred option. This was presented to Missouri Public Service Commission Staff on October 31, 2007.

Additionally, with the acquisition of Aquila, Inc. by Great Plains Energy, PricewaterhouseCoopers was engaged to complete a Purchase Accounting Valuation. As part of this analysis, there was an assessment of the fair market value of the Crossroads Energy Center. This evaluation resulted in an amount that was in excess of the Net Book Value that was offered into the Request for Proposal process initiated by Aquila Inc. GPE's management made the decision to not record a fair market value adjustment on the Crossroads Energy Center, but instead record the plant at net book value and include the property as part of GMO's regulated jurisdiction. This amount is being requested to be part of rate base at net book value in GMO's current rate case filing, case number ER-2009-0090.

*Recorded at August 2008 on Business Unit MOPUB*

The support to move the Crossroads Energy Center to MOPUB's business unit in August 2008 can be linked to a series of events ultimately concluding in GPE management's decision to include the Crossroads Energy Center in the GMO's regulated jurisdiction rate base calculation in the September 5, 2008 rate case filing (ER-2009-0090). The series of events as discussed in the background section of this whitepaper are detailed below:

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- On March 31, 2007, the non-regulated subsidiary Merchant Energy Partners negotiated an assignment of the rights and obligations of the Crossroads Energy Center to the Parent company Aquilla, Inc.
- Subsequently, Aquilla, Inc. bid the Crossroads Energy Center into a Request for Proposal by GMO's regulated jurisdiction for a long-term supply option.
- GMO's evaluation of the bids offered concluded that the Crossroads Energy Center was the least cost and preferred option for the long-term supply option.
- On October 31, 2007, a presentation was made to the Missouri Public Service Commission Staff communicating the results of the Request for Proposal process.
- Approximately May 14, 2008 Aquilla's management reviewed the results of the IRP process and the results of the Request for Proposal process with GPE's management. GPE's management concurred with the decision that Crossroads was the least cost and preferred long-term supply option.
- On July 14, 2008 Great Plains Energy completed their acquisition of Aquilla, Inc.
- August 2008, GPE's management decided to include the Crossroads Energy Center in rate base in its GMO regulated jurisdiction.
- On August 25, 2008, GPE's management met with Missouri Public Service Commission Staff and discussed GPE's decision to move the Crossroads Energy Center onto the books and records of GMO's regulated jurisdiction and include the net book value of the plant in rate base in the upcoming rate case filing.
- August 31, 2008 Crossroads Energy Center was transferred to GMO's regulated jurisdiction.
- September 5, 2008, GMO filed a rate case under the docket number ER-2009-0090 including the Crossroads Energy Center in rate base at net book value.

Recorded as a Capital Lease

The "General Instructions" number 19 of 18 CFR part 101 states the following:

*If at the inception a lease meets one or more of the following criteria, the lease shall be classified as a capital lease. Otherwise, it shall be classified as an operating lease.*

1. *The lease transfers ownership of the property to the lessee by the end of the lease term.*
2. *The lease contains a bargain purchase option.*
3. *The lease term is equal to 75 percent or more of the estimated economic life of the leased property.*
4. *The present value at the beginning of the lease term of the minimum lease payments, excluding that portion of the payments representing executory costs such as insurance, maintenance and taxes to be paid by the lessor, including any profit thereon, equals or exceeds 90 percent of the excess of the fair value of the leased property to the lessor at the inception of the lease over any related investment tax credit retained by the lessor and expected to be realized by the lessor.*

The Crossroads Energy Center has been recorded on the books and records since October 2002 as a capital lease. This is supported by the following:

- Criteria number 3 states that the lease term is equal to 75 percent or more of the estimated economic life of the leased property. The Crossroads Energy Center meets this criteria. The lease term agreed to with the City of Clarksdale was for an original term of 30 years and two 5 year extension options. The economic life of the plant is estimated at 40 years. This equates to 75 percent of the economic life when considering the original terms and 100 percent of the economic life if the two 5 year extension periods are exercised. Both meet or exceed the 75 percent criteria discussed above.
- In addition, criteria number 2 states that the lease must contain a bargain purchase option. Effective March 28, 2008 GMO finalized a purchase option that allows it to purchase the Crossroads Energy Center from the City of Clarksdale at any time for \$1,000. \$1,000 would be considered a bargain purchase option as it is significantly less than the fair market value of the plant. Crossroads would meet this requirement.

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**Case No. ER-2016-0156**

Recording of ADIT Balances

ADIT balances to date associated with the Crossroads Energy Center can be grouped into two separate categories as follows:

- ADIT accumulated from original in service date during 2002 to the date the plant was transferred to Aquila, Inc.'s parents books CECAQ in March 2007.
- ADIT accumulated on Aquila, Inc.'s parents books from March 2007 to present.

The ADIT in the first grouping when the Crossroads Energy Center was recorded on Aquila's non-regulated subsidiary Merchant Energy Partner's with a business unit titled ACEC is attributable to the deferred intercompany gain from when the Plant was transferred to Aquila, Inc.'s parents books. The transfer of these ADIT balances to Parent would not be appropriate as the Parent or the future GMO jurisdiction has not received any benefits of the accelerated depreciation that was recognized on the non-regulated subsidiary books. As such, the ADIT associated with this time period is recorded presently on the non-regulated business unit AQP.

The ADIT associated with the time period of when the plant was recorded on Aquila Inc.'s parents books to the present is attributable to the tax effected difference between book and tax depreciation. Due to tax normalization rules, these amounts are required to follow the plant as it gets transferred to the GMO regulated jurisdiction of MOPUB. These ADIT amounts will be used as rate base offsets to the plants net book value that will be included in GMO's rate case filings.

**KCP&L Greater Missouri Operations****Case No. ER-2016-0156****Missouri Public Service Commission**Data Request

**Data Request No.** 0070.2  
**Company Name** KCP&L Greater Missouri Operations Company-Investor(Electric)  
**Case/Tracking No.** ER-2016-0156  
**Date Requested** 3/4/2016  
**Issue** Expense - Operations - Fuel Expenses  
**Requested From** Lois J Liechti  
**Requested By** Nathan Williams  
**Brief Description** Natural Gas Prices—Transportation

**Description** A). For Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company generating units, identify all natural gas-fired combined-cycle and peaking combustion generation that has firm transportation and firm pipeline reservation. B) For each identified generating unit provide the monthly volumes, and the associated monthly and annual dollar amount costs of the natural gas that relates to the firm transportation and pipeline reservation for the period 2015 to most current available, and update as months become available C) Provide all contracts for the natural gas firm transportation and pipeline reservations. D) For generating units that have firm transportation and/or firm pipeline reservation, explain why it is firm. E) For generating units that do not have firm transportation and/or firm pipeline reservation, explain why they are not firm. (KCPL Case ER-2012-0174, DR 70.3; ER-2014-0370, DR 71.3) Requested by Cary Featherstone (Cary.Featherstone@psc.mo.gov)

**Due Date** 3/24/2016

The attached information provided to Missouri Public Service Commission Staff in response to the above data information request is accurate and complete, and contains no material misrepresentations or omissions, based upon present facts of which the undersigned has knowledge, information or belief. The undersigned agrees to immediately inform the Missouri Public Service Commission Staff if, during the pendency of Case No. ER-2016-0156 before the Commission, any matters are discovered which would materially affect the accuracy or completeness of the attached information.

If these data are voluminous, please (1) identify the relevant documents and their location (2) make arrangements with requestor to have documents available for inspection in the KCP&L Greater Missouri Operations Company-Investor(Electric) office, or other location mutually agreeable. Where identification of a document is requested, briefly describe the document (e.g. book, letter, memorandum, report) and state the following information as applicable for the particular document: name, title number, author, date of publication and publisher, addresses, date written, and the name and address of the person(s) having possession of the document. As used in this data request the term "document(s)" includes publication of any format, workpapers, letters, memoranda, notes, reports, analyses, computer analyses, test results, studies or data, recordings, transcriptions and printed, typed or written materials of every kind in your possession, custody or control or within your knowledge. The pronoun "you" or "your" refers to KCP&L Greater Missouri Operations Company-Investor(Electric) and its employees, contractors, agents or others employed by or acting in its behalf.

**Security** Public  
**Rationale** NA

**Schedule CGF-s7****Page 1 of 5**

**KCP&L Greater Missouri Operations****Case No. ER-2016-0156****Missouri Public Service Commission****Respond Data Request**

<b>Data Request No.</b>	0070.2
<b>Company Name</b>	KCP&L Greater Missouri Operations Company-Investor(Electric)
<b>Case/Tracking No.</b>	ER-2016-0156
<b>Date Requested</b>	3/4/2016
<b>Issue</b>	Expense - Operations - Fuel Expenses
<b>Requested From</b>	Lois J Liechti
<b>Requested By</b>	Nathan Williams
<b>Brief Description</b>	Natural Gas Prices—Transportation
<b>Description</b>	A). For Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company generating units, identify all natural gas-fired combined-cycle and peaking combustion generation that has firm transportation and firm pipeline reservation. B) For each identified generating unit provide the monthly volumes, and the associated monthly and annual dollar amount costs of the natural gas that relates to the firm transportation and pipeline reservation for the period 2015 to most current available, and update as months become available C) Provide all contracts for the natural gas firm transportation and pipeline reservations. D) For generating units that have firm transportation and/or firm pipeline reservation, explain why it is firm. E) For generating units that do not have firm transportation and/or firm pipeline reservation, explain why they are not firm. (KCPL Case ER-2012-0174, DR 70.3; ER-2014-0370, DR 71.3) Requested by Cary Featherstone (Cary.Featherstone@psc.mo.gov)
<b>Response</b>	Please see attached.
<b>Objections</b>	NA

The attached information provided to **Missouri Public Service Commission** Staff in response to the above data information request is accurate and complete, and contains no material misrepresentations or omissions, based upon present facts of which the undersigned has knowledge, information or belief. The undersigned agrees to immediately inform the **Missouri Public Service Commission** if, during the pendency of Case No. **ER-2016-0156** before the Commission, any matters are discovered which would materially affect the accuracy or completeness of the attached information. If these data are voluminous, please (1) identify the relevant documents and their location (2) make arrangements with requestor to have documents available for inspection in the **KCP&L Greater Missouri Operations Company-Investor (Electric)** office, or other location mutually agreeable. Where identification of a document is requested, briefly describe the document (e.g. book, letter, memorandum, report) and state the following information as applicable for the particular document: name, title number, author, date of publication and publisher, addresses, date written, and the name and address of the person (s) having possession of the document. As used in this data request the term "document(s)" includes publication of any format, workpapers, letters, memoranda, notes, reports, analyses, computer analyses, test results, studies or data, recordings, transcriptions and printed, typed or written materials of every kind in your possession, custody or control or within your knowledge. The pronoun "you" or "your" refers to **KCP&L Greater Missouri Operations Company-Investor(Electric)** and its employees, contractors, agents or others employed by or acting in its behalf.

<b>Security :</b>	Public
<b>Rationale :</b>	NA

**Schedule CGF-s7****Page 2 of 5**

**KCP&L Greater Missouri Operations**  
**Case No. ER-2016-0156**

KCPL GMO  
Case Name: 2016 GMO Rate Case  
Case Number: ER-2016-0156

Response to Featherstone Cary Interrogatories - MPSC\_20160304  
Date of Response: 03/23/2016

Question:0070.2

A). For Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company generating units, identify all natural gas-fired combined-cycle and peaking combustion generation that has firm transportation and firm pipeline reservation. B) For each identified generating unit provide the monthly volumes, and the associated monthly and annual dollar amount costs of the natural gas that relates to the firm transportation and pipeline reservation for the period 2015 to most current available, and update as months become available C) Provide all contracts for the natural gas firm transportation and pipeline reservations. D) For generating units that have firm transportation and/or firm pipeline reservation, explain why it is firm. E) For generating units that do not have firm transportation and/or firm pipeline reservation, explain why they are not firm. (KCPL Case ER-2012-0174, DR 70.3; ER-2014-0370, DR 71.3)  
Requested by Cary Featherstone ([Cary.Featherstone@psc.mo.gov](mailto:Cary.Featherstone@psc.mo.gov))

Response:

*A). For Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company generating units, identify all natural gas-fired combined-cycle and peaking combustion generation that has firm transportation and firm pipeline reservation.*

**Response:**

Hawthorn Station has firm transport on Southern Star Central Gas Pipeline for KCPL. For KCP&L Greater Missouri Operations the Company has transport on Panhandle Eastern Pipeline and Trunkline Pipeline for the South Harper facility.

*B) For each identified generating unit provide the monthly volumes, and the associated monthly and annual dollar amount costs of the natural gas that relates to the firm transportation and pipeline reservation for the period 2015 to most current available, and update as months become available*

**Response:**

Hawthorn Station has 15,255 mmbtu/day of Production capacity and 40,000 mmbtu/day of Market area capacity. Current charges amount to approximately \$33,103 a month (\$389,765.25/year) for production capacity and \$196,664 a month (\$2,315,560/year) for market area capacity. South Harper current rates are approximately \$252,000 a month equating to annual payments of roughly \$3,025,000 for daily capacity of 45,000 mmbtu.

**KCP&L Greater Missouri Operations**  
**Case No. ER-2016-0156**

*C) Provide all contracts for the natural gas firm transportation and pipeline reservations.*

**Response:**

KCPL, KCPL-GMO and their suppliers consider the various transportation contracts either in whole or in part as **HIGHLY CONFIDENTIAL** information that is protected from disclosure. Moreover, the contracts are voluminous. To facilitate Staff's investigation, the various transportation contracts will be made available for Staff's review within the Fuels department offices. Please contact Amy Murray at 816-556-2067 to arrange to review the documents.

*D) For generating units that have firm transportation and/or firm pipeline reservation, explain why it is firm.*

**Response:**

KCPL's Hawthorn Station originally had firm contracts in place for startup needs for unit #5, which is the larger coal unit that uses natural gas as a startup fuel. The transport capacity can be used for units 5, combined cycle unit 6, and peaking units 7 and 8. In the heavy demand times of summer, KCPL also acquires additional firm transport capacity in the capacity release market to cover high demand days when numerous units may be operating. GMO's South Harper facility needed firm transport because it does not have the ability to operate on other fuels (oil).

*E) For generating units that do not have firm transportation and/or firm pipeline reservation, explain why they are not firm.*

**Response:**

For KCPL, the West Gardner facility does not have firm transport specifically designated for it, but is part of the factor in purchasing additional capacity on SSC in the summer to use in conjunction with Hawthorn station. The Osawatomie plant does not have its own firm transport, but we have had little problems securing supply for that single unit on PEPL. For GMO we do not have firm transport for our Lake Road station or Greenwood facility as both of these facilities have the ability to run on oil as a backup fuel. We do flow gas without issue a majority of the time on SSC to these locations with secondary transport that we acquire in the capacity release market. The Crossroads facility also does not have firm transport currently in place, but we contract for summer delivered supply deals with transporters that set aside firm transport on our behalf.

**Information provided by:** Gary Gottsch, Generation Sales and Services

Attachment: Q0070.2\_Verification.pdf

*Verification of Response*

**Kansas City Power & Light Company  
AND  
KCP&L Greater Missouri Operations**

**Docket No. ER-2016-0156**

The response to Data Request # 0070.2 is true and accurate to the best of my knowledge and belief.

Signed: \_\_\_\_\_

*Tom Rush*

Date: March 23, 2016



**SCHEDULE CGF-s8**

**HAS BEEN DEEMED**

**HIGHLY CONFIDENTIAL**

**IN ITS ENTIRETY**