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and Resource Planning

Witness: Cary G. Featherstone

Sponsoring Party: MoPSC Staff
Type of Exhibit: Rebuttal Testimony
Case Nos.: ER-2018-0145 and

ER-2018-0146

Date Testimony Prepared: July 27, 2018

# MISSOURI PUBLIC SERVICE COMMISSION COMMISSION STAFF DIVISION AUDITING DEPARTMENT

**REBUTTAL TESTIMONY** 

**OF** 

**CARY G. FEATHERSTONE** 

## KANSAS CITY POWER & LIGHT COMPANY CASE NO. ER-2018-0145

**AND** 

KCP&L GREATER MISSOURI OPERATIONS COMPANY CASE NO. ER-2018-0146

Jefferson City, Missouri July 2018

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6	and
7 8	KCP&L GREATER MISSOURI OPERATIONS COMPANY CASE NO. ER-2018-0146
9	Q. Please state your name and business address.
10	A. Cary G. Featherstone, Fletcher Daniels State Office Building, 615 East 13 <sup>th</sup> Street,
11	Kansas City, Missouri.
12	Q. By whom are you employed and in what capacity?
13	A. I am a Regulatory Auditor with the Missouri Public Service
14	Commission ("Commission").
15	Q. Are you the same Cary G. Featherstone who filed direct testimony in
16	this proceeding?
17	A. Yes, I am. I contributed to Staff's Cost of Service Report filed on June 19, 2018,
18	("COS Report") in regard to Kansas City Power & Light Company ("KCPL") and KCP&L
19	Greater Missouri Operations Company's ("GMO"), collectively referred to as Company or
20	Companies, 2018 rate increase requests filed on January 30, 2018.
21	Q. What is the purpose of your rebuttal testimony?
22	A. I address the direct testimony of the following GMO only witnesses relating to
23	Crossroads Energy Center Generating Facility ("Crossroads"):

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Burton L. Crawford, GMO's Director, Energy Resource Management – direct testimony, pages 15 to 17.

Ronald A. Klote, GMO's Director, Regulatory Affairs — direct testimony, pages 9, 10, 25 and 26.

Tim Rush, GMO's Director, Regulatory Affairs – direct testimony, pages 23 to 27.

#### **EXECUTIVE SUMMARY**

Q. Please summarize your rebuttal testimony.

A. Staff continues to support the Commission's decision in GMO's 2010 and 2012 general rate increase cases to exclude all transmission costs related to the power generated from Crossroads Energy Center ("Crossroads").

In 2010 and 2012, the Commission determined that unnecessary and expensive transmission costs incurred to transmit power generated by Crossroads should not be recovered in rates. While GMO's customers are located primarily in the metropolitan Kansas City, Missouri area and surrounding communities and in many areas in western Missouri, Crossroads is physically located in Clarksdale, Mississippi. More importantly, Crossroads is located outside Southwest Power Pool ("SPP"), of which GMO is a member, in another RTO, the Midcontinent Independent System Operator ("MISO"). In effect, the Commission's rate decisions in both the 2010 and 2012 GMO rate cases<sup>1</sup> assume the cost levels as though Crossroads was built within the SPP, just like every other generating unit operated by GMO, and its affiliate, KCPL.

While GMO presents in its direct testimony that it accepts the rate base valuation disallowances made by the Commission in the 2010 and 2012 rate cases,<sup>2</sup> it requests rate recovery in this case of all Crossroads transmission costs incurred in excess of the approximately \$4.9 million excluded in Case No. ER-2012-0175, which would result in GMO's

<sup>&</sup>lt;sup>1</sup> Case Nos. ER-2010-0356 and ER-2012-0175.

<sup>&</sup>lt;sup>2</sup> GMO Case No. ER-2018-0146 - EFIS #16 - Rush direct at page 26; EFIS #12 - Klote direct at pages 9 and 25-26 and EFIS #9 - Crawford direct at pages 16-17.

proposed recovery of approximately \$6.4 million of Crossroads transmission expense in this 1 2

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case.<sup>3</sup> According to its testimony, GMO believes the increased cost to transmit power from Crossroads to GMO's service territory over those levels determined in 2010 and 2012 rate cases

should be recovered from customers in full. Staff disagrees with GMO's position.

However, the Commission excluded all transmission costs related to Crossroads in both the 2010 and 2012 rate proceedings, not a limited disallowance of approximately \$4.9 million, resulting in no recovery of any of this power plant's transmission costs.

To the extent the Commission determines some amount of the Crossroads transmission costs should be allowed rate recovery, then Staff recommends that there be a corresponding review of the rate base investment for Crossroads determined by the Commission in its original decision in GMO's 2010 rate case, and reaffirmed in the 2012 rate case. This rate base amount would be the value of Crossroads at the time of the Aquila acquisition in July 2008, approximately \$51.6 million before any depreciation is considered and would be a further reduction to Crossroads rate base investment. Depreciation and related deferred taxes would have to be determined to develop a full rate base value.

#### BACKGROUND OF CROSSROADS ENERGY CENTER

Q. What is the Crossroads Energy Center?

A. Crossroads' generating site has four 75 megawatt combustion turbines, fired by natural gas with a total capacity of approximately 300 megawatts (currently accredited 292 megawatts<sup>4</sup>) located near Clarksdale, Mississippi. These four units are General Electric model 7 EAs, and were installed in 2002 as a merchant plant for the former Aquila Merchant,

<sup>&</sup>lt;sup>3</sup> Case No. ER-2018-0146 EFIS #12 - Klote direct testimony, pages 25 and 26 - the forecast amount of \$11.3 million less amount of transmission costs at time of 2012 rate case of \$4.9 million resulting in \$6.4 million or GMO's requested transmission recovery for Crossroads.

<sup>&</sup>lt;sup>4</sup> Crossroads is identified as 292 megawatts in Great Plains 10-K as of December 31, 2016 - page 30.

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a non-regulated wholly-owned subsidiary of Aquila. The generating facility is operated by the City of Clarksdale, Mississippi under an agreement entered into at the time of plant completion in 2002. This arrangement continues today.

A non-regulated affiliate of Aquila, Aquila Merchant Services ("Aquila Merchant") built Crossroads in 2002 as a non-regulated independent merchant power plant ("IPP"), originally built to serve the constrained transmission area in and around Clarksdale, Mississippi. However, because the power market collapsed just prior to the completion of Crossroads, it never operated as a merchant plant. In fact, other than testing the units during installation, it never operated until 2005, when it generated electricity for Aquila's regulated affiliate, MPS, under a short-term purchased power agreement in the summer of 2005. In July 2008, Great Plains Energy purchased Crossroads as part of the Aquila acquisition. Great Plains Energy and Aquila estimated what each thought the market value of Crossroads would be in the spring of 2007 and again in late summer of that same year. It was determined Crossroads had a value of \$51.6 million, which was communicated to both Great Plains and Aquila shareholders in a May 8, 2007, Joint Proxy Statement and again in an August 27, 2007, Joint Proxy Statement, both filed with the SEC.

fair value of certain Adjusted Aquila non-regulated tangible assets and

reduction of depreciation expense associated with the decreased fair value. The adjustment was determined based on Great Plains Energy's estimates of fair value based on estimates of proceeds from sale of units to an unrelated party of similar capacity in the current market place. The preliminary internal analysis indicated a fair value estimate of Aquila's non-regulated Crossroads power generating facility of approximately \$51.6 million. This analysis is significantly affected by assumptions regarding the current market for sales of units of

D - The pro forma adjustment represents the adjustment of the estimated

similar capacity. The \$65.4 million adjustment reflects the difference between the fair value of the combustion turbines at \$51.6 million and the

\$117.0 million book value of the facility at June 30, 2007.

A.

Great Plains Energy management believes this to be an appropriate estimate of the fair value of the facility. The adjusted value will be depreciated over the estimated remaining useful lives of the underlying assets and could be materially affected by changes in fair value prior to the closing of the merger. An additional change in the fair value of the facility of \$15 million would result in an additional change to annual depreciation expense of approximately \$0.5 million.

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[Emphasis added; Great Plains Energy & Aquila Joint Proxy Statement/Prospectus the SEC on August 27, 2007, page 194]

When Great Plains Energy acquired Aquila in July 2008, GMO sought to include

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Q. How did Crossroads become part of GMO's rate base?

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the merchant plant, Crossroads, in its rate base. Crossroads was the selected choice on meeting

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GMO's continued short fall of capacity. GMO sought to include the full depreciated value

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reflected on the non-regulated Aquila Merchant's books, as though that was the value paid by

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Great Plains for this asset. The Commission determined Crossroads should be included in rate

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base at a market value, not the depreciable value the non-regulated entity paid for the unit.

#### **CROSSROADS TRANSMISSION COSTS**

included in this rate case."

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Q. What is GMO's position regarding transmission costs related to Crossroads in this

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A. Several GMO witnesses support the inclusion of certain transmission costs

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relating to Crossroads:

rate proceeding?

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• Mr. Klote states at page 25 through 26 that "the Company included the forecasted amount of Crossroads transmission expense for the period July 2017 to June 2018 less the amount of disallowed transmission cost associated with Crossroads Generating Station that was established in Case Nos. ER-2010-0356 and ER-2012-0175" and "the forecasted amount of Crossroads transmission expense for the period July 2017 and June 2018 was \$11,345,896. The amount of the Crossroads generating facility's transmission expense that was previously disallowed in the 2012 Case that was removed

from this case was \$4,915,609. This nets to a projected annual amount

associated with Crossroads transmission expense of \$6,430,287 that is

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- Mr. Crawford states at page 15 of his direct testimony that "while GMO is not seeking recovery of transmission costs previously disallowed by the MPSC, GMO is seeking recovery of the increase in transmission costs above the amount of the original \$4.9 million disallowance" and at page 17 "GMO is requesting cost recovery for the increase in transmission costs for Crossroads above the amount of the original \$4.9 million disallowance in ER-2010-0356. GMO is not asking to recover the transmission costs previously disallowed by the Commission nor the Crossroads capital costs previously disallowed by the Commission."
- Mr. Rush states at page 26 of his direct testimony that "the Company is not asking the Commission to reverse any of its prior decisions. GMO proposes to continue the disallowance levels adopted by the Commission in Case Nos. ER-2010-0356 and ER-2010-0175 with respect to rate base and transmission costs. GMO proposes to include in rates the incremental increase in transmission cost above the \$4.9 million, which was the amount disallowed in Case No. ER-2012-0175."
- Q. Does Staff agree with the inclusion of any of GMO's Crossroads transmission costs in GMO's revenue requirement used to set rates?
- A. No. Staff excluded all the test year transmission costs for Crossroads in the Accounting Schedules filed with its direct testimony on June 19, 2018.

These costs were eliminated consistent with the Commission's treatment of these costs in GMO's 2010 and 2012 rate cases. See pages 16 to 26 of Staff's Cost of Service Report (EFIS #66) for a discussion of Crossroads and Adjustment E 85.1 in Accounting Schedule 10 - Adjustments to Income Statement. In addition, Staff witness Keith Majors makes Adjustments E-58.2, E-61.3, E-88.1 and E-194.1 to remove transmission and other costs for Crossroads that would not be incurred but for the location of this power plant facility. (*See* EFIS #73 - Accounting Schedules)

Q. GMO stated in its direct testimony that it accepts the disallowance made by the Commission for Crossroads rate base valuation in the last two rate cases. How did Staff treat Crossroads in rate base in this proceeding?

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filing in this current rate case. All these adjustments will be updated for the true-up ending June 30, 2018. What is the nature of the transmission service Crossroads requires that GMO Q.

witness Mr. Crawford discusses at pages 15 and 16 of his direct testimony?

made a series of adjustments to GMO's recorded plant in service ("plant") and accumulated

depreciation reserve ("reserve") to reflect the Commission ordered rate base values for this

generating unit determined in both Case Nos. ER-2010-0356 (the "2010 rate case") and

ER-2012-0175 (the "2012 rate case"). An adjustment for deferred taxes relating to Crossroads

was also made. GMO made these same plant, reserve and deferred tax adjustments in its direct

Consistent with the Commission's decision in the 2010 and 2012 rate cases. Staff

- A. Because Crossroads is not located in the SPP, but rather in MISO, GMO obtained firm transmission service to transmit power back to western Missouri from this generating facility. In 2009, GMO signed a 20-year transmission agreement with Entergy to provide firm transmission service for Crossroads. Mr. Crawford states in his direct testimony this "... transmission service is required for GMO to count the 300 MWs of Crossroads capacity towards meeting GMO's capacity obligations. Without this service, GMO would be required to build or purchase 300 MWs of additional generating capacity and obtain firm transmission service."5
- Q. Is the location of this plant the key point supporting Staff's recommendation to disallow recovery of transmission costs?

<sup>&</sup>lt;sup>5</sup> Case No. ER-2018-0146 - Crawford direct, page 16, line 11 - EFIS #9.

A. Yes. The Commission decided in GMO's 2010 rate case that Crossroads could be included in rate base but at a substantial reduction in value as long as no transmission costs were included in rates.<sup>6</sup>

The Commission stated at page 90 of its Case No. ER-2010-0356 Order:

#### **Ultimate Finding Regarding Prudence of Crossroads**

262. Considering the costs involved, the fact that this was an affiliate transaction rather than an arms-length transaction, the relative reliability of transmission, the excessive costs of that transmission, the reduced costs for natural gas and the alternative supply source, the distance of the power location to the customers served, and the other facts set out above, the Commission finds that the decision not to build two more 105 MW combustion turbines at South Harper was not imprudent. In addition, the decision to include Crossroads in the generation fleet at an appropriate value was prudent with the exception of the additional transmission expense, when other low-cost options were available. Paying the additional transmission costs required to bring energy all the way from Crossroads and including Crossroads at net book value with no disallowances, is not just and reasonable and is discussed in detail below.

#### **Conclusions of Law- Crossroads**

29. In addition to the valuation, the Commission concludes that but for the location of Crossroads customers would not have to pay the excessive cost of transmission. Therefore, transmission costs from the Crossroads facility, including any related OSS shall be disallowed from expenses in rates and therefore also not recoverable through GMO's fuel adjustment clause ("FAC").

#### **Decision - Crossroads**

The Commission further determines that it is not just and reasonable for GMO customers to pay the excessive cost of transmission from Mississippi and it shall be excluded.

[emphasis added]

- Q. What is the current level of transmission costs incurred for Crossroads?
- A. For 2017, Crossroads actual transmission costs were \$11.1 million.<sup>7</sup> This compares with the level of Crossroads transmission expenses incurred at the time of the 2010

<sup>&</sup>lt;sup>6</sup> Commission's Order in Case No. ER-2010-0356, pages 90-91, 98-100 - EFIS #1085.

<sup>&</sup>lt;sup>7</sup> For other years' transmission costs, refer to page 25 of the Cost of Service Report filed on June 19, 2018 in this case, EFIS #66.

GMO rate case at \$4.9 million. Starting in 2014, Crossroads transmission costs increased substantially over previous levels, to over \$12.9 million. The transmission costs for Crossroads appears to have stabilized over the past couple of years.

Q. What caused the dramatic increase in transmission costs?

for 2014 to \$12.7 million and almost \$13 million in 2015.

A. Entergy, who supplies transmission service for Crossroads, joined MISO in December 2013. Entergy's move to MISO caused the substantial increase in transmission costs

Q. In Staff's opinion, should the disallowance for Crossroads' transmission costs be capped at the \$4.9 million level?

A. No. In both the 2010 and 2012 rate cases, KCPL and GMO requested special ratemaking consideration ("tracker mechanisms") for the increases expected to occur for transmission costs. GMO and KCPL, as well as Staff, presented extensive information on actual and projected costs for transmission services in every recent rate case, including the 2010 and 2012 rate cases. Those proposals were presented and decided by the Commission and there is no reason to believe the Commission intended the disallowed transmission costs of \$4.9 million to be the only amount disallowed in the future.

Q. What amount of transmission costs relating to Crossroads has been removed from this case?

A. Staff removed the entire amount of transmission costs identified for the twelve months ending June 30, 2017 test year of approximately \$11.0 million. The transmission costs are primarily charged to FERC Account 365 so Adjustment E-85.1 represents the vast majority of those costs. Nevertheless, other accounts contain Crossroads related transmission costs that needed to be adjusted, identified in the following table:

FERC Account	Adjustment No.	Adjustment Amount of Removed Costs
365.0	E 85.1	\$10,812,698
575.7	E 88.1	\$15,622
928.0	E 164.4	\$147,764
Total		\$10,976,084

Other costs relating to travel to Mississippi by KCPL employees and costs incurred from the state of Mississippi have been removed from the test year. Those costs were removed consistent with how transmission costs were treated in the 2010 and 2012 rate cases.

Q. Have all costs relating to Crossroads been removed from the test year?

A. No. All operating costs for Crossroads other than transmission costs and those identified as related to the physical location of the generating facility have been included in GMO's cost of service. Costs associated with operating Crossroads by City of Clarksdale have been included. Other costs for maintenance of Crossroads have been included in costs for recovery from GMO customers. Amounts for insurance and property taxes, or its equivalent Pilot payments, have been included as well. Any costs to operate the power plant that would normally be incurred if located in GMO's service area were included GMO's cost structure.

Q. GMO witness Crawford states at page 15 of his direct testimony that "as a result of prior MPSC decisions, GMO does not recover FERC-approved transmission rates associated with Crossroads." Does Staff view the dispute relating to Crossroads as primarily involving a FERC-approved transmission rate issue?

A. No. The dispute with Crossroads transmission costs has nothing to do with FERC authorized and approved transmission tariff rates but the incurrence of transmission costs based on the facility being located outside the RTO.

Crossroads transmission costs relate only to the location of the generating facility which causes GMO to be charged for the transmission of electricity to serve its customers in western Missouri. If the Crossroads facility were located in the Southwest Power Pool, no transmission costs would be recognized under network services since SPP allows its members to transmit power throughout its RTO area without incurring additional transmission costs. There would not be an issue regarding transmission costs because those costs would be "zero."

#### **NATURAL GAS SUPPLY AND COSTS**

Q. At page 26 of Mr. Rush's direct testimony he references a time when natural gas supply was limited in early 2014. Is natural gas typically available in the Kansas City region?

A. Yes. Natural gas is generally available throughout the year. Mr. Rush referenced a tight market for natural gas in January and February 2014 at a time of extreme cold temperatures. This was a temporary, short term condition.

While Mr. Rush indicates natural gas was unavailable for the gas-fired combustion turbines in GMO's service area, Greenwood produced electricity using both natural gas and oil during January and February of 2014 as follows:

Month for 2014	Greenwood MWhs (gas & oil)	Crossroads MWhs
January	6,888	19,587
February	3,668	27,048
Total	10,556 MWhs	46,635 MWhs

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Clearly, Crossroads generated greater megawatt hours than Greenwood, but Greenwood

had natural gas available to produce needed electricity during this extreme and unusual

weather pattern.

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In addition, KCPL had natural gas available in Kansas City to operate its natural gas fired units to generate electricity during the first quarter of 2014.8

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Month for 2014	Osawatomie 1 MWhs	West Gardner 1 – 4 MWhs
January	2,308	365
February	1,112	0
Total	3,420 MWhs	365 MWhs

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Q. With respect to GMO's natural gas supply, are there differences between the region Crossroads operates in and the Kansas City region where all other GMO and KCPL generating units are located?

Historically, the Mississippi-based Crossroads has experienced higher A. natural gas costs when compared to actual purchases of natural gas prices and costs in and about Kansas City, Missouri. Schedule CGF-r1 contains historical natural gas prices for GMO and KCPL natural gas-fired generating facilities.

#### CROSSROADS IS NOT THE LOWEST COST OPTION

Q. Do you agree with Mr. Rush's and Mr. Crawford's statements that Crossroads is the "lowest cost supply option" for GMO?<sup>9</sup>

<sup>&</sup>lt;sup>8</sup> KCPL's natural gas-fired combustion turbines consumed for January and February 2014-January 631,261 mmBtu and February 501,914 mmBtu. The two months total 1,133,175 mmBtu, representing significantly higher usage by KCPL's natural gas-fired units compared to previous January and February generation from 2009 through 2013. GMO Greenwood natural gas & oil consumed January and February 2014—January 148,424 mmBtu gas and 5,413 mmBtu oil and February 39,198 mmBtu gas and 54,222 mmBtu oil; GMO Crossroads natural gas consumed January and February 2014—January 291,550 mmBtu gas and February 266,072 mmBtu gas.

<sup>&</sup>lt;sup>9</sup> Mr. Rush at pages 23, line 19 and 24, line 2 of direct - EFIS #16 and Mr. Crawford at pages 15, line 9 of direct -EFIS #9.

1	A. No. Because Crossroads is located in MISO and GMO is a member of the
2	Southwest Power Pool, the cost to transmit Crossroads' generation to western Missouri is
3	extremely expensive.
4	Q. Does Staff agree with Mr. Crawford's statement at page 15 of his direct testimony
5	that "in 2007 when the decision to add this asset to GMO's supply portfolio was evaluated
6	[Crossroads] was the lowest cost supply option for GMO customers?"
7	A. No.
8	The Commission rejected the 2007 least cost study in GMO's 2010 rate case stating the
9	following regarding the 2007 study in its Order at page 93:
10 11 12 13 14 15 16	268. GMO claims that the fair market value of Crossroads is established by an RFP conducted in March 2007, prior to the SEC disclosures. GMO postulates that, the responses to this RFP, demonstrates that fair market value is comparable to the proposed net book value. GMO fails to explain, however, given the alleged results of the RFP, why it announced to the Securities Exchange Commission, mere months later, that 'fair value' was only \$51.6 million.  275. Considering the depressed market as exhibited by the sale of
18 19 20 21	similar turbines to Ameren, and the valuation of these assets reported to the SEC by GPE, the Commission finds that \$61.8 million is an accurate reflection of the fair market value of Crossroads as acquired by the affiliate transaction rule as of July 14, 2008.
22	LOCATION OF POWER PLANTS
23	Q. Mr. Crawford states at page 17 of his direct testimony that it is not unprecedented
24	in Missouri for recovery of transmission costs related to an out-of-state generating facility to be
25	allowed. Do you agree with this assessment?
26	A. Yes. There are many examples of power plants that are located in another state or
27	even outside the service territory of a utility. KCPL itself has several examples of its power
28	plants located in areas not serve by it. Iatan 1 and 2, the Montrose units, LaCygne 1 and 2, and

Wolf Creek are all examples where generating facilities are located outside of service territory.

1	However, the difference is KCPL does not incur millions of dollars of transmission costs
2	to benefit from the electricity generated from these power units. While these units may be
3	located in regions outside those served by KCPL, all the units have in common being within the
4	SPP footprint. None of the units incur any transmission costs to move power generated to
5	KCPL's customers.
6	Q. Is it common for a utility to pay for transmission service to receive power from its
7	own generating facilities?
8	A. No. None of GMO's other generating units and none of KCPL's power plants
9	incur transmission costs because all those generating units are located within the SPP regional
10	transmission organization.
11	Q. Mr. Crawford cites Empire's Plum Point generating unit as an example of a power
12	plant being located in another state where Empire is able to get this plant's transmission costs in
13	rates. What is Plum Point?
14	A. Plum Point is a 665 megawatt coal-fired generating unit located near Osceola,
15	Arkansas that went into commercial operation on September 1, 2010, with combination
16	ownership. Empire has 50 megawatts of ownership with the option to purchase another
17	50 megawatts, pursuant to a long-term purchased power agreement.
18	Q. Why does Empire receive rate treatment for Plum Point transmission costs, when
19	the Commission determined it was not appropriate for Crossroads to receive rate treatment for its
20	transmission costs?
21	A. There are several reasons why Empire has successfully obtained rate recovery of
22	Plum Point transmission costs:
23 24 25	<ul> <li>Empire's ownership share of Plum Point was always intended to be a regulated facility. As such, during the economic decision-making process with regulators and stakeholders, all costs of Plum Point, including its</li> </ul>

transmission costs, were considered. When Empire considered investing in Plum Point, it approached the Commission, Staff, and various stakeholders to fully examine the merits and economic consequences of participating in Plum Point. Extensive analysis and review took place before Empire, and ultimately stakeholders, agreed to Empire's investment in this base load facility. Ultimately, Empire and the various stakeholders agreed to a Regulatory Plan in Case No. EO-2005-0263, very similar to the plan parties agreed to with KCPL's Regulatory Plan (Case No. EO-2005-0329). It was during this extensive evaluation where all the cost estimates, including transmission costs, were considered. Crossroads, as a merchant plant, was never intended to be part of regulated utilities operations. Consequently, there was never an assessment and evaluation by a regulatory body and the various stakeholders that considered Crossroads costs, and especially its transmission costs.

- Crossroads is used very little while Plum Point is a base load unit that generates a significant amount of Empire's energy needs. Crossroads' limited usage drives up the transmission costs on a per megawatt hour basis compared to the base load generation of Plum Point. Plum Point output is simply more critical to Empire than Crossroads generation. (*See* Rebuttal Confidential Schedule CGF-r2)
- Crossroads' transmission costs are substantial as a peaking unit. For base load unit, Plum Point's total transmission costs are significantly less than the transmission cost amounts incurred by Crossroads.
- Plum Point serves customers for each state Empire operates in, including the state of Arkansas where this generating facility is located.
- Unlike combustion turbine peaking units, Plum Point is a base load unit
  requiring large amounts of land and water to operate the generating unit. It is
  far more difficult to find suitable sites for large-scale base load units
  compared to peaking stations. While it is typical for base load units to be
  further away from utility service areas, peaking units are generally much
  closer to customers, and, with the exception of Crossroads, are within the
  utilities' RTO.
- Empire was too small of a utility to be able to build a base load unit like Plum Point or Iatan 2 on its own and, therefore, had to partner with others to participate in these large scale generating units. With such a small share of Plum Point, Empire was at the mercy of where these plants are built such as where KCPL's Iatan 1 and 2 power plants and the Plum Point station are located. Both Iatan and Plum Point facilities are well outside the service areas of Empire. But those circumstances were well known at the time of decisional-prudence reviews by regulators and taken into consideration. There were no such decisional reviews conducted for Crossroads, as that

power plant was developed as a merchant plant and did not have to through the scrutiny of state regulation.

#### **CROSSROADS RATE RECOVERY**

Q. Mr. Rush states at page 27 of his direct testimony, that "GMO customers have had the capacity of the Crossroads facility at a bargain price and had reflected in rates since 2008..." Have customers benefited from Crossroads at bargain prices?

A. When the Commission assessed all the evidence in the 2010 GMO rate case, and again in the 2012 rate case, , it determined that GMO's utilization of Crossroads was reasonable and prudent *only* if the plant value was substantially reduced and no rate recovery for transmission costs was included.. The Commission recognized the fact Great Plains acquired this generating facility at a much lesser value than what was on the books of Aquila Merchant, and reflected such in its original rate decision in 2010 and again in 2012. Thus, the inclusion of Crossroads was not a "bargain" price, but was reflected as a fair market price a willing buyer would pay for the Crossroads generating units.

Q. Mr. Rush indicates, at page 27 of his direct testimony, that "while Crossroads costs \$132 million, the Commission disallowed nearly \$70 million of gross plant from the actual costs." Do you agree with this assessment?

A. No. Great Plains did not pay \$132 million for Crossroads.<sup>10</sup> Crossroads was acquired in the Aquila acquisition in July 2008<sup>11</sup> as a distressed asset, deeply discounted from the value on Aquila Merchant's books. The price paid by Great Plains was closer to the estimate made by both Aquila and Great Plains of approximately \$51 million at the time of the transaction.

<sup>&</sup>lt;sup>10</sup> Commission's Order in Case No. ER-2010-0356, at pages 93-95 EFIS #1085.

<sup>&</sup>lt;sup>11</sup> The Commission approved the Aquila acquisition in Case No. EM-2007-0374.

from Crossroads transmission costs?

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A. Yes. GMO clearly incurs yearly operating costs for Crossroads transmission service. None of those transmission costs have been allowed in rates by the Commission.

Mr. Rush indicates at page 27 of his direct, GMO shareholders have lost money

The Commission determined, in the 2010 and 2012 rate cases, that transmission costs incurred to

from Crossroads for the disallowed transmission costs. Have GMO shareholders lost money

deliver power back to GMO's customers from this Mississippi power plant only made economic

sense if there was no recovery of these costs in rates. The Commission's rate orders in 2010 and

2012 ensured customers would not be over charged for a plant investment that did not exist.

However, the Commission in GMO's 2010 rate case, considered the nature of the costs incurred

by GMO for its Crossroads generating plant. To the extent some of the plant investment costs

were deemed to be prudent and reasonable using a market based analysis, in the 2010 rate case,

the Commission "...afford[ed] the utility an opportunity to recover a reasonable return on the

assets it has devoted to the public service." But to the extent costs were not considered

appropriate, the Commission made a determination not to allow cost recovery. Amounts relating

to the power plant that were in excess of market values were not afforded rate recovery as were

costs believed to be improper, such as the transmission costs.

#### STAFF RECOMMENDATION ON CROSSROADS TRANSMISSION

Q. What is Staff's recommendation on Crossroads transmission?

A. Staff recommends the Commission maintain its decisions in the 2010 and 2012 rate cases and deny recovery of Crossroads transmission costs in rates. GMO has agreed to the rate base valuation of Crossroads determined by the Commission in the 2010 and 2012 rate

<sup>&</sup>lt;sup>12</sup> Commission's order GMO's 2010 rate case (page 16), Case No. ER-2010-0356 - EFIS #1085.

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cases, and both the Company and Staff have made the necessary adjustments to reflect the proper levels for plant and reserve.

- Does Staff have a recommendation if the Commission allows any transmission O. costs in rates for Crossroads?
- Yes. If the Commission were to include any level of transmission costs for A. Crossroads, as GMO has suggested in this proceeding, then Staff recommends the Commission further discount the rate base value of this plant, by reducing the value of Crossroads from the levels found in the 2010 and 2012 rate cases to the level identified by Great Plains and Aquila in 2007. The issue of transmission costs and the valuation of the generating plant are interrelated one decision affects the other.
- Q. Does Staff have a recommendation as to how to determine the rate base value should the Commission allow transmission costs for Crossroads?
- Yes. Staff recommends an amount determined in a Joint Proxy Statement issued A. by Great Plains Energy and Aquila in August 2007 that found a value of \$51.6 million for Crossroads to be appropriate.<sup>13</sup> This same value was also communicated to each company's shareholders in May 2007, so it is logical that Great Plains paid no more than this \$51.6 million amount when it determined the appropriate and fair price to pay for Aquila as a whole in July 2008.
  - Q. Does this conclude your rebuttal testimony?
  - A. Yes.

<sup>&</sup>lt;sup>13</sup> August 27, 2007 Joint Proxy/ Prospectus issued by Great Plains Energy and Aquila - page 194.

#### BEFORE THE PUBLIC SERVICE COMMISSION

#### OF THE STATE OF MISSOURI

In the Matter of Kansas Cit Light Company's Request to Implement a General Ra	for Authority	,	Case No. ER-2018-0145
Electric Service		)	and
In the Matter of KCP&L G	reater	)	
Missouri Operations Comp		st )	Case No. ER-2018-0146
for Authority to Implement		)	
Rate Increase for Electric S	Service	)	
AF STATE OF MISSOURI COUNTY OF COLE	FIDAVIT O ) ) ss.		G. FEATHERSTONE
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 *Rebuttal Testimony* and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

JURAT

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: December 12, 2020
Commission Number: 12412070

Notary Public

## KCP&L Greater Missouri Operations Company Case No. ER-2018-0146

Generating Unit	Natural Gas Commodity		2008		2009		2010		2011		2012	:	2013	:	2014		2015	2016	2017
South Harpe	<u>r_</u>																		
	mmbtu	1,2	267,064		509,228		716,227		901,270	1,	712,254	(	647,856		74,159		26,369	92,797	46,939
		per	mmbtu	per	mmbtu	per	mmbtu	per	mmbtu	per	mmbtu	per	mmbtu	per	mmbtu	per	mmbtu	per mmbtu	per mmbtu
	Commodity	\$	6.56	\$	3.37	\$	4.50	\$	4.39	\$	2.77	\$	3.57	\$	4.49	\$	2.97	2.80	2.66
	Commodity with variable transportation	\$	6.92	\$	3.85	\$	4.78	\$	4.70	\$	2.98	\$	4.02	\$	4.70	\$	3.15	2.88	2.75
	Commodity with all firm & varible transportation	\$	9.80	Ś	9.87	Ś	9.87	Ś	8.75	Ś	5.11	Ś	9.61		53.13	Ś	108.73	35.48	67.16
	transportation	•			rper has p					Ą	5.11	Ţ	5.01		55.15	Ų	100.73	33.40	07.10
Greenwood			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			,			-										
	mmbtu	3	333,734		437,199		454,293		285,837		253,322	:	104,684	1,0	024,162		773,883	397,371	226,986
		•	mmbtu	•	mmbtu	•	mmbtu	•	mmbtu	•	mmbtu	•	mmbtu	•	mmbtu		mmbtu	per mmbtu	per mmbtu
	Commodity	\$	7.08	\$	3.74	\$	4.43	\$	4.21	\$	2.51	\$	3.59	\$	4.23	\$	2.57	2.52	2.66
	Commodity with variable transportation	\$	7.25	\$	4.26	\$	4.92	\$	4.69	\$	2.75	\$	4.61	\$	4.62	\$	2.89	3.13	3.38
	Commodity with all firm & varible																		
	transportation	\$	9.15	\$	4.31	\$	4.92	\$	4.69	\$	2.75	\$	4.61	\$	4.62	\$	2.89	3.13	3.38
		In 20	008 and ea	rly 2009	, Greenwo	ood had	firm trans	portatio	n pipeline	charge-	no reserv	ation pa	ayment in	years 20	10 through	ո 2017			

## KCP&L Greater Missouri Operations Company Case No. ER-2018-0146

Unit	Natural Gas Commodity	2	2008		2009		2010		2011		2012		2013		2014	:	2015	2016	2017
Crossroads																			
	mmbtu	1	21,736	1	121,326	:	306,454	1,0	081,911	1,0	)43,560	į	538,504	8	359,546	:	267,710	304,876	155,680
	Commodity	per (	mmbtu 8.03	per \$	mmbtu 4.71	per \$	mmbtu 4.89	per \$	mmbtu 4.53	per \$	mmbtu 3.08	per \$	mmbtu 3.87	per \$	mmbtu 5.87	per \$	mmbtu 2.88	per mmbtu 2.97	per mmbtu 3.01
	Commodity with variable transportation	\$	8.14	\$	5.03	\$	5.03	\$	4.64	\$	3.24	\$	4.07	\$	6.07	\$	3.23	3.37	3.43
	Commodity with all firm & varible																		
	transportation	\$	20.50	\$	7.69	\$	6.08 ervation cl	\$	4.96	\$	3.58	\$	4.55	\$	6.35	\$	4.15	4.06	4.77
Lake Road	mmbtu				379,068		295,384		256,743		35,931		747,749		336,376		188,971	1,785,727	1,464,801
Lake Road	mmbtu			1,3	379,068	1,:	295,384	1,:	256,743	1,6	35,931	1,7	747,749	1,8	336,376	2,:	188,971	1,785,727	1,464,801
				per	mmbtu	per	mmbtu	per	mmbtu	per	mmbtu	per	mmbtu	per	mmbtu	per	mmbtu	per mmbtu	per mmbtu
	Commodity			\$	3.54	\$	4.32	\$	3.93	\$	2.66	\$	3.63	\$	4.35	\$	2.50	2.28	2.67
	Commodity  Commodity  with variable  transportation			-		\$	4.32	\$	3.93 4.11	\$ \$	2.66	\$ \$	3.63	\$ \$	4.35 4.61	\$	2.50	2.28	•
	Commodity with variable transportation Commodity with all			\$	3.54	\$	4.50	\$	4.11	\$	2.88	\$	3.78	·	4.61	\$	2.73	2.54	2.67
	Commodity with variable transportation Commodity			\$	3.54	·		·		·		•		·		·			2.67
Ralph Green	Commodity with variable transportation Commodity with all transportation			\$	3.72	\$	4.50 4.52	\$	4.11	\$	2.88	\$	3.78	\$	4.62	\$	2.73	2.54 2.55	2.67 2.97 2.98
Ralph Green	Commodity with variable transportation Commodity with all			\$	3.54	\$	4.50	\$	4.11	\$	2.88	\$	3.78	\$	4.61	\$	2.73	2.54	2.67
Ralph Green	Commodity with variable transportation Commodity with all transportation			\$ \$	3.72	\$	4.50 4.52	\$	4.11	\$	2.88	\$	3.78	\$	4.62	\$	2.73	2.54 2.55	2.67 2.97 2.98
Ralph Green	Commodity with variable transportation Commodity with all transportation  mmbtu			\$ \$ \$ per	3.54 3.72 3.78 5,075 mmbtu	\$ \$ per	4.50 4.52 11,689 mmbtu	\$ \$ per	4.11 4.13 18,815 mmbtu	\$ \$	2.88 2.89 7,250 mmbtu	\$ \$	3.78 3.79 16,591 mmbtu	\$ per	4.61 4.62 180,154 mmbtu	\$ \$ per	2.73 2.74 264,947 mmbtu	2.54 2.55 179,205 per mmbtu	2.97 2.98 124,257 per mmbtu

Source: GMO Data Requests 70, Case No. ER-2016-0156; GMO Data Requests 70 & 70.1, Case No. ER-2012-0175; GMO Data Request 70 & 70.1, Case No. ER-2010-0356

## Kansas City Power & Light Company Case No. ER-2018-0145

#### **Combustion Turbines Natural Gas Prices**

Generating Unit	Natural Gas Commodity	2014	2015	2016	2017
West Gardner					
	mmbtu	482,667	475,518	178,281	149,110
		per mmbtu	per mmbtu	per mmbtu	per mmbtu
	Commodity	\$ 4.16	\$ 2.67	\$ 2.29	\$ 2.46
	Commodity with variable				
	transportation	\$ 4.66	\$ 3.01	\$ 3.16	\$ 3.06
	Commodity with all firm & varible				
	transportation	\$ 4.66	\$ 3.01	\$ 3.16	\$ 3.06
		West Gardner ha	as no firm pipeline reservatio	n charges	
Hawthorn					
	mmbtu	850,583	1,089,764	1,372,298	1,125,949
		per mmbtu	per mmbtu	per mmbtu	per mmbtu
	Commodity	\$ 3.27	\$ 2.52	\$ 2.47	\$ 2.57
	Commodity with variable				
	transportation	\$ 4.07	\$ 3.24	\$ 3.41	\$ 3.36
	Commodity with				
	all firm & varible transportation	\$ 7.31	\$ 6.22	\$ 5.78	\$ 6.24
		Hawthorn has fir	rm transportation pipeline re	servation charge-	
Osawatomie					
	mmbtu	171,182	59,609	23,650	12,504
	Commodity	per mmbtu \$ 3.79	per mmbtu \$ 2.94	per mmbtu \$ 2.37	per mmbtu \$ 2.87
	Commodity with variable				
	transportation	\$ 3.88	\$ 3.03	\$ 3.37	\$ 3.28
	Commodity with				
	all firm & varible transportation	¢ 200	\$ 3.03	¢ 227	¢ 220
	ι αποροιτατίση	\$ 3.88 Osawatomie, ha	\$ 3.03 d firm transportation for fou	\$ 3.37 r months in 2016.	\$ 3.28
		•	his facility has no firm pipeli		
		, , -	, , , , , , , , , , , , , , , , , , , ,	5	

Source: KCPL Data Requests 70 & 70.2, Case No. ER-2018-0145; GMO Data Requests 70, Case No. ER-2016-0285; GMO Data Requests 70 & 70.1, Case No. ER-2010-0355

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#### TRANSMISSION COSTS FOR PLUM POINT COMPARED TO CROSSROADS

Below is a table that identifies Plum Point's levels of generation by year since its operations began in 2010. Included in this table are the transmission costs by year incurred by Empire to transmit power back to Empire's service area:

Year	Plum Point Transmission Costs	Plum Point Net Generation MWhs (includes ownership & PPA)	Plum Point Transmission Costs per MWh
2017	\$3,977,003	484,964	\$8.21
2016	\$4,363,436	653,841	\$6.67
2015	\$4,337,333	555,997	\$7.80
2014	\$4,234,424	500,740	\$8.46
2013	\$1,975,245	531,933	\$3.71
2012	\$1,899,967	558,992	\$3.40
2011	\$1,331,846	506,899	\$2.63
2010	\$1,162,500 (partial year in-service)	52,309 (partial year in service)	\$22.22

Source: Empire Case No. ER-2016-0023 Data Request Nos. 0108 and 0196 and Case No. EO-2018-0244 Data Request No. 0063

Below is a table that identifies the transmission cost and net megawatt hour generation for Crossroads since 2010:

Year	Transmission Costs	Net Generation MWhs	Transmission Costs per MWh	
			** **	
2019 Estimate	** **	**- ** -	paid for ** **	
2019 25000000	estimate (a)	expected (b)	expected generation	
2017	\$11,127,897			
2017	excluding settlement	12,353	\$900.83	
2016	\$7,967,289			
2016	excluding settlement	23,261	\$342.52	
2015	\$12,927,935	19,992	\$646.66	
2014				
Entergy in MISO	\$12,458,641	70,616	\$176.40	
2013	\$4,650,299	64,650,299 44,559 \$104.36		
2012	\$3,690,558 84,865		\$43.49	
2011	\$4,747,065	88,681	\$53.53	
2010 \$4,744, 507		23,719	\$200.03	

Source: GMO Case No. ER-2018-0146 Data Request Nos. 367 and 390, Case No. ER-2016-0156 Data Request Nos. 0054 and 0155.1S, 0160 and 0167.3S and Case No. ER-2012-0175 Data Request Nos. 0154.1 and 0313.

<sup>(</sup>a) 2019 Estimate is the 2017 actual costs rounded

<sup>(</sup>b) Crossroads expected dispatch by year 2019-2022- Crawford direct HC Schedule BLC-5 in Case No. ER-2018-0145

#### from 2002 to 2017:

Year	Crossroads Net MWh	Year	Crossroads Net MWh
2002	2,567	2010	23,719
2003	0	2011	88,681
2004	0	2012	84,865
2005	10,787	2013	44, 559
2006	0	2014 SPP Integrated Market	70,616
2007	16,865	2015	19,992
2008 acquisition	2,885	2016	23,261
2009	9,029	2017	12,353

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#### transmission costs.

	2019	2020	2021	2022
Crossroads Megawatt Hours	**_ ** MWh	** _ ** MWh	**_ ** MWh	**_ ** <b>MW</b> h
Expected Transmission Costs	** **	** **	**	**

The following table identifies the expected generation at Crossroads and its forecasted

6 7 8 Source: Crawford Highly Confidential Schedule BLC-5. For planning purposes, GMO does not expect Crossroads to dispatch generation in next four years. Expected transmission costs for Account 565 only, Confidential Data Request No. 0357.