Exhibit No.:	
Issues:	Plant Retirements, Crossroads, CNPPID Contract
Witness:	Burton L. Crawford
Type of Exhibit:	Rebuttal Testimony
Sponsoring Party:	Kansas City Power & Light Company
Case Nos.:	ER-2018-0145 and ER-2018-0146
Date Testimony Prepared:	July 27, 2018

MISSOURI PUBLIC SERVICE COMMISSION

CASE NOS.: ER-2018-0145 and ER-2018-0146

REBUTTAL TESTIMONY

OF

BURTON L. CRAWFORD

ON BEHALF OF

KANSAS CITY POWER & LIGHT COMPANY and
KCP&L GREATER MISSOURI OPERATIONS COMPANY

Kansas City, Missouri
July 2018

Certain Schedules Attached To This Testimony Designated "(CONFIDENTIAL)"
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Pursuant To 4 CSR 240-2.135.

REBUTTAL TESTIMONY

OF

BURTON L. CRAWFORD

Case Nos. ER-2018-0145 and ER-2018-0146

Q: Please state your name and business address.

A: My name is Burton L. Crawford. My business address is 1200 Main, Kansas City, Missouri 64105.

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

A: I am employed by Kansas City Power & Light Company ("KCP&L") as Director, Energy Resource Management.

Q: On whose behalf are you testifying?

A: I am testifying on behalf of KCP&L and KCP&L Greater Missouri Operations Company ("GMO") (collectively, the "Company").

Q: Are you the same Burton L. Crawford who filed both Direct and Supplemental Direct Testimony in both ER-2018-0145 and ER-2018-0146?

A: Yes, I am.

Q: What is the purpose of your testimony?

A: The purpose of my testimony is to respond to issues raised by the Staff of the Missouri Public Service Commission ("Staff) regarding Crossroads Energy Center ("Crossroads") and issues raised by the Office of Public Counsel ("OPC") in regard to future plant retirements and the power purchase agreement with Central Nebraska Public Power and Irrigation District ("CNPPID"). I will also respond to the Missouri Energy Consumers Group ("MECG") concerning Crossroads.

I. PLANT RETIREMENTS

Q: The OPC expressed concern that the retirement of Sibley Unit 3 "could be imprudent" (Robinett Direct, p. 3, line 2). Do you agree?

A: No.

Q: Please explain.

A: As part of the 2017 Integrated Resource Planning ("IRP") annual update process under the Missouri Public Service Commission's ("Commission") Electric Utility Resource Planning rule 4 CSR 240-22, GMO evaluated the potential retirement of Sibley Unit 3. The plant retirement was evaluated under 18 scenarios consisting of different combinations of future natural gas prices, CO_2 restrictions and retail electric load growth. Results showed that without future CO_2 restrictions, the retirement of Sibley 3 is projected to save GMO retail customers approximately $150 million on a net present value basis over the next 20 years. If CO_2 restrictions were implemented (e.g., EPA's Clean Power Plan), the retirement is projected to save GMO retail customers approximately $325 million on a net present value basis over the next 20 years.

Q: The OPC also expressed concern that if the Company's modeling suggests that retiring plants is prudent that it is likely that others in SPP may do the same such that energy prices may increase (Robinett Direct, p. 3 lines 12-16). Has the Company evaluated this situation?

A: Yes. As stated earlier, GMO evaluated the retirement of Sibley 3 under several different scenarios. These scenarios included a range of future wholesale energy market prices. In all scenarios evaluated, the Sibley 3 retirement resulted in lower costs for GMO retail customers.

In addition, at the request of OPC's suggested special contemporary resource planning issues in Case No. EO-2018-0045 and EO-2018-0046, GMO and KCP&L (respectively) evaluated the impact of coal plant retirements in the SPP region on the GMO preferred resource plan. Results indicated a decrease in the cost of the GMO preferred plan (that includes the Sibley 3 retirement) as additional wind resources replaced the coal plant retirements in the region.

Q: OPC states that GMO will not have sufficient generation capacity after Sibley 1,[1] 2 and 3 are retired at the end of 2018 (Robinett Direct, p. 4, line 5). Will GMO have sufficient capacity after Sibley is retired?

A: Yes, GMO will have sufficient capacity after Sibley is retired. The source of information that Mr. Robinett points to as evidence that GMO will be short of meeting the Southwest Power Pool ("SPP") capacity requirements is outdated and does not reflect GMO's current capacity position. GMO will meet its share of the SPP capacity requirements through a combination of owned generating resources, currently contracted resources and demand response resources through at least 2023. The GMO 2018 IRP preferred resource plan includes additional purchased capacity beyond 2023.

Q: Do you anticipate challenges in GMO contracting for capacity beyond 2023?

A: No. With a peak load of approximately 51,000 MW and generating capacity exceeding 87,000 MW, the SPP region currently has excess capacity available and while there will undoubtedly be additional plant retirements over the coming years, there is a significant amount of new generation planned for the region. The capacity from current requests to

[1] Sibley 1 was retired from electric service in June 2017 for operational reasons.

interconnect new generation to the SPP transmission system (over 88,000 MW) exceeds the total existing SPP generating capacity.

Q: OPC expresses concern over the amount of energy GMO purchases from the SPP market to meet GMO native load (Robinett Direct, p. 8, lines 1-7). How do you respond?

A: The current level of SPP market net energy purchases is reflective of the excess generating capacity in SPP and the level of regional wind resources providing low cost energy into the SPP market. These low cost regional resources are replacing energy previously produced by higher cost resources. This is a good thing for retail customers.

In addition, the Sibley retirement analysis evaluated the impact of a range of projected energy market prices and found that even under a high energy market price scenario, it is still better for customers to retire Sibley than keep it in service as the 20-year net present value of revenue requirements is lower when Sibley is retired.

II. CROSSROADS

Q: MECG claims Great Plains Energy ("GPE") decided to "simply assign" Crossroads to GMO retail customers when a purchaser could not be located (Meyer Direct, p. 6 lines 13-14). Do you agree with this characterization of the decision to add Crossroads to the GMO supply portfolio?

A: Absolutely not.

Q: Please explain.

A: Crossroads was added to the GMO supply portfolio to meet GMO's SPP reserve margin requirements and more specifically the needs of GMO retail customers. In March 2007, (16 months prior to the GPE acquisition of GMO), GMO's predecessor, Aquila issued an

RFP for supply resources. The RFP was very broad, seeking renewable resources, conventional peaking, base load, and intermediate capacity and energy. In addition, the RFP requested a variety of proposal types including equity participation, EPC (engineering, procurement and construction), generating equipment only and PPAs (purchased power agreements).

Aquila received several responses to this RFP representing a range of options from non-affiliated entities as well as self-build options. The self-build options included base load, intermediate, and peaking capacity alternatives. After screening the options, Aquila conducted a 20-year analysis to determine a preferred resource plan. This analysis concluded that the Crossroads Energy Center would result in the lowest 20-year net present value of revenue requirement (NPVRR). The results of this analysis and selection of the preferred plan were presented to the Staff in October 2007. The presentation is included with this testimony as Schedule BLC-9 (Conf).

Q: Did Aquila receive any non-affiliated offers for long-term capacity and energy similar to the Crossroads facility?

A: Yes. Aquila received an offer for four GE 7EA combustion turbines (CT), the same number of GE 7EA CTs as installed at Crossroads.

Q: How did the installed cost from the non-affiliated offer compare to the Crossroads offer?

A: The offer from the non-affiliated party was $433/kW excluding the cost for land, water, transmission interconnection, step-up transformer, and several other items. The Crossroads offer was for $383/kW which included all costs.

Q: Did Aquila consider and document the cost of having Aquila as the regulated electrical corporation provide the goods or services for itself?

A: Yes. The engineering group of Aquila submitted bids to the RFP for self-building a variety of generating plant options, including one similar to Crossroads.

Q: Did Aquila consider self-build options using market surplus equipment?

A: Yes. A vendor offered surplus equipment. Self-building with this equipment was considered. It was determined that the surplus equipment did not offer a significant price difference over the new equipment from the manufacturer.

Q: How did the cost of Crossroads compare to the self-build options?

A: Crossroads was determined to be a lower cost option than self-building. The cost of the self-build option came in at $637 per kW installed cost for four GE 7EA CTs while the offer price for Crossroads was $383 per kW.

Q: How did the cost of Crossroads compare to the cost of building today?

A: The table below compares the cost of Crossroads to offers from Aquila's 2007 RFP, the costs allowed in rates by the Commission in ER-2010-0356 along with the current cost of combustion turbine capacity.

Resource	Cost	Cost Basis
Crossroads as Allowed in Rates	$185/kW	ER-2010-0356 Order
Crossroads Offer	$383/kW	2007 RFP Response
Non-Affiliated Offer	$433/kW	2007 RFP Response
Aquila Self-Build Offer	$637/kW	2007 RFP Response
Current CT Build Cost	$723/kW	EIA adjusted to 2018 cost

Q: Has the Crossroads facility provided value to GMO customers?

A: Absolutely. The facility provides firm capacity to meet GMO's reserve margin obligations to SPP. Absent Crossroads, GMO would be required to add additional generating capacity through either constructing new generation or purchasing capacity.

Q: In addition to the 2007 study, what additional support for the prudency of Crossroads is available?

A: In the GMO rate case where the Crossroads asset was first allowed into rates in May 2011, Case No. ER-2010-0356, the Commission found "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." (Report and Order, p. 91). The Commission continued to allow Crossroads to be included in rate base in Case No. ER-2012-0175, decided in January 2013.

Q: MECG claims that "GMO ignored the opportunity to build a peaking facility in its service area and instead sought to impose on its ratepayers the costs of the Crossroads unit." (Meyer Direct, p. 14, lines 11-13). Did GMO ignore the opportunity to build?

A: No. As explained above, Aquila conducted an RFP process followed by an evaluation of the available options, including building a peaking facility, and found that Crossroads was clearly the lowest cost alternative for adding capacity, including the cost of transmission service. The option of building capacity was not ignored.

Q: Staff claims that transmission constraints and distance from GMO customers results in high transmission costs for Crossroads. (Staff Cost of Service Report, p. 24, lines 19-21). Do you agree?

A: No. The rate GMO pays for transmission service is based on the same rate that others in MISO would pay to export capacity from the MISO system, excluding the impact of a settlement agreement reached related to Entergy joining MISO. It is the same rate that Liberty Utilities pays for service for Plum Point which is also located in MISO. Transmission constraints and distance have no impact on this rate.

Q: Does GMO experience transmission constraints when Crossroads is operated?

A: No, GMO has not experienced transmission constraints related to Crossroads transmission service during normal operations.

Q: Staff also claims that "It is the location of this generating facility in relation to the customers' electric needs that makes Crossroads imprudent." (Staff Cost of Service Report, p. 25, lines 1-3). Does the location make Crossroads an imprudent choice for GMO customers?

A: No. While GMO would not decide to build a new generating facility at the Crossroads location, that was not the decision Aquila faced in 2007. The plant already existed. Aquila evaluated capacity options, and as stated earlier, all other options would have cost more for retail customers than Crossroads, including the cost of transmission service and as such Crossroads was the prudent choice.

III. CNPPID HYDRO CONTRACT

Q: The OPC recommends about an $8.3 million reduction in KCP&L's revenue requirement to remove the impact of the CNPPID hydro power purchase agreement (Mantle Direct, starting p. 1, line 19). Do you agree that an adjustment is appropriate?

A: No. No adjustment should be made.

Q: Please explain.

A: OPC states that the resource would "only be cost-effective as a resource for serving Missouri ratepayers if the cost of the energy from it is less than the market price." (Mantle Direct, p. 3, lines 17-18). In general, I agree with the statement, however I disagree with the specific market prices used by OPC to support their recommended adjustment.

In 2011 when the decision was made to enter the contract, the projected market prices over the contract term (2014 through 2023) where higher than today's market prices. On average, the contract price was less than projected market prices and as such, the contract was expected to reduce Missouri retail customer revenue requirements.

Q: The OPC compares current market prices to the contract price as support for the recommended disallowance. Is this appropriate support for a disallowance?

A: No. The decision to enter the contract was made in 2011. The appropriate comparison for prudence determination was conducted in 2011. Schedule BLC-10 (Conf) shows the analysis conducted in 2011 when the then current and projected market prices were higher than today. The analysis shows that in 5 out of 6 scenarios, the contract cost was projected to be less than the market value of energy from the contract. Therefore, the decision was prudent and any adjustment to the KCP&L revenue requirement would be unwarranted.

Q: Has there been any cost disallowance recommended or ordered related to this contract in prior KCP&L rate cases?

A: No. This contract began in 2014 and was fully included in the cost of service in the rate cases filed in 2014 (ER-2014-0370) and 2016 (ER-2016-0285)

Q: Does that conclude your testimony?

A: Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Kansas City Power & Light Company's Request for Authority to Implement A General Rate Increase for Electric Service	)))	Case No. ER-2018-0145
In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority to Implement A General Rate Increase for Electric Service	))))	Case No. ER-2018-0146

AFFIDAVIT OF BURTON L. CRAWFORD

STATE OF MISSOURI)
) ss
COUNTY OF JACKSON)

Burton L. Crawford, being first duly sworn on his oath, states:

1. My name is Burton L. Crawford. I work in Kansas City, Missouri, and I am employed by Kansas City Power & Light Company as Director, Energy Resource Management.

2. Attached hereto and made a part hereof for all purposes is my Rebuttal Testimony on behalf of Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company consisting of nine (9) pages, having been prepared in written form for introduction into evidence in the above-captioned docket.

3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

Burton L. Crawford

Subscribed and sworn before me this 27th day of July 2018.

Notary Public

My commission expires: 4/26/2021

ANTHONY R WESTENKIRCHNER
Notary Public, Notary Seal
State of Missouri
Platte County
Commission # 17279952
My Commission Expires April 26, 2021

SCHEDULES BLC-9 and BLC-10

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