MISSOURI PUBLIC SERVICE COMMISSION

STAFF REPORT

EIGHTH PRUDENCE REVIEW OF COSTS RELATED TO THE FUEL ADJUSTMENT CLAUSE FOR THE ELECTRIC OPERATIONS OF KANSAS CITY POWER & LIGHT GREATER MISSOURI OPERATIONS COMPANY

CASE NO. EO-2019-0067

December 1, 2016 through May 31, 2018

Jefferson City, Missouri
February 28, 2019

** Denotes Confidential Information **

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I. EXECUTIVE SUMMARY

The Missouri Public Service Commission ("Commission") first authorized a Fuel Adjustment Clause ("FAC") for Aquila, Inc. ("Aquila") effective July 5, 2007,[1] in Case No. ER-2007-0004. The Commission approved the acquisition of Aquila, by Great Plains Energy, Inc. and subsequently Aquila was renamed KCP&L Greater Missouri Operations Company ("GMO" or "Company").[2] This acquisition became effective July 14, 2007. Since its initial approval of GMO's FAC in 2007, the Commission has approved continuation of GMO's FAC with modifications in its *Reports and Orders* in the Company's general rate cases: Case Nos. ER-2009-0090, ER-2010-0356, ER-2012-0175, ER-2016-0156[3] and ER-2018-0146.

Commission Rule 4 CSR 240-20.090(11)[4] and Missouri Revised Statute Section 386.266.5(4) require that the Commission's Staff ("Staff") conduct prudence reviews of an electric utility's FAC no less frequently than every 18 months. In this prudence review, Staff analyzed items affecting GMO's fuel costs; purchased power costs; net emission costs; transmission costs; off-system sales revenues; and renewable energy credit revenues for the twentieth, twenty-first and twenty-second six-month accumulation periods of GMO's FAC. The twentieth accumulation period started December 1, 2016 and ended May 31, 2017.

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[1] Item No. 411 in Case No. ER-2007-0004.

[2] In Case No. EN-2009-0164, the Commission recognized, by order dated November 20, 2008 and made effective December 3, 2008, the name change of Aquila, Inc. d/b/a KCP&L Greater Missouri Operations Company to KCP&L Greater Missouri Operations Company. At different points in time, the company now named KCP&L Greater Missouri Operation Company was known as, or did business in Missouri as, Aquila, Inc., Aquila Networks-MPS, and Aquila Networks-L&P. Presently, to the public it, jointly with Kansas City Power & Light Company ("KCPL") does business using the service mark "KCP&L". For ease, in this report the KCP&L Greater Missouri Operations Company will be uniformly referred to as "GMO" or "Company."

[3] GMO's rate districts MPS and L&P were combined on February 22, 2017 as a result of Case No. ER-2016-0156 into a single combined rate district renamed GMO.

[4] Effective January 30, 2019.

The twenty-first accumulation period started June 1, 2017 and ended November 30, 2017. The twenty-second accumulation period started December 1, 2017 and ended May 31, 2018. Thus, the Review Period that is documented in this Prudence Review Report is from December 1, 2016 through May 31, 2018 ("Review Period"). This is Staff's eighth Prudence Review Report for GMO's FAC. Table 1 identifies Staff's previous GMO FAC prudence reviews.

Table 1: Completed GMO FAC Prudence Reviews

Review	File Number	Review Period
First	EO-2009-0115	June 1, 2007 through May 31, 2008
Second	EO-2010-0167	June 1, 2008 through May 31, 2009
Third	EO-2011-0390	June 1, 2009 through November 30, 2010
Fourth	EO-2013-0325	December 1, 2010 through May 31, 2012
Fifth	EO-2014-0242	June 1, 2012 through November 30, 2013
Sixth	EO-2016-0053	December 1, 2013 through May 31, 2015
Seventh	EO-2017-0232	June 1, 2015 through November 30, 2016

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

Staff analyzed a variety of items in examining whether GMO was imprudent when managing its fuel and purchased power costs associated with its FAC. Based on its review, Staff found no evidence of imprudence by GMO for the items it examined for the period of December 1, 2016, through May 31, 2018. However, on February 27, 2019, the Commission issued its *ORDER SUSPENDING TRUE-UP TIMELINE AND DIRECTING THE PARTIES TO FILE A PROPOSED PROCEDURAL SCHEDULE* in Case No. ER-2019-0198 to allow the Commission to address the Office of the Public Counsel's challenge regarding allocation of charges for the auxiliary electric power used by GMO for its steam operations.

Staff Expert/Witness: Dana E. Eaves

II. INTRODUCTION

A. General Description of GMO's FAC

Table 2 identifies GMO's Commission-approved FAC tariff sheets which were applicable for service provided by GMO to its customers during the period December 1, 2016, through May 31, 2018:

Table 2
GMO's Commission-approved FAC Tariff Sheets
December 1, 2016 through May 31, 2018

December 1, 2016 through February	February 22, 2017 through May 31,
3rd Revised Sheet No. 124	3rd Revised Sheet No. 127.1
3rd Revised Sheet No. 125	3rd Revised Sheet No. 127.2
3rd Revised Sheet No. 126	3rd Revised Sheet No. 127.3
1st Revised Sheet No. 126.1	3rd Revised Sheet No. 127.4
1st Revised Sheet No. 126.2	7th Revised Sheet No. 127.5
14th Revised Sheet No. 127	3rd Revised Sheet No. 127.6
	3rd Revised Sheet No. 127.7
	3rd Revised Sheet No. 127.8
	3rd Revised Sheet No. 127.9
	5th Revised Sheet No. 127.10
	1st Revised Sheet No. 127.11
	3rd Revised Sheet No. 127.12

For each accumulation period ("AP"),[5] GMO's Commission-approved FAC allows GMO to recover from (if the actual net energy costs exceed) or refund to (if the actual net energy costs are less than) its ratepayers ninety-five percent (95%) of its Missouri

[5] Accumulation periods are: June through November and December through May.

jurisdictional[6] actual net energy costs ("ANEC")[7] less net base energy costs ("B")[8] which is identified as (ANEC-B)*J in GMO's FAC.[9] Actual net energy costs are defined as the prudently incurred variable fuel costs, purchased power costs, transmission costs and net emissions costs minus off-system sales revenues and renewable energy credit revenues. GMO accumulates variable fuel costs, purchased power costs, transmission costs and net emissions costs minus off-system sales revenues and renewable energy credit revenues during six-month accumulation periods. Each six-month accumulation period is followed by a twelve-month recovery period when 95% of the (ANEC-B)*J amount (including the monthly application of interest)[10] is recovered from or returned to ratepayers through an increase or decrease in the FAC Fuel Adjustment Rates ("FAR") during a twelve-month recovery period ("RP").[11] Because the FAR rarely, if ever, will exactly match the required offset, GMO's FAC is designed to true-up the difference between the revenues billed and the revenues authorized (including the monthly application of interest) for collection during recovery periods. Any disallowance the Commission orders as a result of a prudence review shall include interest at the Company's short-term interest rate and will be accounted for as an item of cost[12] in a future filing to adjust the FAR.

B. Prudence Standard

In *State ex rel. Associated Natural Gas Co. v. Public Service Com'n of State of Mo.*, the Western District Court of Appeals stated the Commission defined its prudence standard as follows:

> [A] utility's costs are presumed to be prudently incurred... However, the presumption does not survive "a showing of inefficiency or improvidence... [W]here some other

[6] J is defined on 5th Revised Sheet No. 127.10 as Missouri Retail Energy Ratio = Retail kWh sales/total system kWh, where total system kWh equals retail and full and partial requirement sales associated with GMO.
[7] Actual Net Energy Costs are equal to fuel costs (FC) plus net emission costs (E) plus purchased power costs (PP) plus transmission costs (TC) minus off-system sales revenue (OSSR) and renewable energy credit revenue (R) as defined on GMO's 3rd Revised Sheet No. 127.2.
[8] Net base energy costs (B) are defined on GMO's 5th Revised Sheet No. 127.10 as net base energy costs ordered by the Commission in the last general rate case consistent with the costs and revenues included in the calculation of the FPA. Net base energy costs will be calculated as shown below SAP x Base Factor ("BF").
[9] For the twentieth, twenty-first and twenty-second accumulation periods, the (ANEC-B)*J amounts are included on line 5 of GMO's 1st Revised Sheet No. 127.12, 2nd Revised Sheet No. 127.12, and 3rd Revised Sheet No. 127.12, respectively.
[10] See Section IV. Interest, of this Prudence Review Report.
[11] Recovery periods are: March through February and September through August.
[12] See definition of variable I on GMO's P.S.C.MO. No. 1, 5th Revised Sheet No. 127.10.

> participant in the proceeding creates a serious doubt as to the prudence of expenditure, then the applicant has the burden of dispelling these doubts and proving the questioned expenditure to have been prudent.
>
> In the same case, the PSC noted that this test of prudence should not be based upon hindsight, but upon a reasonableness standard: [T]he company's conduct should be judged by asking whether the conduct was reasonable at the time, under all the circumstances, considering that the company had to solve its problem prospectively rather than in reliance on hindsight. In effect, our responsibility is to determine how reasonable people would have performed the tasks that confronted the company.
>
> 954 S.W.2d 520, 528-29 (Mo. App. W.D., 1997) (citations omitted).

In reversing the Commission decision in that case, the Court did not criticize the Commission's definition of prudence, but held, in part, that to disallow a utility's recovery of costs from its ratepayers based on imprudence, the Commission must determine the detrimental impact of that imprudence on the utility's ratepayers. *Id*. at 529-30. This is the prudence standard Staff has followed in this review. Staff reviewed for prudence the areas identified and discussed below for GMO's twentieth, twenty-first, and twenty-second six-month accumulation periods.

Staff Expert/Witness: Dana E. Eaves

III. FUEL COSTS, PURCHASED POWER COSTS, TRANSMISSION COSTS, NET EMISSION COSTS

GMO's FAC includes four major components of costs: fuel costs, purchased power costs, transmission costs, and net emission costs. It also includes two components of revenues: off-system sales revenues and renewable energy credit revenues. Table 3 is a breakdown of GMO's fuel costs, purchased power costs, transmission costs, net emission costs, off-system sales revenues, and renewable energy credit revenues for the period of December 1, 2016 through May 31, 2018:

continued on next page

Table 3 - Confidential

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Staff Experts/Witnesses: Lisa Wildhaber, Brooke Mastrogiannis, Cynthia M. Tandy and Kory J. Boustead

A. Utilization of Generation Capacity

1. Description

The purpose of this section is to provide an overview of GMO's available supply-side and demand response resources and review the process by which generating units are selected to satisfy native load requirements during the Review Period. GMO's generating units consists of a mixture of coal, natural gas, diesel, landfill gas, and solar as indicated in Table 4 below titled Supply Side Resources. GMO's voluntary demand response programs are titled Curtailable Demand Rider[14] and a Voluntary Load Reduction Rider[15].

[13] Total ANEC amounts for AP20, AP21 and AP22 are equal to $291,956,106, a difference of $9,482 from the General Ledger amounts. This difference is the result of a $6,405 May 2018 entry that was reversed in June 2018, as well as a $3,077 unreconciled difference.

[14] P.S.C. MO. No. 1, 4th Revised Sheet No. 99, Curtailable Demand Rider Electric.

[15] P.S.C. MO. No. 1, 1st Revised Sheet No. 96, Voluntary Load Reduction Rider Electric.

Table 4 - Confidential[16]

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16 Response to Data Request No. 0013.

Table 5 – Confidential

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Table 6 - Confidential

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2. Summary of Cost Implications

During the period from December 1, 2016 through May 31, 2018, GMO utilized two separate demand response programs. The Curtailable Demand Rider tariff was frozen on April 1, 2016. It was replaced with a similar demand response program, Demand Response Incentive ("DRI"), for GMO's MEEIA Cycle 2. The Company continues to add customers to the DRI program to fulfill targets for MEEIA Cycle 2. For DRI, the curtailment target and anticipated load reduction is 55 MW for MEEIA Cycle 2.[17] All costs associated with the MEEIA DRI program are recovered through the MEEIA Rider. GMO did not have any costs associated with either Curtailable Demand Rider or the Voluntary Load Reduction for the review period for recovery through its FAC.

[17] GMO's Missouri Energy Efficiency Investment Act ("MEEIA") Application, File No. ER-2015-0241.

GMO participates in the Southwest Power Pool Integrated Marketplace ("SPP IM"). In the Integrated Marketplace ("IM"), the vast majority of generation dispatch decisions are made by SPP via established market requirements and processes. SPP market rules establish must offer requirements both for the Day Ahead Market ("DA") and the Real Time Balancing Market ("RT"). With respect to the DA, there is a Day Ahead Must Offer requirement which essentially states that Market Participants ("MPs") must offer enough generation to cover that MP's next day projected peak load, ancillary service obligations and any firm sales they have agreed to make. In addition, the SPP Market Monitoring Unit monitors for Physical Withholding of generation, which further incentivizes MPs to offer much of their available generation in the DA, even if they have already met their Must Offer requirement. With respect to the RT, SPP requires that all physically available generation be offered to the market. In accordance with SPP rules and requirements, GMO submits generation offers in the DA and RT. Once these offers have been submitted, they are utilized by SPP in its market co-optimization processes. SPP market applications consider inputs such as system-wide requirements, generator operating parameters, offers from all MPs, and transmission system topology to arrive at the most cost effective and reliable generation solution possible. Some of these applications include the Security Constrained Unit Commitment ("SCUC") and Security Constrained Economic Dispatch ("SCED") tools. Once the least cost, viable solution is arrived at, SPP issues operating instructions to MPs. Under the SPP market construct, MPs are given the flexibility to let the SPP market independently decide when to commit a given unit or to self-commit the generator. A common example of the latter is if a unit needs to be online for required testing on a given day. Even if a generator is self-committed, this simply establishes that the unit will be online. SPP will still dispatch the unit via the SCED tool within its dispatchable range as established through the market submissions process.[18]

3. Conclusion

Staff did not observe any evidence of imprudent utilization of generation resources during the time period examined in this prudence review.

[18] GMO response to Data Request No. 0012.

4. Documents Reviewed

a. GMO's responses to Staff Data Request Nos. 0001, 0002, 0010, 0011, 0012, 0013, 0015, 0016, 0017, 0018, 0021, 0047, 0047.1, 0055, and 0058.

Staff Experts/Witnesses: Dana E. Eaves and Lisa Wildhaber

B. Heat Rates

1. Description

Heat rates of generating units are an indicator of unit performance. A heat rate is a calculation of total volume of fuel burned for electric generation multiplied by the average heat content of that volume of fuel divided by the total net generation of electricity in kilowatt hours (kWh) for a given time period.

2. Summary of Cost Implications

Heat rates are inversely related to the operating efficiency of the generating unit. Increasing heat rates of specific units over time may be an indication that a specific unit's efficiency is declining. Heat rates can vary greatly depending on operating conditions including but not limited to load, hours of operation, shut downs and startups, unit outages, derates, and weather conditions. Therefore, a good indication of unit performance for those units that are utilized frequently is an analysis of the trend of heat rates over time. A permanent increase in monthly heat rates is commonly the result of a decrease in a generating unit's operating efficiency whenever additional emissions reduction equipment is added to the backend of the generating unit. Continued utilization of units with sustained elevated heat rates could result in GMO incurring higher fuel costs per unit of electricity generated than it would otherwise have incurred. If GMO was imprudent in response to the ongoing trend of a unit's heat rate, ratepayer harm could result from an increase in the fuel costs that are collected through GMO's FAC charges.

** ____

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____________ **[19]

[19] Response to Data Request No. 0057.

3. Conclusion

In reviewing the monthly heat rates of the GMO's generating units dating back to January 2013, Staff found no indication that GMO acted imprudently during the Review Period.

4. Documents Reviewed

a. GMO's responses to Staff Data Request Nos. 0002, 0019, and 0057; and

b. Monthly Outage data in the Monthly Reports submitted by GMO in compliance with Rule 4 CSR 240-3.190.

Staff Expert/Witnesses: Brooke Mastrogiannis and Jordan Hull

C. Plant Outages

1. Description

Generating stations' outages generally can be classified as scheduled outages, forced outages, or partial outages ("derating"). Scheduled outages consist of either a planned outage or a maintenance outage. A planned outage is one that is scheduled well in advance, with a predetermined duration and occurring only once or twice a year. Due to significant resources required such as contractors and scheduling, planned outages are scheduled more than a year in advance. Turbine and boiler overhauls, inspections, testing, and nuclear refueling are typical planned outages. A maintenance outage is one that can be deferred beyond the end of the next weekend but must be taken before the next planned outage. A forced outage is an outage that cannot be deferred beyond the next weekend and a partial outage or derating is a condition that exists that requires the unit to be limited to an energy output below maximum capacity.

Outages taken at any of the generating units have an impact on how much GMO will pay for fuel and purchased power and, if planned during peak load demand times, has the potential result of GMO paying more for fuel and purchased power cost than it would have paid if the outage were planned during forecasted low load times. Periodic planned outages are required to maintain each generating unit in peak operating condition to minimize forced or maintenance outages that could occur during peak load demand or periods of high replacement energy costs, typically June through August and January through February.

Staff examined the planned outages and their timing for imprudence. An example of an imprudent outage would be scheduling a planned outage of a large base load unit during a time of peak load. GMO has little or no control over the timing of unscheduled maintenance or forced outages of the generating stations it owns and operates when such outages are the result of unforeseen events causing fuel and/or purchase power costs that are collected from customers through GMO's FAC to increase. The Company has no control over the timing of planned outages for generating stations it does not operate.

** **[20]

2. Summary of Cost Implications

An imprudent planned outage could result in an increase in purchased power costs as well as a decrease in off-system sales revenues through the SPP IM and ratepayer harm could result from an increase in FAC charges.

3. Conclusion

Staff did not find any evidence of imprudent planned outages by GMO during the time period examined in this review.

[20] Response to Data Request No. 51.

4. Documents Reviewed

a. GMO responses to Staff Data Request Nos. 0001, 0004, 0005, 0006, and 0051.

Staff Expert/Witnesses: Brooke Mastrogiannis and Jordan Hull

D. Natural Gas Costs

1. Description

For the Review Period, $** ________ **[21] or ** ___ **% of GMO's total fuel costs, purchased power costs, transmission costs, and net emission costs was associated with the natural gas used in generating electricity. The cost of natural gas includes various miscellaneous charges such as firm transportation service charges and other fuel handling expenses. During the Review Period, KCPL's natural gas price averaged $** ____ ** per MMBtu, based on ** ________ ** MMBtu of actual natural gas burned and costs of $** ________ . ** Staff reviewed the contract terms and a sampling of invoices for gas purchased. GMO receives natural gas services from 17 natural gas supply companies and 5 natural gas transportation companies. The companies are:

continued on next page

**[21] ____ **

Table 7 - Confidential

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Table 8 - Confidential

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The following table identifies GMO's peaking generating units that burn natural gas:

Table 9 - Confidential

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2. Summary of Cost Implications

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

3. Conclusion

Staff found no indication GMO's purchases of natural gas were imprudent during the Review Period.

4. Documents Reviewed

a. GMO's responses to Staff Data Request Nos. 0001, 0002, 0013, 0025, 0032, 0047, 0047.1, 0061; and

b. GMO's General Ledger, FAR Filings, and monthly reports.

Staff Expert/Witness: Lisa Wildhaber

E. Coal and Rail Transportation Costs

1. Description

For the Review Period, $** ________ ** or ** __ **% of GMO's total fuel costs, cost of purchased power, transmission costs, and net emission costs was associated with the coal used in generating electricity. The cost of coal includes various miscellaneous charges such as rail and other ground transportation service charges, and other fuel handling expenses. Staff reviewed the contract terms of 11 short and long-term coal purchase contracts, as well as a sampling of invoices for coal purchased and delivered. The counterparties for the contracts are:

Table 10 - Confidential

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The contracts provide coal delivery to GMO's Jeffrey Energy Center 1, 2, and 3; Sibley 1, 2, and 3; and Lake Road generating units. The price of coal can either be a fixed price for the entire contract, a fixed price for each year of the contract, a base price plus an escalation as calculated per the contract, a price determined by the Master Purchase & Sales Agreement, or a price which is indexed based.

2. Summary of Cost Implications

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

3. Conclusion

Staff found no indication GMO's purchases and transportation of coal or its coal-related contracts were imprudent during the Review Period.

4. Documents Reviewed

a. GMO's responses to Staff Data Request Nos. 0001, 0002, 0013, 0022, 0032, 0033, 0047, and 0047.1, 0061; and

b. GMO's General Ledger, FAR Filings, and monthly reports.

Staff Expert/Witness: Lisa Wildhaber

F. Fuel Oil Costs

1. Description

For the Review Period, $** ________ ** or ** ___ **% of GMO's total fuel costs, cost of purchased power, transmission costs, and net emission costs was associated with the fuel oil used in generating electricity. The cost of fuel oil includes various miscellaneous charges, such as rail and/or ground transportation service charges and other miscellaneous fuel handling expenses. Staff reviewed the contract terms of GMO's 3 oil contracts that were in place during the Review Period, as well as a sampling of invoices for fuel oil purchased. The contracts provide a primary delivery location and agreement on the price. The price is based on the market price at the time GMO purchases the fuel oil. The counterparties for the fuel oil contracts are listed in the table below:

<u>Table 11 - Confidential</u>

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The fuel oil contracts provide delivery of fuel oil to various generating units.

2. Summary of Cost Implications

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

3. Conclusion

Staff found no indication GMO's costs associated with its fuel oil contracts in place were imprudent during the Review Period.

4. Documents Reviewed

a. GMO's responses to Staff Data Request Nos. 0001, 0002, 0013, 0027, 0032, 0047, 0047.1, 0061; and

b. GMO's General Ledger, FAR Filings, and monthly reports.

Staff Expert/Witness: Lisa Wildhaber

G. Transmission Costs

1. Description

For the Review Period, $** ** or ** **% of GMO's total fuel cost, cost of purchased power, transmission costs and net emission costs, was associated with transmission costs.

Beginning in Case Nos. ER-2010-0356, effective May 14, 2011, and ER-2012-0175, effective January 9, 2013, the Commission ordered Crossroads-related transmission charges to be excluded from both base rates and the FAC. There were two tariff sheets that were in effect during this Review Period. The 3rd Revised Sheet No. 126, applicable to service provided from January 26, 2013 through February 21, 2017 defines transmission costs as:

> TC = Transmission Costs:
>
> The following costs reflected in FERC Account Number 565000 (excluding Base Plan Funding costs and costs associated with the Crossroads generating station): transmission costs that are necessary to receive purchased power to serve native load and transmission costs that are necessary to make off-system sales.

The 3rd Revised Sheet No. 127.4, applicable to service provided from February 22, 2017 through December 6, 2018 defines transmission costs as:

> TC = Transmission Costs:
>
> The following costs reflected in FERC[22] Account Number 565:
>
> Subaccount 565000: non-SPP transmission used to serve off-system sales or to make purchases for load, excluding any transmission costs associated with the Crossroads Power Plant and 39.62% of the SPP transmission service costs which includes the schedules listed below as well as any adjustments to the charges in the schedules below:
>
> Schedule 7- Long Term Firm and Short Term Point to Point Transmission Service
> Schedule 8- Non Firm Point to Point Transmission Service
> Schedule 9- Network Integration Transmission Service
> Schedule 10- Wholesale Distribution Service
> Schedule 11- Base Plan Zonal Charge and Region Wide Charge
>
> Subaccount 565020: the allocation of the allowed costs in the 565000 account attributed to native load;
>
> Subaccount 565027: the allocation of the allowed costs in the 565000 account attributed to transmission demand charges;
>
> Subaccount 565030: the allocation of the allowed costs in account 565000 attributed to off-system sales.

For calculating TC, GMO implemented a process whereby total transmission expenses were tabulated and then costs not allowed in the FAC were removed. Staff reviewed the transmission costs over the Review Period to verify only 39.62% of the SPP transmission

[22] Federal Energy Regulatory Commission, Uniform System of Accounts ("FERC Account").

service costs were included (starting February 22, 2017) as well as verifying all Crossroads transmission costs were excluded. GMO's transmission costs during the Review Period are $** ___________ . **

2. Summary of Cost Implications

If GMO imprudently included Crossroads Transmission costs or more than 39.62% of the SPP transmission service costs, ratepayer harm could result from increased FAC charges.

3. Conclusion

Staff found no indication GMO's transmission costs were imprudent during the Review Period.

4. Documents Reviewed

a. GMO's General Ledger;

b. GMO's responses to Staff Data Request Nos. 0001, 0002, 0047, 0047.1, 0050; and

c. FAR and other supporting work papers in this case;

Staff Expert/Witness: Brooke Mastrogiannis

H. Emission Allowances

1. Description

The Cross-State Air Pollution Rule ("CSAPR") is a ruling by the United States Environmental Protection Agency ("EPA") that requires a number of states, including Missouri, to reduce power plant emissions that contribute to ozone and/or fine particle pollution in other states. The CSAPR replaced EPA's 2005 Clean Air Interstate Rule (CAIR), following the direction of a 2008 court decision that required EPA to issue a replacement regulation. CSAPR implementation began on January 1, 2015.

The CSAPR requires Missouri to reduce its annual emissions of sulfur dioxide (SO_2) and nitrous oxides (NO_x) to help downwind states attain the 24-hour National Ambient Air Quality Standards ("NAAQS"). The CSAPR also requires Missouri to reduce ozone season emissions of NO_x to help downwind states attain the 8-hour NAAQS.

On September 7, 2016, the EPA revised the CSAPR ozone season NO_X program by finalizing an update to CSAPR for the 2008 ozone NAAQS, known as the CSAPR Update. The CSAPR Update ozone season NO_X program will largely replace the original CSAPR ozone season NO_X program starting on May 1, 2017. The CSAPR Update will further reduce summertime NO_X emissions from power plants in the eastern U.S.

The primary mechanism of CSAPR is a cap-and-trade program that allows a major source of NO_X and/or SO_2 to trade excess allowances when its emissions of a specific pollutant fall below its cap for that pollutant. Originally, the EPA issued a model cap-and-trade program for power plants, which could have been used by states as the primary control mechanism under CAIR. This model, with modifications, had continued under CSAPR.

To comply with CSAPR, GMO established an SO_2 inventory. GMO currently plans to maintain this SO_2 allowance inventory sufficient to offset expected emissions. This inventory is tracked in Company account 158.100 Emissions Allowance Inventory. The GMO SO2 allowance inventories are valued at cost, and the cost for SO_2 allowances is tracked in FERC Account Number 509. For the Review Period, the SO_2 balance in the inventory account as of May 31, 2018 was $315,203, NOx Annual $314 and NOx Seasonal $125. The Company annually balances account 509 when the EPA yearly awards the additional SO_2 allowances.

For the Review Period, GMO's total net emission allowance cost was $** ____ . **

2. Summary of Cost Implications

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

3. Conclusion

Staff found no indication GMO was imprudent in its purchases, banking, or usage of CSAPR SO_2 allowances.

4. Documents Reviewed

a. Company response to Staff's Data Request Nos. 0035, 0037 and 0041;

b. GMO monthly reports for the time period December 1, 2016 through May 31, 2018 required by 4 CSR 240-3.161(7);

c. Section 7 Filing – 20th, 21st and 22nd Accumulation Periods (ending May 2017, November 2017, May 2018 respectively); and

d. Balance Sheet GMO December 2016-May 2018.

Staff Expert/Witness: Cynthia M Tandy

I. Off-System Sales Revenue

1. Description

Off-system sales revenues ("OSSR") is a component in the calculation of GMO's FAR used to charge or refund fuel and purchased power costs to its customers. The tariff language in effect during the Review Period includes:

> GMO's FAC 7th Revised Sheet No. 127.5, effective February 22, 2017 Through December 6, 2018 defines the "OSSR" component as:
>
> - OSSR = Revenues from Off-system Sales:
>   - The following revenues or costs reflected in FERC Account Number 447:
>
>   Subaccount 447010: all revenues from off-system sales. This includes charges and credits related to the SPP IM. Off-system sales and revenues from full and partial requirements sales to municipalities that are served through bilateral contracts in excess of one year shall be excluded from OSSR component;
>
>   Subaccount 447012: capacity charges for capacity sales one year or less in duration;
>
>   Subaccount 447030: the allocation of the includable sales in account 447020 not attributed to retail sales.

Staff did include revenue account 447035 in its base factor calculation in GMO's most recent general rate case, Case No. ER-2018-0146. As stated in Staff's direct Class Cost of Service Report on page 61:

> During Staff's review of the Base Factor calculation for GMO's FAC, Staff determined that accounts 555035, purchased power associated with the WAPA contract, and 447035, revenues associated with the WAPA contract, should be included in the Base Factor calculation and should be included on GMO's tariff sheets. Staff understands these accounts to be in the nature of purchased power contracts and therefore should be included in the Base Factor calculation for GMO's tariff sheets. Staff is recommending GMO include these accounts on its compliance FAC tariff sheets.

No other party filed rebuttal testimony regarding this revenue or purchased power expense being included in the base factor calculation. Staff's base factor was approved as part of the

Commission's October 31, 2018 *Order Approving Stipulations and Agreements in Case No. ER-2018-0146*.

Staff reviewed the off-system sales quantities and revenues over the Review Period, and GMO's off-system sales revenue amount is $** ________ . **

2. Summary of Cost Implications

GMO's revenues from off-system sales are an offset against total fuel and purchased power costs, transmission costs and net emission costs. This is because GMO's ratepayers pay for the resources used to produce any energy that GMO sells.[23] Since implementing the IM, SPP has controlled the economic dispatch of GMO's generation. During times that GMO's generation exceeds GMO's retail customers' needs, GMO becomes a net seller in the SPP IM market. If GMO did not make available its generating units in the SPP IM market for off-system sales to be made, ratepayers could be harmed by such imprudence by an increase in GMO's FAC charges.[24]

3. Conclusion

Staff found no indication that GMO imprudently withheld availability of its generating units in the SPP for off-system sales to be made.

4. Documents Reviewed

a. GMO's responses to Staff Data Request Nos. 0002, 0047, 0047.1, and 0050;

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

c. GMO's monthly reports and FAR filing worksheets.

Staff Expert/Witness: Brooke Mastrogiannis

J. Renewable Energy Credit Revenues

1. Description

The Missouri Renewable Energy Standard ("RES")[25] requires all investor-owned electric utilities in Missouri to provide at least two percent (2%) of their retail electricity sales using renewable energy resources in each calendar year 2011 through 2013, and to increase

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

[24] Beginning March 1, 2014, the SPP implemented the Integrated Marketplace that changed GMO's practice of making off-system sales. See the Utilization of Generation Capacity section above.

[25]. Section 393.1020 RSMo. Supp. 2013 and Section 393.1030.1(1), RSMo. Supp. 2013.

that percentage over time to at least fifteen percent (15%) by 2021.[26] Commission rule 4 CSR 240-20.100 Electric Utility Renewable Energy Standard Requirements, which first became effective September 30, 2010, contains the definitions, structure, operations, and procedures for implementing the RES.

The RES rule creates two categories of energy-generating resources: non-renewable energy resources (including purchased power from non-renewable energy sources) and renewable energy resources (including purchased power from renewable energy sources).[27] Renewable energy resources produce electrical energy and are wind, solar sources, thermal sources, hydroelectric sources, photovoltaic cells and panels, fuel cells using hydrogen produced by one (1) of the above named electrical energy sources, and other sources of energy that become available after August 28, 2007, and are certified as renewable by the Missouri Department of Economic Development -- Division of Energy ("Division of Energy"). Once an energy resource is certified, it begins producing RECs, with one (1) REC representing one (1) megawatt-hour of electricity that has been generated from the renewable energy resource. These RECs can be sold and/or traded in the market place bundled with or without the energy that generated the REC.[28] The cost of a REC (as a RES compliance cost) cannot be recovered through the FAC.[29] Revenues from the sale of RECs are recovered through the FAC as an off-set to fuel costs.

During the Review Period, the RES rule required GMO to serve 10% of its retail load using renewable energy resources. Also, during the Review Period, GMO did not sell or purchase solar RECs outside of those bundled with purchased power from qualified customer generator's operational solar electric systems as a condition of receiving solar rebates.[30] GMO received non-solar RECs bundled with renewable energy from GMO's St. Joseph Landfill Gas Facility, and contractually through purchased power agreements with two

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[26] However, the annual level of required renewable energy resources may be considered due to 4 CSR 240-20.100(5)(A) Retail Rate Impact. (A) The retail rate impact, as calculated in subsection (5)(B), may not exceed one percent (1%) for prudent costs of renewable energy resources directly attributable to RES compliance. The retail rate impact shall be calculated on an incremental basis for each planning year that includes the addition of renewable generation directly attributable to RES compliance through procurement or development of renewable energy resources, averaged over the succeeding ten (10)-year period, and shall exclude renewable energy resources owned or under contract prior to the effective date of this rule.

[27] 4 CSR 240-20.100(5)(B).

[28] 4 CSR 240-20.100(6)(B)(5)(J).

[29] 4 CSR 240-20.100(6)(A)(16).

[30] *KCP&L GMO 2016 Annual Renewable Energy Standard Compliance Report* and *KCP&L GMO 2017 Annual Renewable Energy Standard Compliance Report [Corrected].*

renewable energy providers (Gray County Wind and Ensign Wind). Some of the RECs created by generation at Gray County Wind and Ensign Wind farms and the St. Joseph Landfill Gas Facility were used for 2016 and 2017 RES compliance. In FERC Account 509.000, no costs for purchasing the solar RECs were recovered through the FAC during the Review Period.

In Staff Data Request No. 0044, Staff requested "the dollar amount of Renewable Energy Credit revenues" for the period December 1, 2016 through May 31, 2018, and GMO responded, "KCP&L Greater Missouri Operations Company did not sell any RECs during the review period of December 31, 2016 through May 31, 2018...". Staff issued follow up Data Request Nos. 0044.1 and 0044.2. Staff Data Request No. 0044.2 was issued to obtain additional information on why the Company was choosing to not sell REC's. In Case Number ER-2018-0146, Staff Cost of Service Report, Staff witness Claire Eubanks provided in direct testimony, "Staff is concerned with GMO's decision to not pursue the sale of RECs that will not be utilized for future Missouri RES compliance. Revenue from the sale of RECs is returned to customers through the FAC; therefore, Staff reviews the management of REC sales during FAC prudence reviews and further exploration of the decision will be conducted at that time. Costs related to the tracking of RECs, which will ultimately be retired or unused, are included for recovery in GMO's Renewable Energy Standard Rate Adjustment Mechanism ("RESRAM"). Expiration of GMO RECs occurred in 2018, outside of the current RESRAM prudence review period. GMO's annual estimated REC production from existing non-solar resources ** ________ ** RECs is well in excess of the projected average RES requirement ** ____ ** RECs; resulting in unused RECs and increased annual issuance fees of approximately $** ____ . **" The Company provided the following response to Staff's data request:

A. ** ____ **

B. ** ____ **

C. ** ____ **

D. ** ____
____ **

2. Summary of Cost Implications

If the Commission found that GMO was imprudent in its management of RECs, by including the cost of RECs in calculating its FAC charges, or not selling RECs when it had the opportunity to do so, ratepayer harm could result from increased costs or decreased revenues in its FAC charges.

3. Conclusion

With regards to FAC prudency, Staff did not find evidence that GMO's management of its RECs during the Review Period was imprudent.

4. Documents Reviewed

a. Staff Data Request Nos. 0044, 0044.1 and 0044.2; and
b. GMO 2016 and 2017 Annual Renewable Energy Standard Compliance Reports.

Staff Expert/Witness: Kory J. Boustead

K. St Joseph Landfill Gas Facility

1. Description

GMO constructed a landfill gas generating plant at the St. Joseph city landfill. Division of Energy certified the St. Joseph Landfill Gas Facility as a renewable energy resource on August 3, 2012. The plant satisfies the relevant Missouri statutes and regulations to qualify as a renewable energy resource located within the State of Missouri and, therefore, GMO receives one and twenty-five hundredths (1.25) renewable energy credit for each MWh generated by this in-state renewable energy facility. The St. Joseph Landfill Gas Facility was deemed in-service March 30, 2012, by the Commission, at which time landfill gas fuel costs for it began to flow through GMO's FAC.

On December 21, 2012, GMO filed in Case Nos. ER-2012-0175 and ER-2013-0341 an *Application for Waiver or Variance of 4 CSR 240-20.100(6)(A)(16) for St. Joseph Landfill Gas Facility and Motion for Expedited Treatment*. Rule 4 CSR 240-20.100(6)(A)(16) provides that RES compliance costs may only be recovered through a RESRAM or as part of a general rate proceeding, but not through a fuel adjustment clause. On December 28, 2012, Staff filed *Staff's Response to KCP&L Greater Missouri Operations Company's Application for Waiver or Variance of 4 CSR 240-20.100(6)(A)16 for St. Joseph Landfill Gas Facility*. In its response, Staff expressed that it did not oppose GMO's application for waiver because of GMO's commitment to work with the parties to resolve these issues before GMO files its next general electric rate case.

On January 3, 2013, the Commission issued an *Order Granting Waiver* with an effective date of January 4, 2013, granting GMO relief from Commission Rule 4 CSR 240-20.100(6)(A)(16) for purposes of Case Nos. ER-2012-0175 and ER-2013-0341, allowing GMO to temporarily flow its St. Joseph Landfill Gas Facility's gas fuel costs through its FAC rather than through a RESRAM or as part of a general rate proceeding. This allows GMO to recover RES compliance costs from the *St. Joseph Landfill Gas Facility* through its FAC. Paragraph 5, on Page 3, of GMO's application for the waiver requests that the words "landfill gas" be included in its tariff sheet implementing the relief. The tariff the Commission approved in GMO's rate case where it granted the relief includes the words "landfill gas."

The relief the Commission granted from Commission Rule 4 CSR 240-20.100(6)(A)(16), was a temporary fix that allowed time for all interested parties to come to agreement on a solution that complies with the Commission Rules. As part of the ER-2016-0156 general rate case, GMO agreed to exclude the landfill gas costs from the FAC when rates from the general rate case ER-2016-0156 went into effect. On November 8, 2016, GMO filed compliance tariff sheets intended to implement GMO's new rates established by the Commission-approved stipulation and agreement that resolved GMO's general rate case, Case No. ER-2016-0156. In an order issued on November 30, 2016, the Commission approved those compliance tariff sheets to become effective on December 22, 2016. Thereafter, GMO encountered technical problems and was unable to generate bills that accurately reflected the new rates. At the request of GMO, the Commission extended the effective date of the compliance tariff sheets until February 22, 2017, to allow GMO time to fix the technical problems. The substitute tariff sheets became effective February 22, 2017. Therefore, landfill gas costs were included in the FAC during December 1, 2016 through February 21, 2017 of the Review Period after which these costs are excluded from the FAC.

During this Review Period, Staff reviewed account 501.450 for expenses related to the St. Joseph Landfill Gas Facility and found costs to be recovered through the FAC. However, the total net costs were reversed in the general ledger removing all related expenses to be recovered from the FAC and appropriately through the RESRAM. Since this was corrected within the Review Period, no issues are stated during this Prudence Review

2. Summary of Cost Implications

If GMO's use of the FAC to recover RES compliance costs was imprudent, ratepayer harm could result from an increase in FAC charges.

3. Conclusion

Staff has found no indication that GMO has acted imprudently regarding the St. Joseph Landfill Gas Facility with respect to its FAC. Staff will continue to monitor this issue in future GMO FAC prudence reviews.

4. Documents Reviewed

a. Staff Data Request No. 0047.1.

Staff Expert/Witness: Cynthia M. Tandy

L. Lake Road Auxiliary Power Steam Allocation

1. Description

In the June 29, 2018 FAR filing for its FAC's twenty-second accumulation period which started December 1, 2017 and ended May 31, 2018, Case No. ER-2018-0400, GMO made an adjustment entry for auxiliary power to reduce fuel expense for electric customers and allocate a portion to industrial steam customers. However, as a result of a Commission order in its most recent general rate case, Case No. ER-2018-0146, the Company believes that no adjustment entry was needed for this allocation of auxiliary power in its FAC's twenty-second accumulation period FAR filing. The Stipulation and Agreement filed in Case No. ER-2018-0146 on September 19, 2018 was approved by the Commission to be effective November 10, 2018, and provided the following in its paragraph 10:

> **10. GMO STEAM ALLOCATIONS**
>
> GMO will use the allocation numbers used in Staff's model filed in Case No. ER-2016-0156. These allocation numbers shall be used by GMO in its FAC, QCA, and surveillance reporting. GMO agrees to work with Staff, OPC, and MECG to develop new steam allocation procedures prior to GMO's next electric general rate case.

As a result of the Commission's order in Case No. ER-2018-0146, GMO reversed the original adjustment entry from the prior FAR filing, in its FAR filing for its FAC's twenty-third accumulation period which started June 1, 2018 and ended November 30, 2018.

On February 27, 2019, the Commission issued its *ORDER SUSPENDING TRUE-UP TIMELINE AND DIRECTING THE PARTIES TO FILE A PROPOSED PROCEDURAL SCHEDULE* in Case No. ER-2019-0198 to allow the Commission to address the Office of the Public Counsel's challenge regarding allocation of charges for the auxiliary electric power used by GMO for its steam operations.

2. Summary of Cost Implications Summary of Cost Implications

If GMO imprudently included steam auxiliary power costs in its FAC, ratepayer harm could result from an increase in FAC charges.

3. Conclusions

Staff found no indication that GMO imprudently included steam auxiliary power costs in its FAC during the Review Period. However, it is expected that the prudency of GMO's allocation of auxiliary power costs will be determined by the Commission in Case No. ER-2019-0198.

4. Documents Reviewed

a. Staff Data Request No. 0062;

b. OPC Data Requests 8000 through 8010;

c. Staff Recommendation in Case Nos. ER-2018-0400 and ER-2019-0198; and

d. September 19, 2018 Non-Unanimous Stipulation and Agreement in Case No. ER-2018-0146.

Staff Expert/Witness: Brooke Mastrogiannis

M. Gray County Wind Purchased Power Agreement

1. Description

GMO has a long-term (15-year) PPA with NextEra Energy Resources for energy and RECs generated by the Gray County Wind Farm located in Kansas. The contract is based on ** __ ** MW of capacity that GMO (then known as Aquila, Inc.) began receiving in 2001. The contract is a "take-or pay" contract (i.e., GMO has to receive and pay for the energy whether it needs the energy or not), which is a standard feature of many wind PPAs. The contract is for the energy and RECs generated by the wind farm. In its response to Staff Data Request No. 0044 GMO stated, "KCP&L Greater Missouri Operations Company did not sell any RECs during the review period of December 31, 2016 through May 31, 2018". Total costs of electricity under the Gray County PPA was $** ________ ** with revenue associated with sales of $** ________ ** which resulted in a net loss of $** ________ ** for the Review Period.

2. Summary of Cost Implications Summary of Cost Implications

If GMO imprudently included either energy costs and/or REC costs in its FAC, ratepayer harm could result from an increase in FAC charges. Rule 4 CSR 240-20.090(1)(B) and (C) and GMO's FAC allow purchased power costs and revenues in FERC Account Number 555 to be recovered through the FAC. Staff found no indication that GMO imprudently included the Gray County Wind Farm PPA costs in the FAC.

3. Conclusions

Staff has identified that the Gray County Wind Farm PPA is creating a significant amount of additional costs compared to the revenue received; Staff notes this is a long-term PPA and the performance of this contract should be viewed on a long-term basis and not just from the results during this Review Period. Staff is not recommending a disallowance related to this issue at this time.

4. Documents Reviewed

a. Staff Data Request Nos. 0001, 0002, 0021, 0045, 0047, 0047.1, 0058, 0060;

b. GMO 2017 Annual Renewable Energy Standard Compliance Plan;

c. GMO 2018 Annual Renewable Energy Standard Compliance Plan;

d. Staff Report in Case No. EO-2017-0272; and

e. Staff Report in Case No. EO-2018-0291.

Staff Expert/Witness: Lisa Wildhaber

N. Ensign Wind Purchased Power Agreement

1. Description

GMO has a long-term (20-year) PPA with NextEra Energy Resources for energy and RECs generated by the Ensign Wind Center beginning in November 2012. The contract is also a "take-or pay" contract for renewable wind energy and RECs (i.e., GMO has to receive and pay for the energy whether it needs the energy or not), and is based on a capacity of ** ____ ** MW. In its response to Staff Data Request No. 0044 GMO stated, "KCP&L Greater Missouri Operations Company did not sell any RECs during the review period of December 31, 2016 through May 31, 2018". Total costs of electricity under the Ensign Wind PPA was $** ________ ** with revenue associated with sales of $** ________ ** which resulted in a net loss of $** ________ ** for the review period.

2. Summary of Cost Implications

If GMO imprudently included either energy costs and/or RES compliance costs in its FAC calculations, ratepayer harm could result from an increase in FAC charges. Rule 4 CSR 240-20.090(1)(B) and (C), and GMO's FAC allow purchased power costs and revenues in FERC Account Number 555 to be recovered through the FAC. Staff found no indication that GMO imprudently included the Ensign Wind Center PPA costs in the FAC.

3. Conclusions

Staff has identified that the Ensign Wind Center PPA is creating a significant amount of additional costs compared to the revenue received; Staff notes this is a long-term PPA and the performance of this contract should be viewed on a long-term basis and not just from the results during this Review Period. Staff is not recommending a disallowance related to this loss issue at this time.

4. Documents Reviewed

a. Staff Data Request Nos. 0001, 0002, 0021, 0045, 0047, 0047.1, 0058, 0060;
b. GMO 2017 Annual Renewable Energy Standard Compliance Plan;
c. GMO 2018 Annual Renewable Energy Standard Compliance Plan;
d. Staff Report in Case No. EO-2017-0272; and
e. Staff Report in Case No. EO-2018-0291.

Staff Expert/Witness: Lisa Wildhaber

O. Osborn Wind Energy Purchased Power Agreement

1. Description

GMO has a long-term (20-year) PPA with NextEra Energy Resources for energy and RECs generated by the Osborn Wind Energy Center located in Missouri. The contract is based on ** __ ** MW of capacity that GMO began receiving in December 2016. The contract is a "take-or pay" contract (i.e., GMO has to receive and pay for the energy whether it needs the energy or not), which is a standard feature of many wind PPAs. The contract is for the energy and RECs generated by the wind farm. In its response to Staff Data Request No. 0044 GMO stated, "KCP&L Greater Missouri Operations Company did not sell any RECs during the review period of December 31, 2016 through May 31, 2018". Total costs of electricity under the Osborn Wind PPA was $** ________ ** with revenue associated with sales of $** ________ ** which resulted in a net loss of $** ________ ** for the review period.

2. Summary of Cost Implications Summary of Cost Implications

If GMO imprudently included costs from the Osborn Wind Energy PPA in its FAC, ratepayer harm could result from an increase in FAC charges. Rule 4 CSR 240-20.090(1)(B) and (C), and GMO's FAC allow purchased power costs and revenues in FERC Account Number 555 to be recovered through the FAC. Staff found no indication that GMO imprudently included the Osborn Wind Energy PPA costs in the FAC.

3. Conclusions

Staff has identified that the Osborn Wind Energy PPA is creating a significant amount of additional costs compared to the revenue received; Staff notes this is long-term PPA and the performance of this contract should be viewed on a long-term basis and not just from the results during this Review Period. Staff is not recommending a disallowance related to this loss issue at this time.

4. Documents Reviewed

a. Staff Data Request Nos. 0001, 0002, 0021, 0045, 0047, 0047.1, 0058, 0060;
b. GMO 2017 Annual Renewable Energy Standard Compliance Plan;
c. GMO 2018 Annual Renewable Energy Standard Compliance Plan;
d. Staff Report in Case No. EO-2017-0272; and
e. Staff Report in Case No. EO-2018-0291.

Staff Expert/Witness: Lisa Wildhaber

P. Rock Creek Wind Project Purchased Power Agreement

1. Description

GMO has a long-term (20-year) PPA with Rock Creek Wind Project, LLC for energy and RECs generated by the Rock Creek Wind Farm located in Missouri. The contract is also a "take-or pay" contract for renewable wind energy and RECs (i.e., GMO has to receive and pay for the energy whether it needs the energy or not), and is based on a fixed energy price of $** ____ ** per MWh and a capacity of ** ____ ** MW that GMO began receiving in August 2017. In its response to Staff Data Request No. 0044 GMO stated, ** " ____ ____ ______________________________ ". ** Costs of electricity under the Rock Creek Wind Project was $** ________ ** with revenue associated with sales of $** ________ ** which resulted in a net loss of $** ________ ** for the review period.

2. Summary of Cost Implications

If GMO imprudently included either energy costs and/or RES compliance costs in its FAC, ratepayer harm could result from an increase in FAC charges. Rule 4 CSR 240-20.090(1)(B) and (C), and GMO's FAC allow purchased power costs and revenues in

FERC Account Number 555 to be recovered through the FAC. Staff found no indication that GMO imprudently included the Rock Creek Wind Project PPA costs in the FAC.

3. Conclusions

Staff has identified that the Rock Creek Wind Project PPA is creating a significant amount of additional costs compared to the revenue received; Staff notes this is a long-term PPA and the performance of this contract should be viewed on a long-term basis and not just from the results during this Review Period. Staff is not recommending a disallowance related to this loss issue at this time.

4. Documents Reviewed

a. Staff Data Request Nos. 0001, 0002, 0021, 0045, 0047, 0047.1, 0058, 0060;
b. GMO 2017 Annual Renewable Energy Standard Compliance Plan;
c. GMO 2018 Annual Renewable Energy Standard Compliance Plan;
d. Staff Report in Case No. EO-2017-0272; and
e. Staff Report in Case No. EO-2018-0291.

Staff Expert/Witness: Lisa Wildhaber

Q. Purchased Power Costs

1. Description

GMO's FAC 3rd Revised Sheet No. 125 through 3rd Revised Sheet No. 126, effective January 26, 2013 through February 21, 2017, and Second Revised Sheet No. 127.3, applicable to service provided February 22, 2017 and thereafter, define the Purchased Power Costs ("PP") components, which are purchases of power through the SPP IM and not energy generated by the company.

Staff has determined that GMO's total purchased power expense for the Review Period is $** ________ ** as shown previously in Table 3. More detail for the cost of Purchased Power is shown in Table 12 below.

continued on next page

Table 12 – Confidential

**

**

GMO had four long term purchase power agreements in effect at the start of the Review Period: Intercompany Purchases, WPE/ Gray County, Ensign Wind and Osborn Wind. Staff reviews the prudency of long term purchased power contracts during a general rate case as part of the determination of what generation plants and purchased power contracts should be input into Staff's fuel model. If a determination of imprudence is found, Staff determines the appropriate resource (e.g. generation plant and/or purchased power contract) to be used in the fuel model. Therefore, the prudency of entering into long-term purchased power contracts is a general rate case issue and not an FAC prudence review issue.

Intercompany Purchases

At certain times Missouri Public Service ("MPS") will sell excess energy to Light and Power ("L&P")[31] and at other certain times L&P will sell excess energy to MPS. Per response to Data Request 0002, February 2017 monthly report: "Effective February 22, 2017, per Case No. ER-2016-0156, MPS and L&P rate districts were combined into one consolidated GMO rate structure. The base energy charge was changed from $22.78 per MWh for MPS and $20.76 per MWh for L&P to $20.55 per MWh for GMO."

[31] MPS and L&P are rate districts within GMO.

WPE/Gray County, Ensign, Osborn, and Rock Creek Wind

GMO had long term purchased power contracts with four wind farms during the Review Period. A further description of these contracts can be found in Section III.M. through P.

Non-firm Short Term Energy

Since SPP implemented the IM on March 1, 2014, SPP has controlled the economic dispatch of GMO's generation. During times that GMO's load exceeds GMO's generation, GMO becomes a net purchaser in the SPP market. These SPP market purchases are from other electric suppliers to help meet GMO's retail load during times of forced or planned plant outages and during times when the market price is below both the marginal cost of providing that energy from GMO's generating units. Under the SPP Integrated Marketplace, GMO's generation is offered to the SPP IM and energy needed for native load requirements is purchased from the SPP market. "Spot purchases and sales are made based upon SPP market and operating conditions for the SPP footprint." Costs for the IM purchases are included as "Non-Firm Short Term Energy" in Tables 3 and 12. Further discussion of GMO's participation in these markets can be found in Section III.A. of this report.

Short Term Demand

Capacity charges for capacity purchases less than 12 months in duration are listed as Short Term Demand on Tables 3 and 12.

2. Summary of Cost Implication

If GMO did not manage its purchase power contracts properly or GMO imprudently participated in the SPP's IM, ratepayer harm could result from an increase in costs collected through the FAC.

3. Conclusion

Staff found no indication of imprudence by GMO for purchasing short term capacity, or impacts from long-term purchased power contracts**,** or purchasing energy in the SPP IM market.

4. Documents Reviewed

a. GMO's responses to Staff Data Request Nos. 0001, 0002, 0010, 0018, 0021, 0036, 0045, 0047, 0047.1, 0058, and 0060 issued in this case; and

b. Section III.A. of this report.

Staff Expert/Witness: Lisa Wildhaber

IV. INTEREST

1. Description

During each accumulation period, GMO is required to calculate a monthly interest amount based on GMO's short-term debt borrowing rate that is applied to the under-recovered or over-recovered fuel and purchased power costs. GMO's short-term debt rate is calculated using the daily one-month United States Dollar London Interbank Offered Rate ("LIBOR"), using the last previous actual rate for weekends and holidays or dates without an available LIBOR, and the Applicable Margin for Eurodollar Advances. A simple mathematical average of all the daily rates for the month is then computed. For the Review Period, GMO's average interest rate from December 1, 2016 through May 31, 2018 was 0.21% with the total amount of interest accumulated for the period of $223,185. The interest amount is component "I" of GMO's FAC.

2. Summary of Interest Implications

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

3. Conclusion

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

4. Documents Reviewed

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

a. Staff Data Request Nos. 0001 and 0046; and

b. Staff Work Papers "EO-2019-0067 GMO Section 7 Filing – 20th, 21st and 22nd (May 2017, November 2017 and May 2018 respectively)".

Staff Expert/Witness: Cynthia M. Tandy

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Eighth Prudence Review of Costs Subject to the Commission-Approved Fuel Adjustment Clause of KCP&L Greater Missouri Operations Company	)))))	Case No. EO-2019-0067

AFFIDAVIT OF KORY J. BOUSTEAD

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW KORY J. BOUSTEAD and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Staff Report – Eighth Prudence Review*; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

Kory J. Boustead

KORY J. BOUSTEAD

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 28th day of February 2019.

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

D Suzie Mankin

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Eighth Prudence Review of Costs Subject to the Commission-Approved Fuel Adjustment Clause of KCP&L Greater Missouri Operations Company	)))))	Case No. EO-2019-0067

AFFIDAVIT OF DANA E. EAVES

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW DANA E. EAVES and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Report – Eighth Prudence Review*; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

Dana E. Eaves

DANA E. EAVES

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 28th day of February 2019.

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

D Suzie Mankin

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Eighth Prudence Review of Costs Subject to the Commission-Approved Fuel Adjustment Clause of KCP&L Greater Missouri Operations Company	)))))	Case No. EO-2019-0067

AFFIDAVIT OF JORDAN HULL

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW JORDAN HULL and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Report – Eighth Prudence Review*; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

Jordan Hull

JORDAN HULL

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 28th day of February 2019.

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

D Suzie Mankin

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Eighth Prudence Review of Costs Subject to the Commission-Approved Fuel Adjustment Clause of KCP&L Greater Missouri Operations Company	)))))	Case No. EO-2019-0067

AFFIDAVIT OF BROOKE MASTROGIANNIS

STATE OF MISSOURI	)	
	)	ss.
COUNTY OF COLE	)	

COMES NOW BROOKE MASTROGIANNIS and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Staff Report – Eighth Prudence Review*; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

Brooke Mastrogiannis

BROOKE MASTROGIANNIS

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 28th day of February 2019.

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

D. Suzie Mankin

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Eighth Prudence Review of Costs Subject to the Commission-Approved Fuel Adjustment Clause of KCP&L Greater Missouri Operations Company	)))))	Case No. EO-2019-0067

AFFIDAVIT OF CYNTHIA M. TANDY

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW CYNTHIA M. TANDY and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Staff Report – Eighth Prudence Review*; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

Cynthia M. Tandy

CYNTHIA M. TANDY

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 28th day of February 2019.

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

D Suzie Mankin

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Eighth Prudence Review of Costs Subject to the Commission-Approved Fuel Adjustment Clause of KCP&L Greater Missouri Operations Company	)))))	Case No. EO-2019-0067

AFFIDAVIT OF LISA WILDHABER

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW LISA WILDHABER and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Staff Report – Eighth Prudence Review*; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

Lisa Wildhaber

LISA WILDHABER

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 28th day of February 2019.

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

D. Suzie Mankin

Notary Public