Exhibit No.:

Issue: Rate Design
Witness: Greg R. Meyer
Type of Exhibit: Rebuttal Testimony
Sponsoring Party: Dogwood Energy LLC
Case No.: ER-2018-0146

Date Testimony Prepared: August 7, 2018

DEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority to Implement a General Rate Increase for Electric Service

Case No. ER-2018-0146

Rebuttal Testimony and Schedules of

Greg R. Meyer

On behalf of

Dogwood Energy LLC

PUBLIC VERSION
Denotes Redacted Information

August 7, 2018



Project 10619

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority to Implement a General Rate Increase for Electric Service

Case No. ER-2018-0146

STATE OF MISSOURI) SS COUNTY OF ST. LOUIS)

Affidavit of Greg R. Meyer

Greg R. Meyer, being first duly sworn, on his oath states:

- 1. My name is Greg R. Meyer. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 16690 Swingley Ridge Road, Suite 140, Chesterfield, Missouri 63017. We have been retained by Dogwood Energy LLC in this proceeding on its behalf.
- 2. Attached hereto and made a part hereof for all purposes are my rebuttal testimony and schedules which were prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. ER-2018-0146.
- 3. I hereby swear and affirm that the testimony and schedules are true and correct and that they show the matters and things that they purport to show.

Greg R. Meyer

Subscribed and sworn to before me this 7th day of August, 2018.

MARIA E. DECKER
Notary Public - Notary Seal
STATE OF MISSOURI
St. Louis City
My Commission Expires: May 5, 2021
Commission # 13706793

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of KCP&L Greater Missouri
Operations Company's Request for Authority to
Implement a General Rate Increase for Electric
Service

Case No. ER-2018-0146

Rebuttal Testimony of Greg R. Meyer

2 A Greg R. Meyer. My business address is 16690 Swingley Ridge Road, Suite 140,

PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

3 Chesterfield, MO 63017.

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Q

- 4 Q WHAT IS YOUR OCCUPATION?
- 5 A I am a consultant in the field of public utility regulation and a Principal with the firm of
- 6 Brubaker & Associates, Inc. ("BAI"), energy, economic and regulatory consultants.
- 7 Q PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.
- 8 A This information is included in Appendix A to this testimony.
- 9 Q WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY IN THIS
- 10 **PROCEEDING?**
- 11 A The purpose of my testimony is to respond to KCP&L Greater Missouri Operations'
- 12 ("GMO") proposal to discontinue the Real-Time Pricing ("RTP") tariff. My testimony
- 13 will show that the decision to terminate the RTP tariff is premature, unwarranted and
- 14 contrary to other positions advocated by GMO and other parties in the rate case.

1 Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

- 2 A This testimony is presented on behalf of Dogwood Energy LLC ("Dogwood Energy"),
- 3 which is a minority owner of the Dogwood Energy Facility (and commonly referred to
- 4 as "Dogwood," including herein).

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5 Q PLEASE DESCRIBE THE DOGWOOD OPERATIONS.

Dogwood is a 650 MW natural gas-fired combined cycle generating facility located in Pleasant Hill, Missouri. Dogwood operates in the Southwest Power Pool ("SPP") market. When Dogwood is operating, it produces enough power to operate all of the station systems at the facility. However, when Dogwood is off-line (not operating), it requires energy from the grid to maintain the facility. When SPP market prices are high, Dogwood ramps up its units to produce power to sell into the SPP market. Power needed to bring the units on-line (operational) is obtained from the energy grid. GMO is the energy provider for those times when Dogwood is off-line or bringing its units into operational mode. During the summer peak load months, Dogwood is often on-line and operating for 300-500 hours a month. Further, Dogwood is nearly always on line supplying its own power prior to periods of peak demand. Witness Rob Janssen provides more information about Dogwood's operations.

18 Q WHAT GMO WITNESS ADDRESSED THE RTP TARIFF AND WHAT WERE THEIR

19 **CONCLUSIONS?**

20 A GMO witness Marisol Miller described the proposed termination of the RTP tariff on

pages 23-24 of her direct testimony. I have included that portion of her testimony

22 below:

1 2		Q: Please summarize the proposed changes to rules & regulation tariffs or other non-base rate tariffs.
3 4 5 6 7 8 9 10 11 12 13		A: The specific, proposed changes to rules and regulations and non-base rate tariffs may be found in Schedule MEM-7. Changes are proposed to better align the rules & regulations with current costs or planned business practices and are generally minimal in impact. The most significant changes included elimination to of [sic] the frozen Real-Time Pricing tariffs and modifications of the Special Contracts tariffs. The special contract tariffs were streamlined to better align with business practices and the frozen RTP tariffs are being proposed to be eliminated given the administratively burdensome nature to maintain these frozen tariffs. (Emphasis added).
14	Q	WAS THAT THE ONLY JUSTIFICATION GIVEN FOR DISCONTINUING THE RTP
15		TARIFF?
16	Α	No. On Schedule MEM-7, Ms. Miller also lists the following reasons for discontinuing
17		the RTP tariff:
18 19 20 21		The Company is proposing to eliminate the non-residential Real-Time Pricing program. There are no customers served on these frozen rates. Additionally, the administrative effort to continue to offer this unused product and maintain the tariff is overly burdensome.
22	Q	IS GMO'S CLAIM THAT THERE ARE NO CUSTOMERS SERVED BY THE RTP
23		TARIFF CORRECT?
24	Α	No. Dogwood has been for many years and continues to be served by GMO under
25		the RTP tariff. In response to Data Requests Dogwood-4 and Dogwood-5, GMO
26		identified several other customers that have been served by it and KCPL pursuant to
27		the RTP tariff since January 1, 2017. Therefore, the claim that no one is being
28		served pursuant to the RTP tariff is wrong.

1 Q PLEASE DESCRIBE THE RTP TARIFF.

- 2 A The RTP tariff offers customers the opportunity to shift load from periods of high
- 3 market costs (peak) to periods of low market costs (off peak) to achieve cost savings.
- In the KCPL-GMO tariff Revised Sheet No. 73 the following purpose is stated for the
- 5 RTP tariff:

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Real-time pricing (RTP) offers customers electricity at marginal-cost based prices. This offers customers the ability to more accurately respond to the true costs of providing power. Customers benefit from the opportunity to consume more power during relatively frequent low-cost hours, while reducing usage during the relatively few high-cost hours.

12 Q DOES DOGWOOD'S USAGE PATTERNS MAKE THE RTP TARIFF AN 13 APPROPRIATE ALTERNATIVE?

14 A Yes. Dogwood is seldom on-line during the peak periods of GMO's operations.

Dogwood's load pattern makes it an appropriate customer for the RTP tariff and its

stated purpose of "allowing customers to more accurately respond to the true costs of

power and needs to buy the less expensive power from the market. When power

power and needs to buy the less expensive power from the market. When power

prices are high, Dogwood is producing power and not requiring GMO to provide

energy to its facilities. The circumstances of Dogwood's load profile fit very nicely

providing power." When power prices are low, Dogwood is typically not producing

with the purposes of the RTP tariff. I have attached the GMO tariff Revised Sheet No.

73 as Schedule GRM-R1 to this testimony.

1	Q	REVISED SHEET NO. 73 CONTAINS THE WORD (FROZEN) IN THE TITLE								
2		SECTION OF THE TARIFF. WHAT IS YOUR UNDERSTANDING OF THIS TERM?								
3	Α	It is my understanding that this tariff was "frozen" or not available to any new								
4		customers after February 22, 2017. February 22, 2017 was the effective date of new								
5		tariffs approved by the Commission in GMO's last rate case, File No. ER-2016-0156.								
6	Q	PRIOR TO THAT DATE ARE YOU AWARE IF GMO WAS PROMOTING THE RTP								
7		TARIFF TO ANY CUSTOMERS?								
8	Α	I do not believe it was. In response to MECG data request 7-3, GMO states the								
9		following:								
10 11 12 13		The existing RTP rates were introduced in the mid 1990's. KCP&L-GMO can find no record of marketing materials or promotional efforts that may have been used to promote these programs other than the rate sheets.								
14		Given that no marketing materials or record of promotional efforts could be								
15		found, I think it can be reasonably concluded that essentially no effort was made to								
16		alert other customers of this tariff and its possible benefits.								
17	Q	DO YOU BELIEVE THE RTP TARIFF SHOULD BE UNFROZEN AND OFFERED								
18		TO OTHER CUSTOMERS?								
19	Α	Absolutely. It is very unclear at this point in time how much if any effort was								
20		dedicated by KCPL or GMO to really promote the RTP tariff. It is very easy to claim								
21		lack of customer interest as a reason to discontinue a tariff. However, lack of								
22		customer interest could be directly tied to a lack of information available to customers								

about this pricing option. Furthermore, reopening the RTP tariff would coincide with

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1	the Sta	ff's	position	in	this	case	advocating	for	mandatory	time-of-use	rates	fo
2	resident	ial c	customer	s.								

3 Q DO YOU BELIEVE CUSTOMER EDUCATION ABOUT THE RTP TARIFF IS 4 IMPORTANT?

Yes. In the direct testimony of both the Staff and Division of Energy, customer education is cited as vitally important to promote the implementation of time-of-use ("TOU") rates.

Q PLEASE EXPLAIN THE RELEVANCY OF THE STAFF'S POSITION ON TIME-OF USE RATES FOR RESIDENTIAL CUSTOMERS TO THE RTP TARIFF.

In its direct testimony the Staff is proposing mandatory time-of-use rates for residential customers with Advanced Metering Infrastructure ("AMI") meters. In addition, Division of Energy witness Martin Hyman notes in his direct testimony that in the future most residential general use customers will be served on demand response rates (time-differentiated). Clearly, both the Staff and Division of Energy are promoting residential rate packages that have different rates for different periods of the day. This is entirely consistent with the RTP tariff. To completely discontinue the RTP tariff at this point in time would be a step backwards in the pricing of energy for RTP customers.

19 Q WHAT IS THE DIFFERENCE BETWEEN REAL-TIME PRICING RATES AND TIME-

20 **OF-USE RATES?**

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21 A Real-time pricing rates are a further refinement of time-of-use rates. In its direct 22 testimony, the Staff proposes the following KCPL and GMO time-of-use rates.

TABLE 1						
Staff Proposed KCPL and GMO Time-of-Use Rates						
	KCPL	GMO				
Summer 8:00 AM to 9:59 PM	\$0.141	\$0.129				
Summer 10:00 PM to 7:59 AM	\$0.111	\$0.092				
Non-Summer 8:00 AM to 9:59 PM	\$0.124	\$0.105				
Non-Summer 10:00 PM to 7:59 AM	\$0.071	\$0.064				

Q

Α

As can be seen from the above table, customers would pay different rates depending on the time of day. Real-time pricing refines those periods of the day to usually one-hour increments. Thus, customers would pay for their energy usage based on the actual hourly price and not the average price for a specific period of the day. Real-time pricing is a more exact pricing mechanism than time-of-use rates.

HAS GMO PROVIDED ANY EVIDENCE TO SUPPORT ITS CLAIM THAT THE RTP TARIFF IS ADMINISTRATIVELY BURDENSOME IN NATURE TO MAINTAIN?

No. There is nothing in the GMO direct testimony that describes the administrative burden of this tariff. In response to data request Dogwood-1, GMO lists 17 steps that are involved when creating a monthly bill for Dogwood. GMO estimates it takes approximately 6.75 hours to complete those steps and compile a monthly bill for Dogwood. In addition, in response to data request Dogwood-2, GMO explains in less detail the manual billing process it uses to bill an RTP customer. Within that response GMO quantifies an annual cost of \$65K to utilize an outside service (Olameter). This is all of the documentation that I am aware of which describes the purported administrative burden of the RTP rate. I have attached GMO's responses to data requests Dogwood-1 and Dogwood-2 as Schedule GRM-R2.

1	Q	IS \$65K A YEAR AN ADMINISTRATIVE BURDEN ON GMO?
2	Α	I do not believe so. GMO's total operating expenses according to the Staff's
3		Accounting Schedules are approximately \$562 million. \$65K is immaterial to the total
4		operating expenses of GMO versus the benefits of the tariff.
5	Q	HAVE YOU REVIEWED THE CALCULATION OF DOGWOOD ENERGY'S BILL?
6	Α	Yes, I have.
7	Q	DO YOU BELIEVE AN OUTSIDE SERVICE WOULD BE NEEDED TO CALCULATE
8		DOGWOOD'S BILL?
9	Α	No. I would contend that GMO could perform all of the billing functions with its
10		current workforce and not need any assistance from outside vendors.
11	Q	ARE YOU AWARE THAT A NEW COMPUTER BILLING SYSTEM IS BEING
11 12	Q	ARE YOU AWARE THAT A NEW COMPUTER BILLING SYSTEM IS BEING INSTALLED AT KCPL AND GMO?
	Q A	
12		INSTALLED AT KCPL AND GMO?
12 13		INSTALLED AT KCPL AND GMO? Yes. KCPL and GMO are currently in the implementation stages of the One CIS
12 13 14		INSTALLED AT KCPL AND GMO? Yes. KCPL and GMO are currently in the implementation stages of the One CIS Solution Project. The One CIS Solution Project is estimated to cost approximately
12 13 14 15		INSTALLED AT KCPL AND GMO? Yes. KCPL and GMO are currently in the implementation stages of the One CIS Solution Project. The One CIS Solution Project is estimated to cost approximately \$118 million and was expected to be in service by the second quarter of 2018. GMO
12 13 14 15 16 17	Α	INSTALLED AT KCPL AND GMO? Yes. KCPL and GMO are currently in the implementation stages of the One CIS Solution Project. The One CIS Solution Project is estimated to cost approximately \$118 million and was expected to be in service by the second quarter of 2018. GMO witnesses Forrest Archibald and Charles Caisley discuss the significant benefits from the One CIS Solution Project in their direct testimony.
12 13 14 15 16 17		INSTALLED AT KCPL AND GMO? Yes. KCPL and GMO are currently in the implementation stages of the One CIS Solution Project. The One CIS Solution Project is estimated to cost approximately \$118 million and was expected to be in service by the second quarter of 2018. GMO witnesses Forrest Archibald and Charles Caisley discuss the significant benefits from the One CIS Solution Project in their direct testimony. DO YOU BELIEVE THE ONE CIS SOLUTION PROJECT COULD ADDRESS THE
12 13 14 15 16 17	A Q	INSTALLED AT KCPL AND GMO? Yes. KCPL and GMO are currently in the implementation stages of the One CIS Solution Project. The One CIS Solution Project is estimated to cost approximately \$118 million and was expected to be in service by the second quarter of 2018. GMO witnesses Forrest Archibald and Charles Caisley discuss the significant benefits from the One CIS Solution Project in their direct testimony. DO YOU BELIEVE THE ONE CIS SOLUTION PROJECT COULD ADDRESS THE ADMINISTRATIVE BURDENS DISCUSSED PREVIOUSLY?
12 13 14 15 16 17 18 19 20	Α	Yes. KCPL and GMO are currently in the implementation stages of the One CIS Solution Project. The One CIS Solution Project is estimated to cost approximately \$118 million and was expected to be in service by the second quarter of 2018. GMO witnesses Forrest Archibald and Charles Caisley discuss the significant benefits from the One CIS Solution Project in their direct testimony. DO YOU BELIEVE THE ONE CIS SOLUTION PROJECT COULD ADDRESS THE ADMINISTRATIVE BURDENS DISCUSSED PREVIOUSLY? Yes. In response to MECG data request 7-1, GMO indicates it would investigate
12 13 14 15 16 17	A Q	INSTALLED AT KCPL AND GMO? Yes. KCPL and GMO are currently in the implementation stages of the One CIS Solution Project. The One CIS Solution Project is estimated to cost approximately \$118 million and was expected to be in service by the second quarter of 2018. GMO witnesses Forrest Archibald and Charles Caisley discuss the significant benefits from the One CIS Solution Project in their direct testimony. DO YOU BELIEVE THE ONE CIS SOLUTION PROJECT COULD ADDRESS THE ADMINISTRATIVE BURDENS DISCUSSED PREVIOUSLY?

did indicate in that response that it would not make a decision until it had the opportunity to analyze the costs associated with any changes to the program. I have not seen any information that would suggest the new billing system could not be adopted for these RTP customers.

YOU MENTIONED EARLIER IN YOUR TESTIMONY THAT DOGWOOD DOES NOT GENERALLY REQUIRE ENERGY FROM GMO DURING PEAK PERIODS. DO YOU HAVE ANY EVIDENCE TO SUPPORT YOUR STATEMENT?

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Yes. I have compiled the following table, which shows the GMO peak period and MW of peak power consumed. The table also shows the hourly usage of Dogwood at the time of the GMO peak.

GMO Monthly Peaks vs. Dogwood Hourly Usage						
GMO Monthly Peak Day	GMO Peak Hour	GMO Peak <u>MW</u> 's	Dogwood Hourly Usage MWh's			
January 6	8	1531	** **			
February 9	8	1297	** **			
March 15	8	1239	** **			
April 19	18	1101	** **			
May 15	18	1427	** **			
June 15	18	1745	** **			
July 20	17	1910	** **			
August 15	18	1629	** **			
September 21	17	1690	**_**			
October 2	18	1329	** **			
November 10	8	1140	**			
December 31	19	1473	** **			

As can be seen from the above table, Dogwood rarely takes energy from GMO at monthly peak demand times. The reason for this is that at times of GMO

1		peaks, Dogwood typically is providing power into the SPP real-time market and is not
2		needing any energy from GMO. **
3		
4		1** The data shown in this table demonstrates
5		that Dogwood should remain on the RTP tariff.
6	Q	HAS GMO PROPOSED A REPLACEMENT TARIFF TO PRICE SERVICE TO
7		DOGWOOD?
8	Α	Yes. GMO has stated that given Dogwood's usage, it appears it likely would fall
9		under the GMO LPS tariff.
10	Q	HAVE YOU CALCULATED THE RATE IMPACT TO DOGWOOD IF IT WERE
11		PLACED UNDER THE GMO LPS TARIFF?
12	Α	Yes. I have estimated that Dogwood's power bills would more than double if it were
13		subject to the LPS tariff. This would result in a significant increase in Dogwood's
14		expenses and would not reflect GMO's true costs to serve Dogwood. These
15		increased costs would have to be passed on to co-owners of Dogwood, and in turn
16		the residents and businesses served by the municipal utilities and power authorities
17		in Missouri and Kansas that own roughly 2/3 of Dogwood.
18	Q	IS THE LPS TARIFF SUITABLE FOR A CUSTOMER WITH A LOAD PATTERN
19		LIKE DOGWOOD?
20	Α	No. Typically rate classes are determined to group certain customers together based
21		on similar load characteristics of energy and demand. Placing Dogwood on the LPS
		**1 **

tariff would not be appropriate since its peak demands and usage patterns do not fit within the load characteristics of the LPS customer group or for that matter any of the rate groups of GMO. Dogwood has little if any demand requirements when GMO is experiencing its peak. Dogwood's unique load pattern fits nicely with a tariff that prices energy at its current hourly market value.

6 Q ARE YOU AWARE IF OTHER UTILITIES IN DIFFERENT STATES OFFER RTP

TARIFFS?

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Yes. I have obtained a 2016 Energy Information Administration survey that identified 33 states which have RTP in effect. I believe the number of states which offer RTP should be another indication of its success and the need to continue this pricing tariff in the future in Missouri.

HAVE DOGWOOD ENERGY AND GMO HAD ANY DISCUSSIONS REGARDING

THE RTP TARIFF AND ITS APPLICABILITY TO THE OPERATIONS OF

DOGWOOD?

Yes. There have been recent discussions between GMO and representatives of Dogwood Energy. Those discussions reveal a mutual desire to see if the current RTP tariff pricing could be modified or if Dogwood Energy should have its power priced under a different rate structure. But it remains to be seen whether a settlement can be reached between Dogwood Energy and GMO. Absent such a resolution, GMO should at present maintain the RTP tariff and consider unfreezing it and marketing it to other customers.

1	O	PLEASE SUMMARIZE YOUR TESTIMONY
1	u	PLEASE SUIVINARIZE TOUR TESTINION

- I recommend that the RTP tariff remain in effect. I am not aware of any reason to discontinue the tariff at this time. The RTP tariff addresses the unique load pattern of Dogwood. It would be premature to discontinue it while GMO evaluates potential improvements to its billing systems and discusses alternatives with Dogwood Energy.

 I also recommend that the "Frozen" classification of the RTP tariff be removed. I believe that with proper customer education the RTP tariff could result in more efficient use of energy while saving customers money.
- 9 Q DO YOU HOLD THE OPINIONS YOU HAVE EXPRESSED IN THIS TESTIMONY
 10 TO A REASONABLE DEGREE OF CERTAINTY AS A REGULATORY
 11 CONSULTANT?
- 12 A Yes, I do.
- 13 Q DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?
- 14 A Yes, it does.

Qualifications of Greg R. Meyer

1	Q	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.								
2	Α	Greg R. Meyer. My business address is 16690 Swingley Ridge Road, Suite 140,								
3		Chesterfield, MO 63017.								
4	Q	PLEASE STATE YOUR OCCUPATION.								
5	Α	I am a consultant in the field of public utility regulation and a Principal with the firm of								
6		Brubaker & Associates, Inc. ("BAI"), energy, economic and regulatory consultants.								
7	Q	PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND								
8		EXPERIENCE.								
9	Α	I graduated from the University of Missouri in 1979 with a Bachelor of Science Degree								
10		in Business Administration, with a major in Accounting. Subsequent to graduation, I								
11		was employed by the Missouri Public Service Commission. I was employed with the								
12		Commission from July 1, 1979 until May 31, 2008.								
13		I began my employment at the Missouri Public Service Commission as a								
14		Junior Auditor. During my employment at the Commission, I was promoted to higher								
15		auditing classifications. My final position at the Commission was an Auditor V, which I								
16		held for approximately ten years.								
17		As an Auditor V, I conducted audits and examinations of the accounts, books,								
18		records and reports of jurisdictional utilities. I also aided in the planning of audits and								
19		investigations, including staffing decisions, and in the development of staff positions in								
20		which the Auditing Department was assigned. I served as Lead Auditor and/or Case								

Supervisor as assigned. I assisted in the technical training of other auditors, which included the preparation of auditors' workpapers, oral and written testimony.

During my career at the Missouri Public Service Commission, I presented testimony in numerous electric, gas, telephone and water and sewer rate cases. In addition, I was involved in cases regarding service territory transfers. In the context of those cases listed above, I presented testimony on all conventional ratemaking principles related to a utility's revenue requirement. During the last three years of my employment with the Commission, I was involved in developing transmission policy for the Southwest Power Pool as a member of the Cost Allocation Working Group.

In June of 2008, I joined the firm of Brubaker & Associates, Inc. as a Consultant. Since joining the firm, I have presented testimony and/or testified in the state jurisdictions of Florida, Idaho, Illinois, Indiana, Maryland, Missouri and Washington. I have also appeared and presented testimony in Alberta and Nova Scotia, Canada. These cases involved addressing conventional ratemaking principles focusing on the utility's revenue requirement. The firm Brubaker & Associates, Inc. provides consulting services in the field of energy procurement and public utility regulation to many clients including industrial and institutional customers, some utilities and, on occasion, state regulatory agencies.

More specifically, we provide analysis of energy procurement options based on consideration of prices and reliability as related to the needs of the client; prepare rate, feasibility, economic, and cost of service studies relating to energy and utility services; prepare depreciation and feasibility studies relating to utility service; assist in contract negotiations for utility services, and provide technical support to legislative activities.

1 In addition to our main office in St. Louis, the firm has branch offices in 2 Phoenix, Arizona and Corpus Christi, Texas.

 $\label{local-local-local} $$ \operatorname{Docs}\DW10619\Testimony-BAI\349722.docx} $$$

P.S.C. MO. No. 1 1 1st Revised Sheet No. 73 Canceling P.S.C. MO. No. 1 Original Sheet No. 73 For Territory Served by Aquila Networks – MPS REAL-TIME PRICE (RTP) PROGRAM (FROZEN) ELECTRIC

PURPOSE

Real-time pricing (RTP) offers customers electricity at marginal-cost based prices. This offers customers the ability to more accurately respond to the true costs of providing power. Customers benefit from the opportunity to consume more power during relatively frequent low-cost hours, while reducing usage during the relatively few high-cost hours.

Hourly prices under the RTP program will be provided on a day-ahead basis to customers. Prices become binding at 4:00 p.m. for the following day. Prices for weekends, holidays, and the business day following them will normally be provided on the preceding business day. Power under the RTP program is firm.

AVAILABILITY

This service is available to all customers who agree to abide by the terms and conditions of the service agreement.

This program is not available for resale, standby, back-up, or supplemental service.

This schedule is not available to new customers after February 22, 2017.

CHARACTER OF SERVICE

Single-phase, 60 Hertz, nominally 120/240 volt firm electric service, provided from the Company secondary distribution system. Three-phase secondary service shall be available where three-phase facilities are available without additional construction or may be made available at additional charge at voltages not exceeding 480 volts. Three-phase primary distribution service shall be available where primary distribution facilities are available without additional construction or may be made available at additional charge at 2,400, 12,470, or 24,900 nominal volts. Primary service may be served from Company's 69,000 volt or 34,500 volt systems, at Company's option, through Company owned transformation. The customer may request contractual service from the 69,000 volt or 34,500 volt systems, if such systems are available at the customer's point of delivery without additional construction, and the customer provides transformation.

MONTHLY RATE

RTP Bill = Base Bill + Incremental Energy Charge + RTP Service Charge + Reactive Demand Adjustment.

The components of the RTP Bill are defined below.

Base Bill = Standard Tariff Bill + β *(Standard Tariff Bill - Σ_h (P_h^{RTP} * CBL_h))

Standard Tariff Bill is the customer baseline load (CBL, defined below) for the billing month, billed under the current prices of the customer's standard tariff, (the tariff under which the customer was billed prior to joining the RTP program). The Standard Tariff Bill excludes the Reactive Demand Adjustment.

 β is an adjustment to the Standard Tariff Bill. Company will offer Basic RTP Service with β equal to zero and may offer Premium RTP Service with β equal to 0.05

FILED Missouri Public Service Commission ER-2016-0156; YE-2017-0068 February 22, 2017

Issued: November 8, 2016

Issued by: Darrin R. Ives, Vice President

Effective: December 22, 2010 1200 Main, Kansas City, MO 64105

KCP&L GREATER MISSOURI OPERATIONS COMPANY

:4	P.S.C. MO. No.	1	6 <u>th</u>	Revised Sheet No	74
Canceling	P.S.C. MO. No.	1	5 th	Revised Sheet No	74
				For Territory Serve	d as MPS
	F	,	TTP) PROGRAM (FROZ ECTRIC	ZEN)	

MONTHLY RATE (continued)

Incremental Energy Charge

= $\Sigma_h P_h^{RTP} * (Actual Load_h - CBL_h)$

 Σ_h indicates a summation across all hours in the billing month. Actual Load_h is the customer's actual energy use in the hour (kWh).

CBL_h is the baseline hourly energy use. (See below.)

 P_h^{RTP} , the real-time price, is calculated as: $P_h^{RTP} = \alpha * MC_h + (1 - \alpha) * P_h^{STD}$

MC_h is the day-ahead forecast of hourly short-run marginal cost of providing energy to Missouri retail customers, including provisions for line losses. Marginal costs include the marginal cost of real power and operating reserves and a proxy for the marginal cost of transmission. (See below for a description of this proxy.)

P_h std is the hourly effective energy charge of the customer's Standard Tariff Bill, calculated from the applicable standard (non-RTP) price schedule. It is the change in the Standard Tariff Bill due to a change in usage and includes both energy and demand charges.

 α is the weight of marginal cost in defining retail price, with value of 0.8 for regular RTP service and 0.95 for RTP Premium service.

Marginal cost of transmission: for service during non-holiday, weekday hours of 3 PM through 7 PM during the months of June through August a transmission congestion charge of \$0.04770 per kWh will be applied for primary voltage level, and \$0.04900 per kWh will be applied for secondary voltage level. (This charge applies only for consumption above the CBL.) For customer service at other voltage levels an adjustment for energy loss rate differences will be applied. Since an Independent System Operator (ISO) may come into existence with jurisdiction over Company's service territory, this tariff component will be subject to revision that comes into force at the effective date of ISO service initiation.

RTP Service Charge =

\$296.57 per month for customers whose customer baseline load (CBL) peak demand exceeds five hundred (500) kW for three (3) consecutive months.

\$336.86 per month for all other customers.

Reactive Demand Adjustment is the adjustment found in the tariff that served the RTP customer prior to joining RTP. The price of the reactive demand is the current price under that tariff.

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KCP&L GREATER MISSOURI OPERATIONS COMPANY

P.S.C. MO. No1	1 <u>st</u>	Revised Sheet No	75				
Canceling P.S.C. MO. No1	8	Original Sheet No	_ 75				
	For Territory S	erved by Aquila Network	s – MPS				
REAL-TIME PRICE (RTP) PROGRAM (FROZEN)							
EL	.ECTRIC						

CUSTOMER BASELINE LOAD

The customer baseline load (CBL) represents the electricity consumption pattern typical of the RTP customer's operations were they to remain on the standard tariff. The CBL is specific to each individual customer and includes hourly load plus billing aggregates such as peak demand necessary to calculate the base bill under the customer's standard tariff. The CBL is determined in advance of the customer's taking RTP service and is part of the customer's service agreement.

The CBL will be based, whenever possible, on existing load information. Company reserves the right to adjust the CBL to allow for special circumstances. The CBL is used to ensure revenue neutrality on a customer-specific basis, and must be mutually agreed upon by both the customer and Company before service commences. The CBL will be in force for the duration of the customer's RTP service agreement.

TRANSMISSION AND DISTRIBUTION

Transmission and distribution charges are currently bundled into Standard Tariff Bill charges.

If Company is required to either increase the capacity or accelerate its plans for increasing capacity of the transmission or distribution facilities or other equipment necessary to accommodate a customer's increased load, then an additional facilities charge will be assessed.

REACTIVE DEMAND ADJUSTMENT

The Reactive Demand Adjustment will be billed, where applicable, in accordance with the customer's otherwise applicable, non-RTP, standard tariff. The customer's Standard Tariff Bill does not include any reactive demand charges.

PRICE DISPATCH AND CONFIRMATION

Company will transmit hourly prices for the following day by no later than 4:00 p.m. Company may provide forecasts of prices several days in advance; however, these prices may subsequently be revised or updated as conditions warrant. Company is not responsible for failure of Customer to receive and act upon the Price Quote. It is Customer's responsibility to inform Company by 5:00 p.m. of failure to receive the Price Quote for the following day. The actions taken by the Customer based on the Price Quote are the Customer's responsibility.

CURTAILABLE CUSTOMERS

Curtailable customers can participate in RTP service using one of three options:

Option 1: Conversion to Firm Power Status: The customer can terminate their curtailability contract, revert to the applicable standard tariff and join RTP.

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KCP&L GREATER MISSOURI OPERATIONS COMPANY

	P.S.C. MO. No.	11	6 <u>th</u>	Revised Sheet No	76
Canceling	P.S.C. MO. No.	1	<u>5th</u>	Revised Sheet No	76
				For Territory Serve	d as MPS
	R	`	RTP) PROGRAM (FROZ ECTRIC	ĽEN)	

CURTAILABLE CUSTOMERS (continued)

Option 2: Retain Curtailable Contract but Add a Buy-through Option: The customer retains their curtailable contract and obtains the privilege of "buying through" their firm power level at times of curtailment at the posted real-time price. The value of the curtailability discount will be reduced by fifty-percent (50%). At times of curtailment calls, the CBL of such a customer will be set to the lesser of the existing CBL value and the customer's firm power level. The customer will be able to exceed their firm power level during curtailment periods without penalty by purchasing incremental load at the real-time price and will be reimbursed at the same real-time price for reductions below the CBL.

Option 3: Retain Curtailable Contract: The Curtailment provisions of the rider will continue to apply as stated in the rider. The marginal cost of real power and operating reserves and the proxy for the marginal cost of transmission included in the hourly real-time price will not be applied to the interruptible portion of the Customer's Baseline Load. At times of curtailment calls, the CBL of such a customer will be set to the lesser of the existing CBL value and the customer's firm power level.

PRICE QUOTES FOR FIXED QUANTITIES

To further manage risks, customers will have the option to contract with Company for short-term power transactions at a price for pre-specified departures from the customer's previously established CBL. The duration of such contracts is not to exceed six months or be shorter than one (1) week. Company and Customer will mutually agree on the pricing structure and quantities to be used for the Price Quote, including but not limited to, hourly prices, prices by time period or seasons, price caps and floors, collars, etc.

Customer may contract through Company representative for quotes for fixed power levels at pre-specified fixed quantities. Company will solicit bids for power from neighboring suppliers that meet customer's schedule, quantities, and pricing structure. Upon agreement by Customer a transaction fee of \$223.33 per contract will be applied to recover costs to initiate, administer, and bill for hedging services.

All power is delivered and titled to Company and may be directed to meet system emergencies should such a need arise. Reasonable advance notice will be made to Customer and a corresponding credit will be applied to customer's bill in the event of such occurrences.

BILL AGGREGATION SERVICE

Customers will have the choice to aggregate the bills of multiple accounts under the RTP Program for the purposes of the application of the Incremental Energy Charge. Eligible customers will be limited to customers who become active participants in the RTP program who are legally or financially related to one another. The calculation of the aggregated Base Bill will be based on the application of the CBL on a non-aggregated basis for each individual account.

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P.S.C. MO. No. _____1 _____ Revised Sheet No. _____77 ____ Canceling P.S.C. MO. No. _____1 _____ Original Sheet No. _____77 ____ For Territory Served by Aquila Networks – MPS

DEAL TIME DDICE (DTD) DDOCDAM (CDOZEN)	
REAL-TIME PRICE (RTP) PROGRAM (FROZEN)	
ELECTRIC	

DURATION OF SERVICE AGREEMENT

Each RTP service agreement will be effective for a minimum of one year unless termination is agreed to by both parties.

SERVICE AGREEMENT TERMINATION

Written notice of sixty days in advance must be provided by the customer for termination of the service agreement. Once terminated, readmission will not be allowed for a period of one year. The CBL may be reassessed prior to readmission.

MEEIA TRUE-UP, PRUDENCE REVIEW, AND MEEIA & PRE-MEEIA OPT-OUT PROVISIONS See Company Rules and Regulations (Sheet Nos. R-63.01.1 and R-63.01.2)

ADJUSTMENTS AND SURCHARGES

The rates hereunder are subject to adjustment as provided in the following schedules:

- Fuel Adjustment Clause (Schedule FAC)
- Renewable Energy Standard Rate Recovery Mechanism (RESRAM)
- Demand-Side Program Investment Mechanism Rider (DSIM)
- Tax and License Rider

REGULATIONS

Subject to Rules and Regulations filed with the State Regulatory Commission

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P.S.C. MO. No. 1 Provided Sheet No. 78 Canceling P.S.C. MO. No. 1 Provided Sheet No. 78 For Missouri Retail Service Area ELECTRIC

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KCPL GMO Case Name: 2018 GMO Rate Case

Case Number: ER-2018-0146

Response to Lumley Carl Interrogatories - Dogwood_20180314 Date of Response: 4/4/2018

Question:1

- 1. In her direct testimony at p 23-24, witness Marisol Miller states that the company proposes to eliminate the frozen Real-Time Pricing tariffs "given the administratively burdensome nature to maintain these frozen tariffs." On schedule MEM-7 to her testimony, she states that there are no customers served by these frozen rates and that the "administrative effort to continue to offer this unused product and maintain the tariff is overly burdensome."
- A. Please confirm that Dogwood Energy is currently served pursuant to the frozen Real-Time Pricing tariffs, or state which tariffs presently govern service to Dogwood and provide copies thereof, and provide copies of all proposed replacement tariffs to govern service to Dogwood.
- B. Explain in detail the administrative burdens referenced by Ms. Miller and itemize the annual costs of maintaining the Real-Time Pricing Tariffs incurred by GMO since the tariffs became frozen.
- C. Provide copies of any communications sent to Dogwood informing it of the proposal to cancel the Real-Time Pricing Tariff and/or to change the terms of service to the Dogwood generation plant.

Response:

- A) Dogwood is currently on the frozen Real-Time Pricing tariff. There are no proposed replacement tariffs for Real Time Pricing. However, given Dogwood's usage, they would likely fall under the GMO LPS tariff.
- B) Real Time Pricing bills are manually calculated. Manual bills require multiple resources that provide various data components across multiple departments which are all collected by Billing that ultimately calculates the manual billing. Generally, manual bills are more prone to billing errors and issues given the various pieces and parts. The Company is interested in minimizing manual bills as much as possible, particularly for tariffs like these where minimal participation exists.

Detailed steps and groups involved when creating a monthly bill for Dogwood Energy are as follows:

- 1. Measurement Technology provides the interval data on 3 meters takes approx. 30 minutes to pull this information each month and save information in our reports depository
- 2. Billing Services takes kwh 15-minute interval data and summarizes into hourly data for each of the 3 meters. (1 tab per meter) 30 minutes
- 3. Billing Services takes kvar 15-minute interval data and summarizes into hourly data for each of the 3 meters. (1 tab per meter) 30 minutes
- 4. Billing Services takes hourly kwh interval data and enters this information into each meter tab for the 3 meters. 30 minutes
- 5. Billing Services takes hourly kvar interval data and enters this information into each meter tab for the 3 meters. 30 minutes
- 6. Updates formulas to combine all three kwh and kvar interval channels which calculates total hourly kwh usage, kw peak demands and kvar demand 30 minutes
- 7. Generation Sales provides wholesale hourly pricing at point of service. 1 hr
- 8. Billing Services receives hourly pricing from Generation Sales group and enters into manual bill spreadsheet marginal costs tab 30 minutes
- 9. Billing Services updates formulas to capture hourly wholesale costs plus margins costs and usage summary for entire month 15 minutes
- 10. Billing Services updates formulas to capture energy charge determination per hour 15 minutes
- 11. Billing Services updates formulas to capture transfer price determination per hour 15 minutes
- 12. Billing Services updates formulas to shipper services price determination per hour 15 minutes
- 13. Billing Services updates formulas for billing determination and summarized for the month 15 minutes
- 14. Billing Services sends email to Business Analyst to enter both energy and transmission costs into bill factor in CIS 15 minutes
- 15. Business Analysts enters information into CIS to bill usage and transmission fees 15 minutes
- 16. Billing Services Clerk verifies bill factors for accuracy 15 minutes
- 17. Billing Services creates monthly bill in CIS, review billing components for accuracy and generates bill 15 minutes

Please Note: The above does not include time for data/meter issues that add to bill research and calculation time.

C) No communications were sent to Dogwood prior to the filing of the GMO rate case.

Information provided by: Marisol Miller, Regulatory Affairs

Attachments:

Q1-GMO Large Power Service Proposed Tariff.pdf

Q1_Verification.pdf

KCPL GMO Case Name: 2018 GMO Rate Case

Case Number: ER-2018-0146

Response to Lumley Carl Interrogatories - Dogwood_20180409 Date of Response: 5/1/2018

Question: Dogwood-2

Referring to your response to Dogwood Data Request No. 1.B and the RTP billing process described therein: A. describe in the same level of detail the process involved in creating bills under the GMO LPS tariff; B. explain the differences between the two processes; C. identify the approximate amount of employee time required for each step of each of the two processes for a typical month; and D. itemize the costs involved for each step in each of the two processes on a monthly or annual basis.

Response:

- A) If a customer was billed on the LPS tariff, the bill would be created programmatically through a batch billing process. No manual involvement would be needed.
- B) The primary difference would be the administrative time savings outlined in data request Dogwood_2018314-1, since the LPS billing process requires no manual intervention.
- C) The manual bill process was outlined in data request Dogwood_2018314-1. The automated billing process requires no manual intervention.
- D) The manual costs associated with the manual billing will vary depending on which clerk or representative from Measurement Technology participates in the manual billing process and the actual duration of each administrative step outlined in Dogwood_2018314-1, but primarily will be Salary/Compensation expense for the time spent on gathering the manual bill data inputs. We also contract with Olameter to provide the interface with the customer on pricing, as well as take the meter read data from the customer and the CBL and compute the difference RTP pricing. The costs associated with this Olameter service is approximately \$65k per year.

The above does not include fixing billing errors that are more likely for bills that are manually calculated such as these and associated costs.

Information provided by Paul Myers, Manager of Billing Services

Attachment: QDogwood-2_Verification.pdf