Exhibit No.
Issue: Rate Design – RTP Tariff
Witness: Robert Janssen
Sponsoring Party: Dogwood Energy, LLC
Type of Exhibit: Rebuttal Testimony
Case No. ER-2018-0146

BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION

In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority To Implement a General Rate Increase for Electric Service	))))	File No. ER-2018-0146

REBUTTAL TESTIMONY – RATE DESIGN

OF ROBERT JANSSEN ON BEHALF OF

DOGWOOD ENERGY, LLC

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August 7, 2018

PUBLIC

Rebuttal Testimony of Robert Janssen
on Behalf of Dogwood Energy, LLC
ER-2018-0146
August 7, 2018

DISTRICT OF COLUMBIA) SS.

BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION

In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority To Implement a General Rate Increase for Electric Service	))))	File No. ER-2018-0146

AFFIDAVIT OF ROBERT JANSSEN

COMES NOW Robert Janssen, of lawful age, sound of mind and being first duly sworn, deposes and states:

1. My name is Robert Janssen; I am Vice President of Dogwood Energy, LLC.

2. Attached hereto and made a part hereof for all purposes is my Rebuttal Testimony in the above-referenced case.

3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge, information and belief.

Robert Janssen

SUBSCRIBED AND SWORN to before me, a Notary Public, this 6th day of August, 2018.

Notary Public

My Commission Expires:
(SEAL)

LYNN L. SHEELER
NOTARY PUBLIC STATE OF MARYLAND
My Commission Expires June 27, 2020

REBUTTAL TESTIMONY OF ROBERT JANSSEN ON BEHALF OF DOGWOOD ENERGY, LLC

I. QUALIFICATIONS

Q. Please state your name, business address, and title.

A. My name is Robert Janssen. My business address is 6700 Alexander Bell Drive, Suite 360, Columbia, MD 21046. I am the Vice President and Chief Commercial Officer of Dogwood Energy, LLC ("Dogwood Energy").

Q. On whose behalf are you testifying?

A. I am testifying on behalf of Dogwood Energy, which is a limited liability company organized and existing under the laws of the State of Delaware and authorized to conduct business in the State of Missouri.

Q. Please describe your educational background and professional experience.

A. I have attached a copy of my resume as **Schedule RJ-1**, which outlines my relevant background and experience. In brief, my experience includes: (a) development and management of generating facilities, (b) analysis of electricity markets and transmission systems, (c) analysis of, and development of testimony regarding, utility rates and other electric industry issues before federal and state regulatory commissions, (d) due diligence analysis of power purchase agreements and fuel contracts, (e) financial analysis of utility and independent power

producer assets such as power plants and water supply systems, and (f) monitoring and reviewing the results of power supply Requests for Proposals.

Q. What are your responsibilities?

A. In my current position, I am responsible for the commercial, regulatory and legislative aspects of Dogwood Energy's ownership interest in the Dogwood facility. As Dogwood Energy's primary representative on the co-owners' Management Committee and a member of the Executive Committee, I also provide direction to Dogwood Power Management on the operations and maintenance of the Dogwood facility, along with the representatives of the other co-owners.

Q. Have you testified in other regulatory proceedings regarding electric utility rates and electric industry issues?

A. Yes, I have submitted written testimony in other proceedings before this Commission as well as proceedings before the Federal Energy Regulatory Commission, the Louisiana Public Service Commission, the Oklahoma Corporation Commission, the Public Service Commission of Wisconsin, the City Council of New Orleans, and the Public Utility Commission of Texas.

II. PURPOSE AND SUMMARY OF TESTIMONY

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to respond to certain aspects of the direct

testimony submitted by KCP&L Greater Missouri Operations ("GMO") regarding its tariffs and rates applicable to the Dogwood generation facility and to describe Dogwood Energy's interests in this proceeding as a co-owner of the Dogwood facility (as described below), which is both a retail power customer of GMO and wholesale power supplier to, and competitor of, GMO.

Q. Please summarize your testimony.

A. Dogwood's payments to GMO for retail electricity service are a significant portion of its fixed operating costs. GMO proposes to cancel its Real Time Pricing ("RTP") tariff, in part based on the erroneous assertion in its testimony that there are no customers being served pursuant to this frozen tariff. GMO's suggested alternative tariff rate would more than double Dogwood's costs for electricity from GMO. Due to the nature of Dogwood's operations, which is the production of electricity, its use of energy from GMO for station power service is not coincident with the peak loads of GMO's system. As a result, Dogwood's operations are consistent with the intended purposes of the RFP tariff, and do not contribute significantly to GMO's costs of service. Non-utility generating facilities similar to Dogwood have access to real time pricing for station power use in other parts of the country. An unjustified increase in Dogwood's costs for station power service from GMO would unreasonably subject the Dogwood facility to a competitive disadvantage and would result in unjust and unreasonable rate increases to the customers of the municipal utility's co-owners of the Dogwood facility in Missouri and Kansas. As result, at the very least, GMO's

proposal to cancel the RTP tariff should be deferred so that the parties can work on alternative solutions.

Q. Does Dogwood Energy present testimony in addition to yours?

A. Yes. Mr. Greg Meyer of Brubaker and Associates is also submitting testimony that elaborates on many of the concepts discussed herein.

III. DOGWOOD ENERGY AND THE DOGWOOD ENERGY FACILITY

Q. What is the relationship between Dogwood Energy and the Dogwood Energy Facility?

A. Dogwood Energy owns a minority share of a 650 MW natural gas-fired, combined cycle generating facility known as the Dogwood Energy Facility (and commonly referred to as "Dogwood", including herein) located in GMO's Missouri service territory, in Pleasant Hill, Missouri.[1] Dogwood Power Management, a subsidiary of Dogwood Energy, operates the Dogwood facility on behalf of the co-owners of the facility as their agent. Dogwood Energy currently owns the largest individual share of the facility at 34%.

Q. Who are the other owners of the Dogwood facility?

A. Municipal utilities and power authorities serving retail customers in Missouri and Kansas own 66% of the Dogwood facility. In Missouri, the City of Independence

[1] This facility was formerly owned by Calpine and known as the Aries facility. Dogwood Energy acquired it at the end of 2006.

and the thirty-five cities that are members of the Missouri Public Energy Pool ("MoPEP") are owners of Dogwood with a 29% ownership share in total. In Kansas, the Unified Government of Wyandotte County and Kansas City, twenty-four cities that are members of the Kansas Power Pool, and five cities that are members of the Kansas Municipal Energy Agency, own 37% of Dogwood in total.

IV. DOGWOOD'S OPERATIONS AND USE OF STATION POWER

Q. What is Dogwood Energy's interest in this proceeding?

A. First, the Dogwood facility is a retail electricity customer of GMO. When Dogwood is offline and not producing electricity, it takes electric service from GMO for station power service purposes, which is electric energy used for operating the equipment necessary for the process of generating electricity, primarily pumps and motors, and to meet the electrical requirements of administrative buildings at the site.

Second, Dogwood is both a potential power supplier to, and a competitor of, GMO in the wholesale power market. Dogwood Energy wants to ensure that it and the other co-owners of the Dogwood facility have a fair and competitive opportunity to supply power to GMO and others through the facility.

Q. Please describe how Dogwood takes station power service from GMO.

A. Dogwood takes station power service from GMO across its three 161kV interconnections with GMO's transmission facilities at the Pleasant Hill substation. Dogwood currently takes service under GMO's Large Power Service ("LPS") – Real Time Pricing ("RTP") tariff (MO737). Dogwood's payments for retail electrical service from GMO are a significant component of its annual fixed operating costs.

Q. Please describe how Dogwood operates in the market.

A. GMO, as a member of the Southwest Power Pool ("SPP") Regional Transmission Organization ("RTO"), has placed its transmission facilities under SPP's Open Access Transmission Tariff ("OATT") and transferred functional control of such facilities over to SPP. Like other generating facilities in SPP, Dogwood is deployed by SPP for Day Ahead commitment and Real-Time dispatch for both energy and ancillary services, based on the prices for such services offered by Dogwood. Thus, Dogwood competes with other generation resources in SPP, including GMO's, to supply energy economically to wholesale consumers within SPP. The three 161kV transmission interconnections mentioned above are also the points (together called Dogwood's market "node") at which SPP prices the electrical energy generated by Dogwood for transactions in SPP's Day-Ahead and Real-Time energy and ancillary services markets.

Electricity prices in SPP's energy and ancillary services markets are set by supply and demand and are influenced by constraints in the transmission system as SPP

attempts to balance the demand (load) with the available supply (generating resources). The calculations required to run the SPP market are complex. However, some general rules of thumb are applicable to most of the results of the market system. As a highly efficient, natural gas-fired, combined-cycle generating facility, Dogwood is typically deployed by SPP on a day-to-day basis to operate when the regional and/or local electrical loads in the SPP system cannot be economically met by the nuclear, coal-fired, and wind resources in the system. Dogwood can also cycle down or offline overnight and then return to full output quickly the next day, which makes it valuable to the SPP system in following daily changes in both load and the output of wind resources in the region.

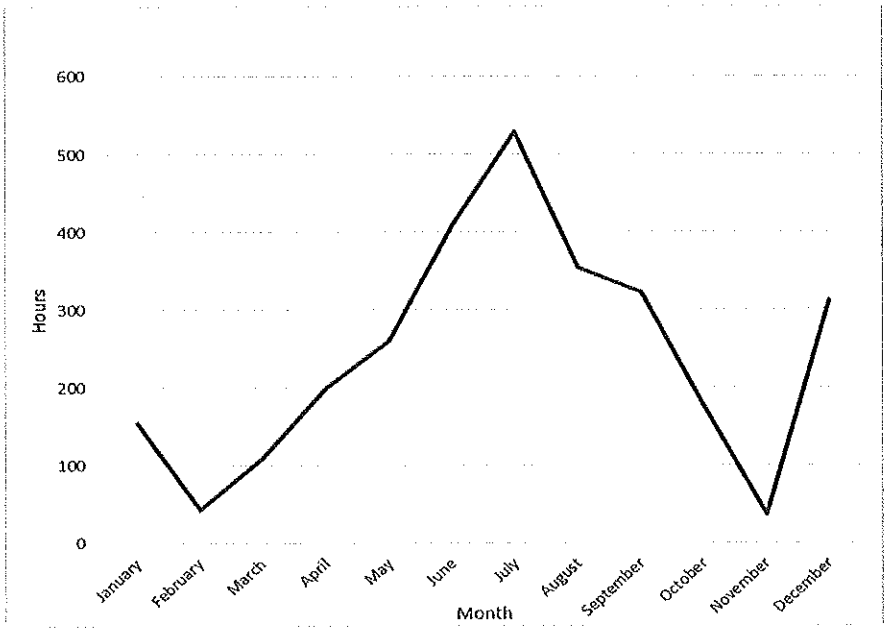
Because the electrical load of the SPP system, including the load of the individual utilities (like GMO) in it, is summer peaking, SPP market prices are typically highest during summer months. As a result, Dogwood typically operates the most during the summer peak season, producing electricity and ancillary services that the co-owners of the Facility sell to the SPP market at Dogwood's node. During the spring and fall months, loads are lower and wind resource output is higher than during the summer, and SPP market prices are typically lower. At these times, Dogwood may operate less and cycle offline more often, depending in part on the level of scheduled outages of other generating facilities in SPP. Dogwood also typically takes its own brief, scheduled outages in the spring and fall months

to ensure that it is ready to operate reliably and efficiently during the summer and winter months. During the winter, SPP's system load peaks at a lower level of roughly 85% of its summer season peak. As a result, Dogwood is typically called to operate less often during the winter months than during the summer period, though it does typically operate when the weather gets cold enough that load is increasing toward its winter peak, wind resource generation drops off, and/or the outputs of other generating facilities are reduced due to cold weather-related operational issues.

To visually depict the typical operations that I describe above, the following chart shows Dogwood's monthly hours of operation during 2017.

Chart 1

DOGWOOD FACILITY'S HOURS OF OPERATION – 2017



Source: EPA hourly emissions data

Q. Does Dogwood compete with GMO's generating facilities as a source of wholesale power?

A. Yes. GMO sells energy at the SPP-established market prices at each of its generating facilities' interconnection points (nodes). GMO also buys electricity from the SPP market at its load-receipt points on its transmission system, averaged up to a Settlement Area for the entire GMO system. Other than self-commitments for out of market conditions or services, GMO should also be following SPP's deployments for committing and dispatching its resources based on each GMO facility's offered prices in the energy market. To the extent SPP

commits and dispatches Dogwood rather than GMO's units, it should be because deploying Dogwood is more cost effective than deploying those GMO units, which should then be reflected in lower prices at which GMO's load purchases energy from the SPP market.

Q. How do Dogwood's operations relate to GMO's peak load?

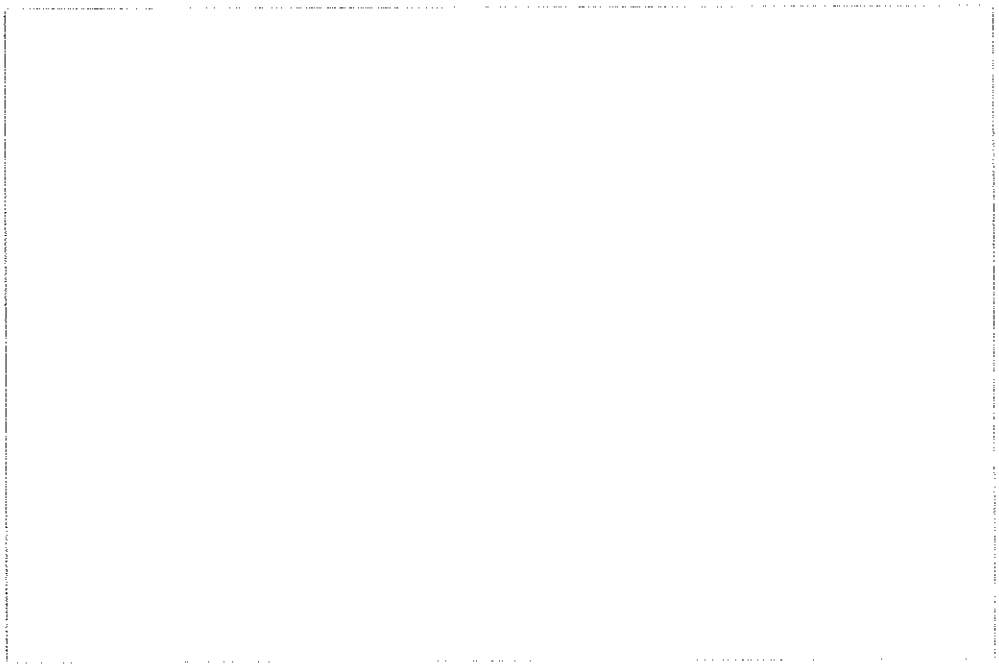
A. Dogwood's operations are price-responsive, and price correlates to the level of loads both locally and regionally in SPP. Dogwood has station power needs when it is not actually producing power. This station power supports Dogwood's ability to produce power and provide reliable service. These station power needs increase during the start-up process as pumps and motors activate and Dogwood gets ready to produce power. Once Dogwood is operating and generating power, it no longer needs service from GMO because the energy it produces exceeds its own station power needs and it dispatches to the transmission grid on a net production basis. Dogwood's operations must commence in anticipation of load, so it typically does not consume power from GMO during the summer days when GMO's own load is hitting its monthly peaks. Hence, Dogwood's station power service use under the RTP tariff is non-coincident with GMO's peak loads and does not contribute significantly to GMO's fixed/demand costs.

The following chart shows how Dogwood's use of energy from GMO for station power service drops off during the summer in terms of monthly MWh consumption.

Chart 2

DOGWOOD FACILITY'S STATION POWER ENERGY USAGE - 2017

CONFIDENTIAL CHART



Source: Confidential GMO Data Response Dogwood-3S

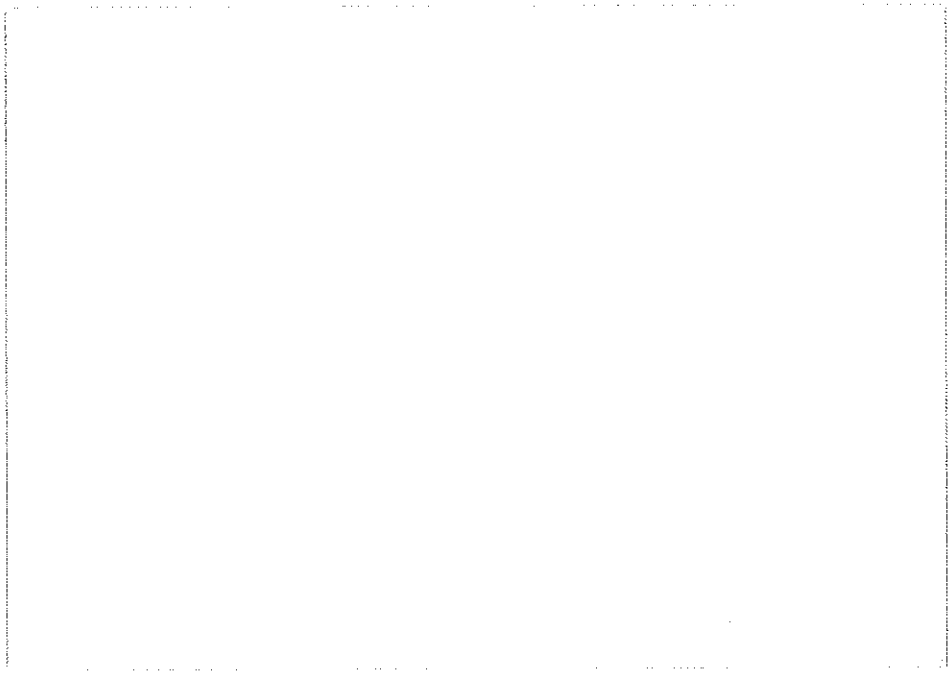
The chart above shows that during the peak summer months, Dogwood averages around **_____** MWh per hour of station power consumption for the entire month. During the winter months, Dogwood's usage increases to around **__** **_____** MWh for the entire month. In comparison, Dogwood's average monthly peak demand averaged slightly more than **_____** MW for the year based on GMO's billing data for the facility, so most of the time, Dogwood's station power service needs are much less than its peak requirements just prior to starting-up the generating units for operation.

An analysis showing how often Dogwood's station power service use is within a particular range also shows that most of the time, Dogwood is consuming little or no station power in comparison to occasionally consuming more during start-up and then being billed for demand charges on those higher peak usage hours.

Chart 3

DOGWOOD FACILITY'S STATION POWER ENERGY USAGE
– GROUPED BY RANGES – 2017

CONFIDENTIAL CHART



Source: Confidential GMO Data Response Dogwood-3S

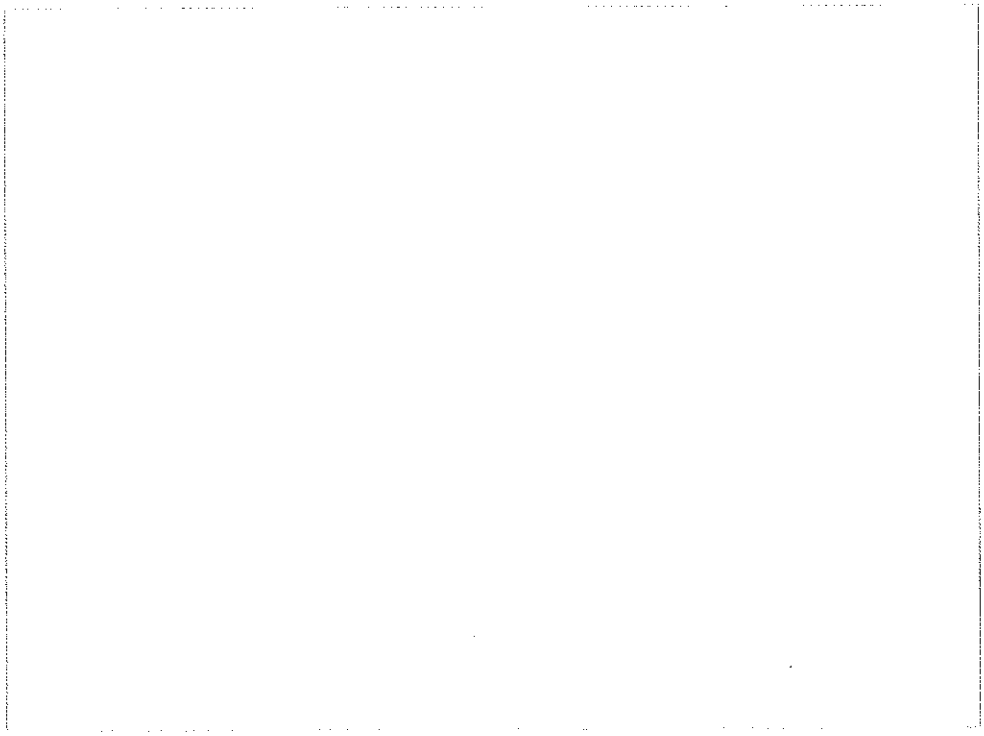
The following chart shows Dogwood's station power service usage monthly peaks

and the energy used at the date and time of each of GMO's monthly load peaks (coincident peaks).

Chart 4

DOGWOOD FACILITY'S STATION POWER ENERGY PEAKS
AND COINCIDENT PEAKS WITH THE GMO SYSTEM – 2017

CONFIDENTIAL CHART



Source: Confidential GMO Data Response Dogwood-3S and KCPL 2017 FERC Form 1

The difference between Dogwood's coincident peaks and its stand-alone monthly peak usage shown above demonstrates the point that Dogwood is typically producing power and not consuming it from GMO for station power service at the

time GMO's load is peaking, particularly during the summer months. In terms of averages, Dogwood's monthly average peak in 2017 was **__** MW, and its 12-CP average was **__** MW, which is only 8.0% of the monthly average peak. Dogwood's 4-CP average was **__** MW.

V. REAL TIME POWER TARIFF

Q. What are GMO's current terms of service to Dogwood.

A. Under the RTP tariff rate, Dogwood (and thus its owners), pays GMO for energy at the marginal cost of GMO's own generating units, which often roughly approximates SPP's Day Ahead energy market pricing for the GMO Settlement Area in the SPP Day Ahead market. In addition, Dogwood pays a transmission system loss charge on the energy, plus a mark-up on the marginal energy price. Dogwood also pays a demand charge on both its monthly peak station power energy usage and reactive power peak usage, and a customer charge, in addition to various other tariff fees and taxes. In total, before taxes, Dogwood pays GMO roughly double the cost of the energy it purchases from GMO under the RTP Tariff, which should be more than adequate compensation for any reasonable allocation of GMO's costs to Dogwood based on commonly accepted cost allocation principles, such as a 4-CP or 12-CP analysis. It is also far more than many similarly-situated generating facilities are paying for station power service in other states and regions near Dogwood, based on information I will provide

later in my testimony.

Q. Did GMO provide the owners of Dogwood any advance notice of the proposal to cancel the tariff under which Dogwood obtains service?

A. No. As noted above, in its testimony GMO asserted that there were no customers. While it has subsequently admitted that was incorrect, it has not revised that testimony. Initially, there were limited discussions between GMO and Dogwood Energy about this situation, as we learned about it during this rate case. More recently, GMO and Dogwood Energy have begun to engage in constructive discussions that I hope will result in some reasonable compromise of our differences in this case regarding the continuation of the RTP tariff rate.

Q. Does Dogwood Energy oppose the cancellation of the RTP tariff?

A. Yes. Real time pricing has generally worked well to meet the Dogwood facility's mostly off-peak station power service needs, subject to some recent billing issues getting resolved. Real-time pricing works well in other jurisdictions and is the norm for station power service at non-utility generating stations in many parts of the US within a regional energy market structure. Further, in this proceeding, GMO and other parties are emphasizing in testimony the value and necessity of time of use ("TOU") pricing. Eliminating the RTP tariff would be inconsistent with an overall focus on TOU rates. Rather than cancel the RTP tariff, GMO should unfreeze and promote it.

Moreover, as Mr. Meyer testifies, GMO's proposed alternative to the RTP tariff

would more than double Dogwood's electricity costs. Such a result does not seem just and reasonable. I discuss this proposed alternative further below.

Q. Please explain the use of Real Time Pricing for station power service in other parts of the US.

A. Mr. Meyer addresses in his rebuttal testimony the prevalence of RTP rates in other states. To the extent that station power service is considered a retail use of electricity by a state, a non-utility generating facility may take service under such retail tariff rates. In addition, some RTOs have a specific tariff schedule (such as MISO's Schedule 20), that provide rules for generating facilities that purchase their station power service needs at wholesale using real time pricing. MISO Schedule 20 states:

> … for each Hour when a Facility has negative net output and has received Station Power from the Transmission System, Generation Owner will pay the Hourly Real-Time Ex Post LMP at its Bus for that Hour for all of the Energy consumed in accordance with Applicable Laws and Regulations. (See MISO OATT, Schedule 20 – Treatment of Station Power, Section II, 2)

The phrase "in accordance with Applicable Laws and Regulations" was intended by MISO to prevent conflict between its Schedule 20 provisions and otherwise applicable state law regarding whether station power is a retail or wholesale consumption of electricity, as referenced by the Federal Energy Regulatory Commission ("FERC") in its order dated May 14, 2012 in Docket No. ER12-1270 accepting such amendments to Schedule 20. MISO's OATT is applicable to all or part of fifteen (15) states, including eastern Missouri.

PJM's OATT contains nearly identical language for supply of station power service under Attachment K – Appendix, Section 1 – Market Operations, subsection 1.7.10(d)(i), stating:

> … for each hour when a Market Seller has negative net output and has received Station Power from the Transmission System, it will pay the LMP at its bus for that hour for all of the energy consumed.

PJM's OATT is applicable to part or all of thirteen states and the District of Columbia.

Outside of the regions covered by MISO and PJM, states like Kansas specifically provide for station power service to be a wholesale rather than retail use of electricity. This enables non-utility generating facilities to purchase their station power service needs at the hourly price of energy from the markets, which would be SPP's markets in the case of Kansas, or a third-party supplier. Kansas statutes specifically state:

> [S]tation power shall not be deemed to be retail electric service…,

where station power is defined as,

> [E]lectric energy used for operating equipment necessary for the process of generating electricity at any generating plant… (See KSA 66-1,173(b) and 66-1,170(i).)

These rules, particularly those in the FERC-jurisdictional OATTs of PJM and

MISO, ensure that non-utility generating facilities are treated similarly and in a non-discriminatory manner in comparison to the way utility-owned generating facilities obtain their station power service from their own fleet of generators. It also recognizes the fact that, unlike other large industrial uses of electricity, generation station power service is for the purpose of making electricity available to the grid. By its nature, generation station power use is price-responsive because the use goes away (i.e. the station starts to serve itself) when electricity prices rise high enough to commit and dispatch the generating facility.

Q. Has GMO proposed any alternative to the RTP tariff rate outside of its testimony?

A. Yes, it has suggested a Large Power Service (LPS) arrangement.

Q. Would LPS be appropriate for Dogwood?

A. No. The unmodified LPS rate does not provide an appropriate rate structure. The underlying costs would not be allocated in a manner consistent with cost causation, because Dogwood's limited needs for power are typically not coincident with GMO's monthly peaks. These needs certainly are not coincident with GMO's peak loads during the four summer months under a 4-CP cost allocation analysis of GMO's fixed costs of service to Dogwood. Hence, GMO does not need to have additional capacity in place to serve Dogwood's station power needs, which are off-peak. The resulting unjustified increase in Dogwood's costs for station power service from GMO would unreasonably subject Dogwood to a competitive disadvantage.

Q. What does Dogwood Energy propose instead of cancelling the RTP tariff?

A. At the very least, GMO's proposal to cancel the RTP tariff should be deferred so that the parties can work on alternative solutions. As mentioned above, more constructive discussions with GMO have started recently. There may be alternative arrangements that the parties could agree upon, but it may take some time to fully develop such options.

VI. SUMMARY AND CONCLUSIONS

Q. Please summarize your testimony and conclusions.

A. Dogwood's payments to GMO for retail electricity service are a significant portion of its fixed operating costs. GMO proposes to cancel its RTP tariff, in part based on the erroneous assertion in its testimony that there are no customers being served pursuant to this frozen tariff. GMO's suggested alternative tariff rate would more than double Dogwood's costs for electricity from GMO. Due to the nature of Dogwood's operations, which is the production of electricity, its use of energy from GMO for station power service is not coincident with the peak loads of GMO's system. As a result, Dogwood's operations are consistent with the intended purposes of the RFP tariff, and do not contribute significantly to GMO's costs of service. Non-utility generating facilities similar to Dogwood have access to real time pricing for station power use in other parts of the country. An unjustified increase in Dogwood's costs for station power service from GMO

would unreasonably subject the Dogwood facility to a competitive disadvantage and would result in unjust and unreasonable rate increases to the customers of the municipal utility's co-owners of the Dogwood facility in Missouri and Kansas. As result, at the very least, GMO's proposal to cancel the RTP tariff should be deferred so that the parties can work on alternative solutions.

Q. Do you hold the opinions you express in this testimony to a reasonable degree of certainty based on your experience regarding electrical power generation and transmission markets and facilities?

A. Yes.

Q. Does this conclude your rebuttal testimony?

A. Yes.

ROBERT J. JANSSEN

6700 Alexander Bell Drive, Suite 360 • Columbia, MD 21046 • (443) 542-5125 •
rob.janssen@kelsonenergy.com

SUMMARY OF QUALIFICATIONS

- Senior executive energy professional with a technical background and over twenty years of corporate and consulting experience in the electricity and natural gas industries, including power plant management, acquisition, development, and financial analysis; RTO/ISO electricity market analysis, participation, design and monitoring; utility rate analysis and development; and directing state and federal regulatory initiatives.

EXPERIENCE

Kelson Energy, Columbia, MD — October 2005 - Present

Senior Vice President, Kelson and Vice President and Chief Commercial Officer, Dogwood Energy	12/14 – Present
Senior Vice President, Kelson and President, Dogwood Energy	10/08 – 12/14
Vice President, Kelson and President, Redbud Energy	6/07 – 9/08
Vice President, Kelson and Vice President, Redbud Energy	2/07 – 6/07
Director, Kelson and Vice President, Redbud Energy	1/06 – 2/07
Director, Kelson	10/05 – 1/06

Primary Areas of responsibility include:

- Power plant management, operations and maintenance
- NERC reliability standards compliance
- State and Federal regulatory and legislative affairs
- RTO transmission and energy market participation

Southwest Power Pool Committee-level participation on behalf of Kelson Energy subsidiaries:

- Members Committee (Board of Directors), Member
- Strategic Planning Committee, Member
- Corporate Governance Committee, Member
- Markets and Operations Policy Committee, Member and Chair
- Holistic Integrated Tariff Team, Vice Chair
- SPP Integrated Marketplace Go-Live Team, Member
- Synergistic Planning Project Task Force, Member

Boston Pacific Company, Inc., Washington, DC — October 1997 – September 2005

Project Director	10/01 – 9/05
Project Manager	10/98 – 10/01
Senior Consultant	10/97 – 10/98

Consulting practice focusing on three primary areas:

- Power Plant Development, Acquisition and Sale Support
- Electricity Market Analysis, Design and Monitoring
- Expert Testimony and Litigation Support

UGI Utilities, Inc., Reading, PA — July 1994 – October 1997
Commercial Engineer II — 5/96 – 10/97
Industrial & Commercial Marketing Engineer I — 7/94 – 5/96

Served as a technical expert and program manager for the Industrial and Commercial marketing department. Directed department initiatives, including promotion of natural gas vehicles and natural gas-driven cooling.

EDUCATION

University of Pennsylvania: GPA 3.39 / 4.00 — 1990-1994
B.S. in Mechanical Engineering with a Minor in Economics

Johns Hopkins University: GPA 4.00 / 4.00 — 2000-2002
Finance and Accounting Graduate Level Classes:

- Financial Accounting
- Managerial Finance
- Corporate Financial Theory