BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of an Investigation of Missouri Jurisdictional Generator Self-Commitments into SPP and MISO Day-Ahead Energy Markets	)))	File No. EW-2019-0370

KANSAS CITY POWER & LIGHT COMPANY AND
KCP&L GREATER MISSOURI OPERATIONS COMPANY
RESPONSE TO COMMISSION QUESTIONS

COME NOW Kansas City Power & Light Company ("KCP&L") and KCP&L Greater Missouri Operations Company ("GMO") (collectively, the "Company"), and for their *Response to Commission Questions* ("Response") to the Missouri Public Service Commission ("Commission"), state as follows:

1. The Company's response to questions contained in the *Order Opening An Investigation of Missouri Jurisdictional Generator Self-Commitments and Self-Scheduling* issued June 5, 2019, is as follows:

(1) Whether the utility has full control, minority partial ownership interest in such facility or has a power purchase interest in the capacity of such a resource; and

(2) Nameplate capacity.

Response: The Company's responses to (1) and (2) are in the table below.

Unit	Name Plate Capacity	Ownership Interest
Cimarron	135	PPA
Crossroads	387.6	Full Control
Ensign	98.9	PPA
Gray County	112	PPA
Greenwood	284.8	Full Control
Hawthorn 5	594	Full Control
Hawthorn 6/9	301	Full Control
Hawthorn 7-8	164	Full Control
Iatan	1365.5	Full Control
Jeffrey	172.8	Minority Partial Ownership
Hydro	72	PPA
LaCygne	799.43	Full Control
Lake Road	278.1	Full Control
Nevada	21.6	Full Control
Northeast	491	Full Control
Osawatomie	102	Full Control

Osborn	200	PPA
Prairie Queen	200	PPA
Pratt	244	PPA
Ralph Green	88.9	Full Control
Rock Creek	300	PPA
Slate Creek	150	PPA
South Harper	387.6	Full Control
Spearville*	252.5	Full Control
Waverly Wind	199	PPA
West Gardner	408	Full Control
Wolf Creek	581	Minority Partial Ownership
Total Capacity	**8390.73**	

Retired Units		
Unit	**Name Plate Capacity**	**Ownership Interest**
Montrose	563	Full Control
Sibley	523.5	Full Control
	9477.23	

JOU Unit Total for KCPL Operated JOUs		
Iatan 1	726	70% KCP&L - 18% GMO
Iatan 2	999	54.71%KCP&L - 18% GMO
LaCygne 1	873	50% KCP&L
LaCygne 2	725.86	50% KCP&L

* KCP&L has full control of Spearville 1 and 2 and a PPA for Spearville 3

(3) Amount of net and gross energy generated.

Response: See attached *MPSC Gross-Net Generation_CONF.xlsx (Confidential)* for the Company's response to (3).

(4) Amount of energy bid into the day ahead market and the amount that cleared;

(5) Amount of energy self-committed, self-scheduled and market selected; and

(6) Regarding the amount of energy self-committed, the difference between production costs and corresponding prevailing market prices.

Response: See attached *MPSC Unit Data Summary_CONF.xlsb (Confidential)* for the Company's response to (4), (5), and (6).

2. The Company's response to questions contained in the *Order Directing Comments* issued June 24, 2019, is as follows:

a. Please describe in detail reasons or scenarios that a utility may self-commit instead of bidding into a given market.

Response: KCP&L has worked to increase the percentage of time its power plants are market-scheduled. KCP&L fossil units are only self-scheduled with the Southwest Power Pool ("SPP") Market for safety, reliability, economic and environmental compliance reasons.

Ensuring a plant is reliable and available to serve customers is one key factor. For example, cold weather can cause reliability issues in a steam-fired power plant due to water lines freezing, oil systems becoming too cold and even coal freezing. When facing environmental issues such as these, KCP&L may choose to self-commit a resource to protect that resource's equipment and thus ensuring its reliability.

KCP&L may choose to self-commit a resource to prevent a thermal cycle or protect equipment that may pose a risk to the reliability of the resource as well. SPP's market model isn't always able to consider risks to KCP&L customer's reliable power supply. If there are concerns about the effects of a thermal cycle on a resource or on a piece of equipment at that resource, KCP&L may choose to self-commit that resource. Managing the number of thermal cycles judicially will protect equipment thus reducing forced outages and unreliable starts due to the complexity of these large stations, all of which is a benefit to the retail customer.

KCP&L may also choose to self-commit a resource for market economic reasons. Those decisions are made looking at wind and load forecasts to see if we can expect the resource to be economical 'x' days into the future. The SPP Market model does not currently do a good job committing large, baseload units with long lead times, large startup costs and long minimum run times. For example, SPP's Day-Ahead Market will not commit a unit with a startup time greater than 24 hours. Because of these restrictions, the Company has historically seen a high percentage of self-commitments at its baseload resources. Also, since

SPP's tool only looks at the next day, there are times we might self-commit a unit that is already online knowing that over the next five total days we would be economic even though operations for the initial two days are at a financial loss; this results in lower overall costs to serve retail customers.

Another key factor related to the self-commitment of resources is compliance testing. KCP&L is required by various governing bodies to regularly test resources for reasons such as emissions performance. KCP&L may have no choice but to self-commit a resource during these testing periods to ensure the resource is online and available to satisfy testing requirements.

Lastly, KCP&L may sometimes self-commit a unit to vet repairs following an outage. If a resource performed a turbine overhaul they may want to check turbine vibration at both running speed and with load on the turbine. Many times, a contractor and specialty vibration equipment are on site so vetting that as soon as possible is ideal, rather than waiting for a potential market start and risk losing both the contractor and equipment to another job. Furthermore, this testing reduces the risk of being unreliable when needed for a market-commitment following a turbine overhaul because further tuning is needed the next time the unit start.

b. Please provide the economic impact of the aforementioned scenarios, or indicate that the information is not available.

Response: To provide the economic impact of a self-commit decision requires a wide area view model that can calculate the impacts of that self-commit decision on other generators, TCR's, load, LMP's. etc. in the SPP footprint. KCP&L does not have the ability to model those interdependencies. Further, the net impact to the retail customer cannot just be measured by looking at resources in isolation. SPP is the only group that can provide that

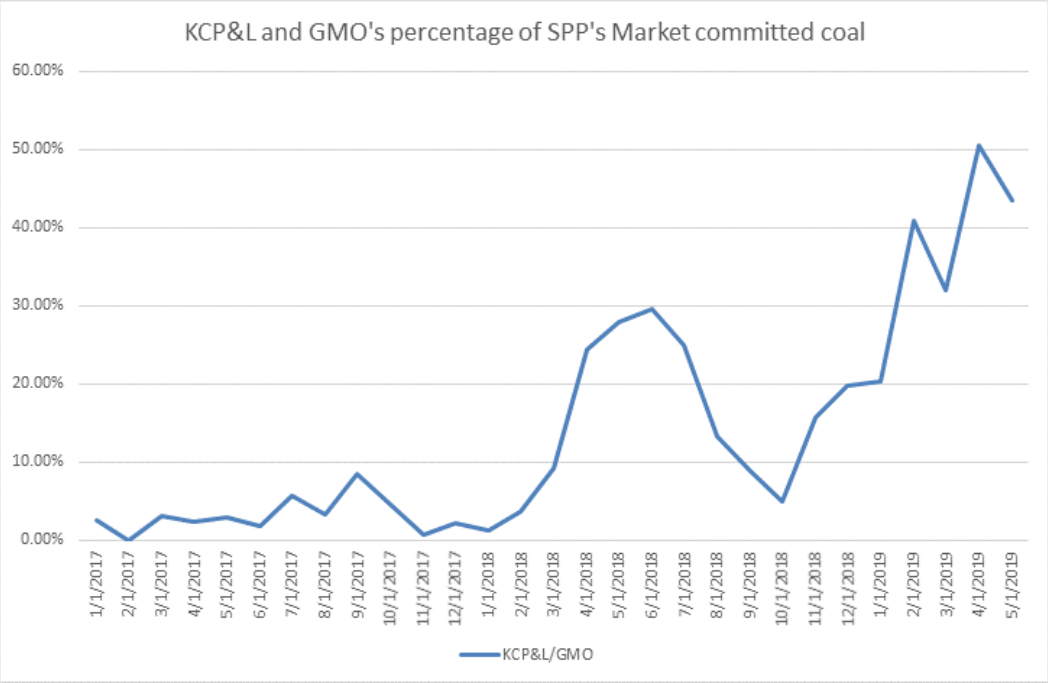
type of system wide impact analysis. For example, KCP&L could self-commit the same unit for the same test at the same time each year and end up with a different financial result each time based on system topology, weather, etc. at the times of the test.

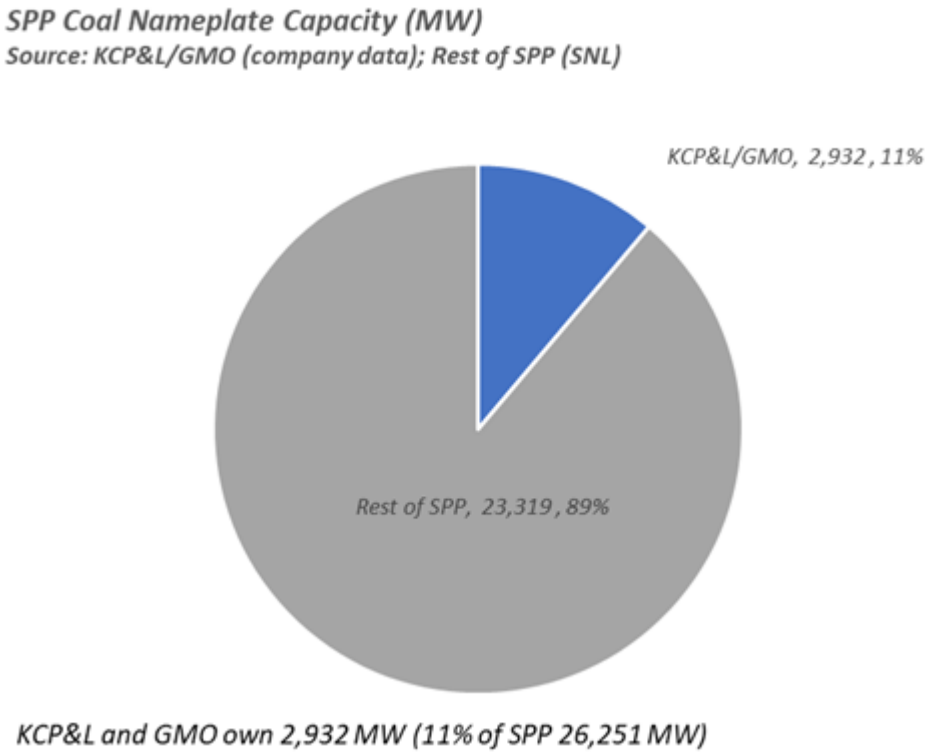
While KCP&L can't commit to providing that economic impact of self-commitments, the Company can show that its self-commit decisions have been financially prudent over time. The data provided for Question 6 includes production costs and prevailing market prices for energy that KCP&L had self-committed. **[redacted]**

3. In addition to the information specifically requested by the Commission the Company wishes to note that, one of the reasons we have self-committed units in the past is because there is currently not a process for 'economic' commitments multiple days in advance within the SPP market. The Market Monitor's 2016 State of the Market Report acknowledges this, and it shows it is something the entire market – not just KCP&L – realized and struggled with. The SPP Market Working Group (MWG) has identified the need for a multi-day commitment tool on a list of its major initiatives.

Since 2017, KCP&L has offered its coal generation to the Market 38% of the time in Market Status when available. In 2017 KCP&L offered coal units in Market Status 31% of the time. In 2018 that number rose to 41% and thus far in 2019 (through May 31st) KCP&L offered coal generation in Market Status 48% of the time the units are available.

Compared to generation actually produced in SPP, the graph below shows the percent of Market committed Coal Generation MWh for KCP&L/GMO as a percentage of the total amount of Market committed MWh of Coal generation in the SPP Footprint. This demonstrates that in April of 2019, half of the Market Committed Coal Generation in the SPP Footprint was provided by KCP&L/GMO Coal units running in a Market Commitment status. The trend of KCP&L/GMO's Market Committed Coal Generation is outpacing the SPP footprint as a whole. This point is made more evident when you consider that as of 2018 KCP&L and GMO combined to account for a mere 11% of total Coal Capacity within the SPP footprint, according to SNL. October and November of 2018 saw a large percentage of KCP&L/GMO coal generation unavailable, which helps explain that dip. For that time period, the units were unavailable 78% of the time in October and 72% of the time in November.





WHEREFORE, KCP&L and GMO request that the Commission take notice of their compliance with the condition cited above.

Respectfully submitted,

/s/ Roger W. Steiner

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CERTIFICATE OF SERVICE

I do hereby certify that a true and correct copy of the foregoing document has been emailed or mailed, postage prepaid, this 8th day of July 2019, to all counsel of record.

/s/ Roger W. Steiner

Attorney for Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company

ATTACHMENTS

MPSC Gross-Net Generation_CONF.xlsx
AND
MPSC Unit Data Summary_CONF.xlsb

CONTAIN CONFIDENTIAL INFORMATION
NOT AVAILBLE TO THE PUBLIC.

ORIGINALS FILED UNDER SEAL.