BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of the Resource Plan of Kansas City Power & Light Company Pursuant to 4 CSR 240-22)	File No. EO-2014-0256
In the Matter of the Resource Plan of KCP&L Greater Missouri Operations Company Pursuant to 4 CSR 240-22)	File No. EO 2014-0257

KANSAS CITY POWER & LIGHT COMPANY AND KCP&L GREATER MISSOURI OPERATIONS COMPANY'S RESPONSE TO ORDER DIRECTING FILING

COME NOW Kansas City Power & Light Company ("KCP&L") and KCP&L Greater Missouri Operations Company ("GMO") (collectively, the "Companies") and hereby responds to the Missouri Public Service Commission's ("Commission") June 17, 2014 Order Directing Filing.

- 1. Sierra Club requests that the Commission issue an order requiring KCP&L and GMO to address in its 2015 triennial compliance filing the deficiencies and issues that the Sierra Club has identified in its Comments filed on May 21, 2014.
- 2. The Companies believe that such an order is unnecessary and not consistent with the Commission's rules. The Commission's Chapter 22 rules specify the content of the Companies' next triennial filing and provide opportunities for interested parties to comment on the filing.
- 3. While the Companies believe that the Commission does not need to address the issues raised by the Sierra Club in the 0256 and 0257 dockets because it will be filing its triennial filing on or before April 1, 2015, the Companies will briefly respond below:

I. Justification of Preferred Resource Plan

<u>Sierra Club states</u>: "...GMO has failed to adequately justify selecting a preferred resource plan that does not "use minimization of the present worth of long-run utility costs as the primary selection criterion."

GMO Response:

In the 2015 triennial filing, if GMO selects a Alternative Resource Plan that is not the least cost 20-year net present value revenue requirement plan, GMO will provide justification for that selection.

II. Renewable Generation

Sierra Club states:

"...KCP&L continues to mask the benefits renewable resources offer ratepayers, both by undervaluing these resources and by severely restricting the variety of renewable additions it models" and "KCP&L should evaluate whether additional cost-effective wind PPAs could meet energy demands".

KCP&L Response:

When developing Alternative Resource Plans ("ARP"), KCP&L includes least-cost resources additions to meet mandated renewable and capacity responsibility requirements. KCP&L clearly values renewable resources and demonstrated the value of this type of generation resource by having entered into a 20-year Power Purchase Agreement ("PPA") for a new wind facility that is expected to begin commercial operation in the 4th quarter of 2015. From the Annual Update filed in March, 2014: "The most recent resource addition was from KCP&L's issuance of a Request for Proposals ("RFP") in July, 2013 to evaluate wind resource offerings. The wind facility KCP&L ultimately obtained was a PPA for a 200 MW facility located in Kansas. The PPA was executed on November 18, 2013 and has an expected Commercial Operating Date ("COD") of on or before December 31, 2015." Note that this resource addition was not procured to meet a renewable portfolio standard ("RPS"), instead it was considered to be an economic generation addition. The Sierra Club statement that KCP&L is "severely restricting the variety of renewable additions it models" is correct from the perspective that only the least-cost renewable options are modeled in the integrated analysis to provide the greatest opportunity for the resource to be chosen – least cost infers utility-scale wind resources that are at least 100 MW of capacity to capture economies of scale opportunities.

Regarding the Sierra Club statement that "additional cost-effective wind PPAs could meet energy demands" KCP&L notes that at the time the 2014 Annual Update ARPs were developed, the new wind facility secured in the 20-year PPA was included in the resource portfolio and an ARP, ABBKW, was developed to test what the resulting 20-year net present value revenue requirement ("NPVRR") would be with respect to the ARP having the same inputs except for doubling the RPS-required wind additions. The result of this comparison of ABBKW to the lowest NPVRR ARP, ABBKA, showed a \$57 million increase. It should be noted that under certain conditions, high CO₂ or natural gas prices, ABBKW was identified as a contingency plan, as the resulting NPVRR is the lowest under these scenarios. The source of the assumed wind cost and operating data utilized in the ARPs was obtained from the July, 2013 RFP which requested bids for 50 MW – 300 MW projects, both for ownership and PPA options. Responses

to the RFP were obtained from over fifteen developers for more than twenty-five existing and proposed wind facilities. An average of the five lowest-cost ownership proposals was assumed for new wind additions. Comparing ownership versus PPA options for a project that some developers submitted both options for show that the 20-year NPVRR results were very similar – therefore utilizing wind ownership over a PPA option would not have yielded vastly different results in the overall comparison of ARP NPVRRs.

It should be noted that the Sierra Club statement "When the wind is blowing and the wind energy delivered is the least-cost option, KCP&L can either temporarily ramp down its coal and gas generation or sell any excess energy off-system." is a representation of how both the SPP marketplace and the Midas model performs – generation resources are selected to run based on economic dispatching to provide least-cost optimization of resources.

GMO Response:

When developing ARPs, GMO includes least-cost resource additions to meet mandated renewable and capacity responsibility requirements. GMO clearly values renewable resources and demonstrated the value of this type of generation resource by having entered into a 20-year PPA for a new wind facility that is expected to begin commercial operation in the fourth quarter of 2015. From the Annual Update filed in March, 2014: "The most recent resource addition was from GMO's issuance of a RFP in July 2013 to evaluate wind resource offerings. The wind facility KCP&L ultimately obtained was a PPA for a 200 MW facility located in Missouri. The PPA was executed on November 13, 2013 and has an expected Commercial Operating Date ("COD") of on or before December 31, 2015." Note that this resource addition was not procured to meet a RPS, instead it was considered to be an economic generation addition. The Sierra Club statement that GMO is "severely restricting the variety of renewable additions it models" is correct from the perspective that only the least-cost renewable options are modeled in the integrated analysis to provide the greatest opportunity for the resource to be chosen – least cost infers utility-scale wind resources that are at least 100 MW of capacity to capture economies of scale opportunities.

Regarding the Sierra Club statement that "additional cost-effective wind PPAs could meet energy demands" GMO notes that at the time the 2014 Annual Update ARPs were developed, the new wind facility secured in the 20-year PPA was included in the resource portfolio and an ARP, ABDGW, was developed to test what the resulting 20-year NPVRR would be with respect to the ARP having the same inputs except for doubling the RPS-required wind additions. The result of this comparison of ABDGW to the Preferred Plan, ACGGA, showed an \$18 million increase. It should be noted that under certain conditions, high CO2 or natural gas prices, ABDGW was identified as a contingency plan, as the resulting NPVRR is the lowest under these scenarios. The source of the assumed wind cost and operating data utilized in the ARPs was obtained from the July 2013 RFP which requested bids for 50 MW - 300 MW projects, both for ownership and PPA options. Responses to the RFP were obtained from over fifteen developers for more than twenty-five existing and proposed wind facilities. An average of the five lowestcost ownership proposals was assumed for new wind additions. Comparing ownership versus PPA options for a project that some developers submitted both options for show that the 20-year NPVRR results were very similar – therefore utilizing wind ownership over a PPA option would not have yielded vastly different results in the overall comparison of ARP NPVRRs.

It should be noted that the Sierra Club statement "When the wind is blowing and the wind energy delivered is the least-cost option, KCP&L can either temporarily ramp down its coal and gas generation or sell any excess energy off-system." is a representation of how both the SPP marketplace and the Midas model performs – generation resources are selected to run based on economic dispatching to provide least-cost optimization of resources.

III. Distributed Generation Technologies

Sierra Club states:

"...KCP&L does not analyze distributed generation technologies as candidate resource options, despite Commission rules explicitly requiring this analysis."

KCP&L and **GMO** Response:

In the Supply-Side Analysis Volume of the April, 2012 Triennial filing, KCP&L considered all potential supply-side options to be preliminary supply-side candidate resource options per Rule 4 CSR 240.22.040(2). Included in the candidate resource options were over fifteen distributed generation technologies. An explanation for each technology eliminated from being considered a supply-candidate resource option was provided per Rule 4 CSR 240.22.040(2)(C)(2). In the 2015 triennial filing, the Company will develop at least one ARP that includes a distributed generation resource addition regardless of the cost ranking of the resource with respect to the other candidate resource options.

IV. Off-System Sales

Sierra Club states:

"KCP&L Should Identify Off-System Sales Revenue as a Critical Uncertain Factor and Begin Reporting It in Future IRP Filings."

KCP&L and **GMO** Response:

Critical uncertain factors are integrated resource plan ("IRP") model input assumptions that can have a material impact on resource plan results and include factors such as natural gas prices and retail load growth. Off-system sales is not an input assumption to be varied, but is a model output. KCP&L's/GMO's integrated modeling process calculates off-system sales transactions for each ARP, as part of the economic dispatch simulation of each scenario. These transactions are calculated on an hourly basis, and are dependent upon many uncertain factors, including:

- 1. Load requirements including the impact of demand-side programs.
- 2. Fuel prices.
- 3. Power market energy availability and price.
- 4. Emissions costs.
- 5. Generating unit characteristics, including costs, availability/outages, etc.

While off-system sales is not an input assumption to the modeling process and therefore not a critical uncertain factor, it is dependent on the critical uncertain factors identified in KCP&L's/GMO's IRP analysis. These factors include natural gas prices and CO₂ emission prices (the primary drivers of projected wholesale electricity market prices), and retail load. Therefore, off-system sales varies by scenario and alternative resource plan, the results of which are included in the NPVRR.

4 CSR 240-22.060(5) lists factors that must be considered in the selection of critical uncertain factors. Off-system sales are appropriately not included in this list.

V. KCP&L's Downward Adjustment to the Demand-Side Management ("DSM") Potential Study

Sierra Club states:

"KCP&L still has yet to explain why it is reasonable to assume the same percentage of KCP&L customers will opt out, given that GMO has both a different customer distribution and more energy intensive customers."

KCP&L Response:

KCP&L and Navigant, Inc. conducted a comprehensive DSM potential study that was completed in August 2013. The potential energy savings identified in the potential study were gross kWh and kW savings that could be achieved by DSM measures and programs. It is noted that the potential energy and demand savings are at the customer meter and did not include the impact of customers who would opt out. At the time, KCP&L did not have a list of customers who requested to opt-out of the DSM programs. KCP&L did not have DSM programs approved under the Missouri Energy Efficiency Investment Act rules. KCP&L made the assumption that the opt-out rates would be similar to GMO's opt-out rate

VI. Developments Impacting Environmental Compliance Costs

Sierra Club states:

"... KCP&L should address the impacts of the following two regulatory developments in its 2015 triennial compliance filing, among other issues expected to impact environmental compliance costs."

KCP&L and **GMO** Response:

The "two regulatory developments" listed by the Sierra Club are Greenhouse Gas regulations and Cross-States Air Pollution Rule (CSAPR). KCP&L plans to evaluate both the recent EPA draft 111(d) rules under the program name "Clean Power Program" and CSAPR in the 2015 triennial IRP filing.

Respectfully submitted,

|s| Roger W. Steiner

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ATTORNEYS FOR KANSAS CITY POWER & LIGHT COMPANY AND KCP&L GREATER MISSOURI OPERATIONS COMPANY

CERTIFICATE OF SERVICE

I do hereby certify that a true and correct copy of the foregoing document have been hand-delivered, emailed or mailed, postage prepaid, this 1st day July, 2014 to all counsel of record in this case.

|s| Roger W. Steiner

Roger W. Steiner