

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of the Resource Plan of)
Kansas City Power & Light Company)

File No. EO-2013-0537

REPLY COMMENTS OF SIERRA CLUB

Intervenor Sierra Club respectfully submits these reply comments regarding Kansas City Power & Light Company's ("KCP&L") 2013 Integrated Resource Plan ("IRP") Annual Update Report in order to correct certain erroneous statements in KCP&L's response to Sierra Club's initial comments and to address information first provided by KCP&L after the comment deadline. As explained in Sierra Club's initial comments and the accompanying technical memorandum from Synapse Energy Economics, KCP&L's 2013 IRP does not satisfy the requirements of 4 CSR 240 Chapter 22 because the company failed to select the least-cost plan as its preferred resource plan and provided only an inadequate and misleading excuse for doing so. The 2013 IRP also provides little explanation for why other likely lower cost plans were not evaluated, fails to document or justify the company's assumption that it will be able to generate ** _____ ** in off-system sales revenues, and ignores the declining costs of wind resources. KCP&L's September 13 filing only cursorily discusses some of the deficiencies discussed in Sierra Club's initial comments. The response includes critical misstatements, and largely fails to address the substance of the points raised in Sierra Club's comments, much less overcome the deficiencies that have been identified.¹ In light of these continuing deficiencies, and those identified by other intervenors, discovery and a hearing should

¹ These reply comments only address a subset of the points raised by KCP&L in its September 13 response and documents produced after the initial comment deadline. The lack of discussion in this document of any point raised by KCP&L should not be construed to constitute Sierra Club's agreement with that point, and Sierra Club specifically reserves the right to address additional issues or arguments in any future filings.

be held so that the Commission can ensure that KCP&L faithfully complies with Missouri's IRP rules.

I. KCP&L Has Not Justified Its Failure to Select the Least-Cost Resource Plan.

Missouri's IRP rules make clear that a utility is required to "use minimization of the present worth of long-run utility costs as the primary selection criterion in choosing the preferred resource plan." 4 CSR 240-22.010(2)(B) (emphasis added). A utility is able to avoid this requirement only if it demonstrates that "other considerations," such as risk, justify selecting a resource plan that does not minimize NPVRR. 4 CSR 240-22.010(2)(C). If a utility seeks to select a resource plan that is not the lowest cost, it must:

Explicitly identify and, where possible, quantitatively analyze any other considerations which are critical to meeting the fundamental objective of the resource planning process, but which may constrain or limit the minimization of the present worth of expected utility costs. The utility shall describe and document the process and rationale used by decision-makers to assess the tradeoffs and determine the appropriate balance between minimization of expected utility costs and these other considerations in selecting the preferred resource plan and developing the resource acquisition strategy.

(*Id.*) In its September 13 response, KCP&L continues to fail to "describe and document the process and rationale" it used to select a higher cost resource plan. Instead, KCP&L reiterates that it rejected the least cost resource plan, ADBKA, because that plan would require an 8.3% rate increase in 2016 to achieve Reasonable Achievable Potential ("RAP") levels of demand side management ("DSM"), while the higher cost resource plan that KCP&L selected, FDHKA, would require only a 6.3% rate increase in 2016 to achieve a lower level of DSM referred to as "MEEIA RAP." (KCP&L Resp. at 13-14). As Sierra Club explained in its initial comments, KCP&L's rationale for choosing a higher cost resource plan does not withstand even minimal scrutiny, and nothing in KCP&L September 13 response repairs that deficiency.

A. Rate Impacts of RAP and MEEIA-RAP Scenarios

KCP&L's comparison of the rate impacts of the least cost plan versus its higher cost preferred plan is misleading because it treats the rate impacts of the RAP and MEEIA RAP DSM levels as a stand-alone factor disconnected from the rate impacts that would result from other changing costs in the KCP&L system under the RAP versus MEEIA RAP scenarios. (SC Comments at 3-7). In response, KCP&L admits this fundamental point, stating that "no other rate impacts such as any retrofits cost at any generating unit, resource or transmission capital expenditures, or other expenditures that would traditionally be captured in a rate case are included in this rate impact analysis." (KCP&L Resp. at 14). The company, however, tries to nullify that concession by claiming that "assuming that KCP&L were to pursue the RAP level of DSM, capital expenditures would still be required at Montrose as their planned operation would remain unchanged." (*Id.*) Such claim is flatly untrue.

In particular, Montrose Units 2 and 3 would be retired in 2016 under the RAP scenario but would continue operating until 2021 under the MEEIA RAP scenario. This operational change is significant because there are substantial capital investments that KCP&L would need to make at Montrose Units 2 and 3 if those operate until 2021 that it could avoid if those units retire in 2016. For example, the 2013 IRP estimates that the company would need at least **_____**² of pollution control investments to achieve compliance with the federal Mercury and Air Toxics Standard ("MATS") by April 2016.³ In addition, there are almost certainly non-environmental capital expenditures that would be incurred in the 2014 to 2016 time frame at Montrose Units 2 and 3 that could be avoided if those units were retired in 2016. Those

² As discussed in Section I.B.2 below, the actual cost for achieving the mercury and PM reductions required by MATS may be significantly higher than the **_____** assumed in the IRP.

³ The cost figures for MATS compliance cited in the 2013 IRP do not include the potential need for dry sorbent injection, which is discussed in Section I.B.1 below.

costs, which would be incurred by 2016 under KCP&L's preferred resource plan FDHKA, would be avoided under resource plan ADBKA, and therefore should have been factored into the evaluation of the comparative short-term rate impacts of the least cost resource plan versus KCP&L's higher cost preferred plan. KCP&L acknowledges that they were not, which is a significant deficiency that should be further evaluated through discovery and a hearing.⁴

B. KCP&L's Preferred Resource Plan is Based on Questionable and Unsupported Assumptions about Environmental Compliance Costs at Montrose Station.

In its initial comments, Sierra Club explained that KCP&L's preferred resource plan ignored or underestimated a number of likely environmental compliance costs facing Montrose Units 2 and 3. (SC Comments at 7-12). Such deficiency further undermines KCP&L's RAP versus MEEIA RAP 2016 rate increase claim as these unaccounted for environmental compliance costs would be avoided under the RAP scenario but would likely be incurred under the MEEIA RAP scenario.

1. MATS HCL Compliance

The 2013 IRP assumes that KCP&L can bring Montrose Units 2 and 3 into compliance with the MATS acid gases limit through the continued use of low-chlorine coal, rather than needing to install Dry Sorbent Injection ("DSI") controls. (KCP&L 2013 IRP Update at 19). The 2013 IRP, however, includes no data, such as stack test results, supporting that contention, even though the company's MEGA study specifically recommended that "KCP&L perform stack

⁴ As Intervenor Natural Resources Defense Council noted in its comments, KCP&L's comparison of the rate impacts of the RAP and MEEIA RAP DSM programs also appears to consider the rate impacts of three years of DSM spending, but only one year of the fuel savings from such spending. (NRDC Comments at 8). In its response, KCP&L acknowledges that the rate impact analysis "captures DSM program costs over a multi-year period," but does not dispute the assertion that only a single year of fuel savings resulting from such DSM programs were factored in. (KCP&L Resp. at 9). As such, it would appear that the RAP versus MEEIA RAP rate increase comparison relied on by KCP&L overstates the comparative impact that those two plans would have on the amounts that ratepayers actually pay. In addition, as noted by Synapse, the rate increases projected by KCP&L will not directly translate into increases in customers' bills, because many KCP&L customers are likely to take advantage of DSM programs offered by the company and thereby use less energy. (Attachment A at 9.)

testing to confirm whether the Montrose units are natively compliant or require DSI to meet the MATS HCL limit as assumed herein.” (Phase I MEGA Study at p. 2-7).

In its September 13 response, KCP&L attempts to dismiss this issue by reporting that it has carried out stack testing on Montrose on May 15, May 19, and July 16-19. (KCP&L Resp. at 15). What KCP&L did not do, however, was present the results of such stack testing, even though it was carried out two to four months ago. As such, KCP&L has provided no basis for concluding that its low-chlorine coal strategy will be sufficient to achieve MATS compliance.

This continued deficiency is critical for two reasons. First, KCP&L’s own MEGA Study suggests that low-chlorine coal may not be sufficient to bring the Montrose units into compliance with the HCL limit. In particular, the MEGA Study estimates, based on the expected range of chloride in PRB coal, that the current HCL emissions rate at Montrose Units 2 and 3 is

_____. (MEGA Study at p. 2-7). If accurate, KCP&L would have to reduce its HCL emissions by **____** to achieve the 0.002 lb/mmBtu HCL MATS limit, which seems a questionable feat given that KCP&L states that it plans to use the same type of coal that it is currently using. (KCP&L Resp. at 14-15).⁵ Second, if the stack testing shows that low-chlorine coal is not sufficient to achieve HCL MATS compliance, then KCP&L would need to install DSI at Montrose Units 2 and 3 by April 2016 at an estimated cost of **_____**. (MEGA Study at p. 1-5). Such additional, unaccounted for cost could be entirely avoided, however, under the RAP DSM scenario that allows for the retirement of Montrose Units 2 and 3 in 2016 and is the lowest cost plan that the company modeled.⁶

⁵ It is not clear from the record whether the design basis coal assumed in the MEGA Study – **_____** – is the same coal blend that KCP&L currently burns at Montrose (MEGA Study at p. 3-1), or whether there are any increased costs associated with KCP&L being limited to a particular coal blend under its low-chlorine coal compliance strategy.

⁶ KCP&L does not dispute in its response that the 2013 IRP also fails to account for the fact that the use of low-chlorine coal increases operating costs for the Activated Carbon Injection system that the company plans to use to achieve compliance with MATS mercury limits at Montrose Units 2 and 3. (SC Comments, Attachment A at 12.)

2. PM MATS Compliance

The **_____** figure assumed in the 2013 IRP as the capital cost for achieving MATS compliance may significantly underestimate the actual cost of compliance. That figure is made up of **_____** Activated Carbon Injection installations on each of Montrose Units 2 and 3, plus **_____** “ESP rebuilds” on each of those units. (KCP&L 2013 IRP at p. 129 Table 68). The Phase 1 MEGA Study, however, identifies “ESP rebuilds,” at an installed cost of **_____**, as necessary to achieve the **_____** at Units 2 and 3, respectively, required for PM MATS compliance. (MEGA Study at p. 1-6, Table 1.2, p. 2-7 and Table 2.4). The **_____** figure for “ESP rebuilds” included in the IRP appears to come from a single spreadsheet titled “Montrose MEGA Phase 2 ESP” that identifies a **_____** installed cost for “ESP Modifications.” No explanation is provided regarding the differences between the Phase 1 MEGA Study “ESP rebuild” and the Phase 2 MEGA spreadsheet “ESP Modification,” or why the latter is purportedly adequate to achieve PM MATS compliance when Burns & McDonnell had previously determined that a far more costly ESP rebuild would be needed.⁷

3. Dry Ash Conversion

Another major environmental cost that KCP&L failed to account for is the need to convert Montrose Units 2 and 3 to dry ash handling. The 2013 IRP assumes that such conversion would not need to occur until 2021, (KCP&L IRP Update at 10-11, 103), and that the Montrose units would simply be retired then in order to avoid the **_____** cost

KCP&L does not appear to have accounted for any additional O&M costs in its IRP analysis with respect to this issue. This is yet another way in which KCP&L’s IRP analysis is deficient under 4 CSR 240-22.040(2)(B). (SC Comments at 9.)

⁷ KCP&L promised during the stakeholder meetings on the 2012 IRP to provide the MEGA Study to the stakeholders, but it did not do so until August 20, the day before the comment deadline on the 2013 IRP, and then only after Sierra Club specifically requested that study in an August 9 letter. KCP&L’s delay in producing the March 2013 MEGA Study until August 20 hindered the ability of Sierra Club to identify in its initial comments all of the shortcomings and inconsistencies in the 2013 IRP.

(MEGA Study at p. 1-9, Table 1.5) of such conversion. The MEGA Study, however, lists a compliance date for wet-to-dry bottom ash conversion of January 1, 2018. (MEGA Study at p. 1-9, Table 1.5). And Table 64 of the IRP update identifies the compliance date for the Effluent Limitation Guidelines (“ELGs”) and Coal Combustion Residuals (“CCR”) regulations that would require the dry ash conversion as 2019, not 2021. (KCP&L 2013 IRP Update at 119.) As such, KCP&L either needed to assume an earlier retirement date for Montrose Units 2 and 3, or account for the cost of dry ash conversion in its evaluation of competing resource plans.

In its September 13 response, KCP&L claims that “under the current proposed EPA rulemaking, Montrose Station would not be required to undertake any significant ash handling modifications.” (KCP&L Resp. at 15). KCP&L, however, provides no basis for this statement, which runs directly contrary to the MEGA Study and the 2013 IRP, both of which identify the need to convert Montrose Units 2 and 3 to dry ash handling to comply with the expected ELG and CCR standards (*see* MEGA Study at Appendix A pp. 1, 10; KCP&L IRP Update at 10-11), and to the proposed ELG rule itself.

As Sierra Club noted in its comments, EPA issued proposed new ELGs for steam electric power plants on June 7, 2013, and is required by a federal court consent decree to finalize the rule by May 2014. (SC Comments at 9-10.) The proposed rule specifies that compliance with Clean Water Act “Best Available Technology” requirements for bottom ash transport water (as with other wastewater streams) is proposed to be required “as soon as possible within [a plant’s] next [Clean Water Act] permit cycle after July 1, 2017.” 78 Fed. Reg. at 34,462. For KCP&L’s Montrose Station, the compliance date will likely fall in 2019, when the plant’s Clean Water Act permit will likely be due for its required five-year renewal. (SC Comments at 10-11.) KCP&L’s response to Sierra Club’s comments completely fails to address this issue, however, or otherwise

explain why the company is now assuming a 2021 compliance deadline for conversion to dry ash handling at Montrose when the MEGA study, other documents in the record, and a review of the proposed ELG rule itself all indicate that conversion to dry ash handling will in fact most likely be required in 2019. If compliance with EPA’s new ELGs is actually required at Montrose two years earlier than the company is assuming, this would have a significant impact on the revenue requirement and rates that would result under its preferred plan FDHKA, making that plan even less favorable to ratepayers than Plan ADBKA, the least-cost plan that the company modeled.

II. KCP&L Has Not Described, Documented, or Justified Its Assumption That It Will Be Able to Generate **_____ in Off-System Sales Revenues Every Year.**

A significant unresolved deficiency dating back to KCP&L’s 2012 IRP is the company’s failure to report or justify its projected level of off-system sales revenues that it will generate each year. The 2013 IRP did nothing to address that deficiency. (SC Comments at 17-18).

In its September 13 filing, KCP&L notes that after the deadline for comments on the 2013 IRP it provided the parties with a spreadsheet projecting **_____** of off-system sales revenues assumed for each year of the planning period for each of the resource plans. (KCP&L Resp. at 17-18). Over the 20-year planning period, that spreadsheet projects total off-system sales revenues of **_____** for KCP&L’s preferred resource plan, FDHKA, and of **_____** for the least-cost resource plan, ADBKA, for a difference of **_____**. (KCP&L Resp. to SC Q. 2, “Exp Value – Whsle Rev” Tab, lines 21 and 33). KCP&L, however, has not provided any explanation of how those projections were generated or what assumptions went into them. In short, the company has still failed to “describe and document,” much less justify, its off-system sales revenue assumptions, even

though such projected revenue constitutes approximately **_____** NPVRR for the resource plans and the off-system sales revenue difference between the least cost resource plan and KCP&L’s higher cost preferred plan is **_____** as the NPVRR difference between those plans. Especially given that KCP&L has been experiencing declining off-system sales in recent years (Attachment A at 15), the failure to document, describe, and justify such a significant component of the NPVRR analysis is a major deficiency that should be addressed through discovery and a hearing.

III. KCP&L’s September 13 Filing Confirms that the Company Has Failed to Evaluate Least-Cost Wind Resources.

As Sierra Club has explained, KCP&L erroneously assumed in its modeling that wind resources would cost **_____** per MWh, which is significantly higher than the price of wind power purchase agreements (“PPAs”), which have fallen to as low as \$31 per MWh. (SC Comments, Attachment A at 16.) KCP&L’s use of an inflated wind power cost also ignores the fact that wind costs have increasingly dropped year-on-year over time and are projected to continue doing so. (*Id.*). As such, KCP&L has failed to satisfy its duty to “collect generic cost and performance information sufficient to fairly analyze and compare” wind resources to other supply-side alternatives. 4 CSR 240-22.040(1).

In its September 13 filing, KCP&L contends that its use of a **_____** per MWh cost for wind was appropriate because it reflects the higher cost of owning a wind resource, which has a “completely different financial structure” than a PPA for wind power. (KCP&L Resp. at 18). KCP&L has provided no explanation for why the “completely different financial structure” of wind power ownership would cause such ownership to cost **_____** as a wind PPA. But regardless, if PPAs offer a lower-cost approach for obtaining wind power, then

prudent and least-cost planning requires the company to evaluate PPAs rather than only the apparently higher cost ownership option. KCP&L's September 13 filing admits that the company did not do so.

IV. The Commission Should Allow For Further Fact-Finding and Evaluation By Holding a Hearing, Preceded by Discovery, on KCP&L's Deficient IRP.

In light of the numerous deficiencies and errors identified above, in Sierra Club's initial comments, and in filings by other parties, the Commission should allow for discovery and schedule a hearing regarding KCP&L's IRP to ensure that the company's resource planning fully conforms to the requirements of 4 CSR 240 Chapter 22. (SC Comments at 19). In response, KCP&L suggests that a hearing is not needed because the company is not planning to make any "significant generating resource decisions" in the near future. (KCP&L Resp. at 6). The reality, however, is otherwise. For example, KCP&L is proposing to implement a MEEIA RAP DSM program that will produce significantly less energy savings and demand reduction than the readily-achievable RAP DSM program. In addition, KCP&L must start expending resources soon to bring Montrose Units 2 and 3 into compliance with the MATS rule if the lower-cost option of retiring those units in April 2016 is not pursued. As such, this IRP comes at a critical time for KCP&L and its ratepayers, and a hearing is necessary to ensure that the company's planning around these resource issues fully complies with Missouri's IRP rules.

KCP&L also contends that a hearing is not needed now because the company will be filing its next IRP update in March 2014. (KCP&L Resp. at 13). But the Commission should not countenance the company's effort to kick these important resource planning questions down the road yet again. KCP&L has now made two straight annual IRP filings in which the company selected a resource plan that is not the least-cost, that includes far less DSM than is cost-

effectively achievable, that ignores or downplays significant environmental compliance costs facing the company's generating units, and that fails to provide to the public basic information about the impacts of the company's resource planning decisions. KCP&L's 2012 IRP included a two-year delay in the company's MEEIA DSM filing that will cost ratepayers \$23 million (SC 2012 IRP Comments at 4), and selected a resource plan with a \$108 million higher NPVRR than the least-cost plan. (2012 IRP at Vol. 7, p. 2). In the 2013 IRP filing, KCP&L selected a resource plan that is at least \$75 million more costly than the least-cost plan, and that proposes to forego significant cost savings that would result if KCP&L pursued RAP DSM. Enough is enough. The Commission should reject KCP&L's effort to continue its deficient resource planning that is leading to higher than necessary costs for ratepayers and, instead, hold a hearing to ensure that the company is fully and faithfully complying with Missouri's resource planning rules.

V. Conclusion

For the reasons set forth above, Sierra Club respectfully requests that the Commission issue an order pursuant to 4 CSR 240-22.080(16) that establishes a procedural schedule for discovery and a hearing on the numerous deficiencies and concerns with KCP&L's 2013 IRP analysis identified by Sierra Club and the other intervenors.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that a true and correct PDF version of the foregoing was filed on EFIS
and sent by email on this 23rd day of September, 2013, to all counsel of record.

/s/ Shannon Fisk
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