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**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-2012-0323

**SIERRA CLUB COMMENTS IN RESPONSE TO KANSAS CITY POWER & LIGHT  
AND REQUEST FOR HEARING**

Pursuant to 4 CSR 240-22.080(10), the Sierra Club hereby files its comments in response to Kansas City Power & Light (“KCP&L”) regarding the unresolved deficiencies and concerns raised by Sierra Club with KCP&L’s 2012 Integrated Resource Plan (“IRP”) filing and respectfully requests that the Commission order that the schedule of any hearing and final order in this docket be extended, as set forth below, until after KCP&L submits its 2013 update filing. In the alternative, Sierra Club respectfully requests that the Commission set a schedule now for a hearing on its deficiencies and concerns.

**I. Introduction**

As described below and in Sierra Club’s September 6, 2012 comments on the IRP,<sup>1</sup> KCP&L’s 2012 IRP filing is fatally flawed because:

- the IRP does not minimize net present value revenue requirements (“NPVRR”) through demand side management (“DSM”) programs;
- the IRP relies upon outdated, unreasonably high natural gas price projections that fail to reflect changed market conditions and thereby significantly overstate the value of KCP&L investing \$1.5 billion in retrofits and continuing to operate its aging coal-fired generating units;
- the IRP failed to include a transparent, unit-by-unit analysis of the economics of retrofitting each of KCP&L’s coal-fired generating units with additional pollution controls to achieve environmental compliance versus the economics of retiring them or repowering them with a different fuel;
- the IRP apparently unreasonably assumes that excess power from KCP&L’s aging coal-fired generating units will generate significant revenue through off-system sales (“OSS”);
- the IRP underestimates future CO2 prices and the non-environmental capital costs of continuing to operating its aging coal-fired generating units; and
- the IRP never evaluated critical uncertain factors on a meaningful range of alternative resource plans.

KCP&L’s general response to the deficiencies and concerns raised by Sierra Club (and many of those raised by other parties) is to claim that its IRP filing is adequate, and to assert that any deficiencies and concerns will be addressed in a new integrated analysis that it will prepare

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<sup>1</sup> Sierra Club’s September 6, 2012 comments on the KCP&L 2012 IRP filing are hereby incorporated by reference.

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in connection with its 2013 annual update filing. But as even KCP&L acknowledges, the new integrated analysis that KCP&L contemplates for its 2013 IRP update will potentially incorporate such significant changes (such as substantially lower natural gas price projections and a study of the full potential of DSM programs, both of which KCP&L should have incorporated, but failed to incorporate, into its 2012 IRP filing) that it will function more like a complete rewrite of the company's triennial compliance filing rather than simply as an update to it.

Accordingly, if the Commission allows KCP&L to move forward with its 2013 update as planned, the Commission should also defer any final order on the adequacy of KCP&L's 2012 IRP until after the 2013 update is filed and any appropriate hearing is held. To accomplish this, the Commission should extend the schedule for this docket as follows:

1. KCP&L shall file its 2013 update as provided in 4 CSR 240-22.080(3).
2. Parties other than KCP&L should have the opportunity to review the 2013 update and file reports or comments thereon of the kind provided for in 4 CSR 240-22.080(7) and (8).
3. If there are any new or remaining unresolved deficiencies, the parties should have the right to proceed with respect to the 2013 update as provided in as provided in 4 CSR 240-22.080(10).
4. The Commission should defer any final order in this docket as provided in 4 CSR 240-22.080(16) and (17) until after any hearing process concludes on the 2013 update.

The extension of the schedule for this docket would allow the Commission to defer any final decision on the adequacy of KCP&L's 2012 IRP filing until after the company submits its new integrated analysis. Such an extension would be the best and most efficient way to address the unresolved deficiencies and concerns with KCP&L's 2012 filing, as it would allow the Commission and the parties to have the benefit of KCP&L's new integrated analysis while maintaining the robust public participation, opportunity for a hearing, and final Commission order that are all critical components to ensuring compliance with the Missouri IRP rules.

In the alternative, Sierra Club respectfully requests that the Commission set a schedule now for a hearing on its deficiencies and concerns. KCP&L should not be allowed to benefit from its delay in addressing the significant deficiencies and concerns with its 2012 IRP filing until the 2013 update. Given the scope and magnitude of the deficiencies and concerns with KCP&L's 2012 IRP filing, the Commission should reject KCP&L's filing and require the company to submit a revised plan.

In February 2012, KCP&L withdrew its Missouri Energy Efficient Investment Act ("MEEIA") filing on the grounds that recent declines in natural gas prices, market energy prices, and off-system sales revenues purportedly reduced the economic benefit of pursuit of further DSM. Yet two months later, KCP&L submitted an IRP filing that virtually ignored those changed conditions. And the company continues to proceed with its preferred resource plan involving more than \$1.5 billion in retrofits to its aging coal units even though changed market conditions make such costly retrofits very likely not prudent. If KCP&L had not submitted a deficient 2012 IRP – in particular, an IRP that failed to account for significant changes in natural gas price projections and electricity markets that KCP&L was fully aware of at the time of filing

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– the company would not have been able to plausibly justify its preferred resource plan. KCP&L should not be given a free pass on submitting an adequate IRP when at the same time the company is moving forward with costly investments that are likely not prudent.

## **II. Sierra Club's Responses to KCP&L Regarding Specific Deficiencies Raised in Sierra Club's September 6, 2012 Comments**

### **A. Failure to Minimize NPVRR Through DSM Programs**

As set forth in Sierra Club's September 6, 2012 comments, KCP&L rejected alternative resource plans that incorporated a doubling of energy savings from DSM programs (which it named the "DSM D" scenario) and achieved lower NPVRR than its preferred plan, on the ground that this DSM D scenario was purportedly "not considered to be realistically achievable." (Sierra Club Comments at 3-4 (quoting IRP Vol. 7, p. 3).) KCP&L itself acknowledges, however, that it did nothing in connection with its 2012 IRP filing to evaluate whether a doubling of energy savings from its DSM programs would be achievable, despite the fact that the Commission had specifically directed the company to do so. (Sierra Club Comments at 3-4 (quoting KCP&L Resp. to SC DR #18a), 14-15.)

KCP&L's response to this Sierra Club deficiency and similar deficiencies raised by other parties has been to acknowledge that the DSM D scenario in its 2012 IRP filing was an empty and arbitrary modeling exercise, as the company made no effort to determine what additional DSM programs might be available to achieve the savings modeled in DSM D. KCP&L now claims, however, that it should be allowed to address this clear set of deficiencies with its 2012 IRP filing by incorporating into its 2013 update filing a new study of DSM potential that is currently being conducted by the Navigant consulting firm.

Although the Navigant study should begin to address the clear deficiencies with KCP&L's DSM analysis in the 2012 IRP, the Commission should not give KCP&L a free pass on the mere promise that the deficiencies will be fixed in the 2013 update. KCP&L's failure to choose the DSM D scenario as its preferred resource plan has real consequences, as Sierra Club explained in its comments on the IRP: if KCP&L had chosen resource plan DCEK1 – which incorporates DSM D – as its preferred resource plan, that alone (even without the company addressing the other deficiencies with its IRP, such as unreasonably high natural gas price projections) would have lowered the NPVRR of its preferred resource plan by \$108 million and allowed the company to retire all three coal-fired generating units at its Montrose Power Plant instead of only one unit in its preferred plan. (Sierra Club Comments at 3, 14-15.) Proper incorporation of the results of the Navigant study into this IRP docket will likely result in a similarly significant change in the company's preferred resource plan.

In addition, KCP&L failed to fully incorporate DSM into its 2012 IRP filing in three other significant ways. First, KCP&L assumed in its modeling that it would not begin spending any additional money on DSM programs until 2014, without providing any justification for doing so, and despite the fact that this two-year delay in additional DSM spending raises the NPVRR of all of the alternative resource plans evaluated in this IRP by \$23 million. (Sierra Club Comments at 4-5 (citing KCP&L Resp. to SC DR #17d).) Second, KCP&L failed to model

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the impact on NPVRR of incorporating the DSM D scenario into a full range of alternative resource plans, which would result in hundreds of millions of dollars of savings for ratepayers. (Sierra Club Comments at 5.) In fact, KCP&L does not appear to have made a serious attempt in its 2012 IRP filing to explore any additional DSM programs beyond those incorporated into the “DSM A” scenario that represents the level of DSM investment that the company is already pursuing. (Sierra Club Comments at 15.) Finally, KCP&L inexplicably failed to model combined heat and power (“CHP”) in its 2012 IRP analysis, despite the fact that it is well-documented that Missouri has substantial untapped CHP potential. (Sierra Club Comments at 15.)

KCP&L has not provided any meaningful response to these three additional deficiencies raised by Sierra Club, but only asserts generally that it evaluated DSM on an equivalent basis with supply-side options. KCP&L’s general response does nothing to address these three specific, additional ways in which KCP&L did not fully incorporate DSM into the IRP analysis to achieve greater savings for ratepayers.

Accordingly, the Commission should not find that KCP&L’s treatment of DSM in its 2012 IRP filing is sufficient to comply with the Missouri IRP rules, and in particular, the rules’ “fundamental objective” to minimize NPVRR “as the primary selection criterion in choosing the preferred resource plan,” the company can demonstrate that “other considerations,” such as risk, justify selecting a resource plan that does not minimize NPVRR. 4 CSR 240-22.010(2). Contrary to the requirements of the IRP rules, by failing to incorporate DSM into its IRP analysis in a range of ways, KCP&L chose a preferred resource plan that did not reduce NPVRR, and the company did not “describe and document” its rationale for failing to do so. *Id.*

As set forth above, the Commission should extend the schedule for this docket to allow for any hearing and final order to occur after KCP&L incorporates the results of the Navigant study of DSM potential into the 2013 update filing. In the alternative, the Commission should set a schedule now for a hearing on the deficiencies with KCP&L’s DSM analysis.

### **B. Reliance Upon Outdated, Unreasonably High Natural Gas Price Projections**

As Sierra Club explained in its September 6, 2012 comments, KCP&L relied upon unreasonably high natural gas price projections that necessarily skewed its analysis of alternative resource plans in favor of costly retrofits of aging coal-fired generating units. (Sierra Club Comments at 7-10.) The composite forecast that KCP&L put together for its 2012 IRP filing was based on data going back as far as December 2010, despite the fact that the company was well aware that present and projected future natural gas prices shifted considerably in the second half of 2011. Especially given that KCP&L withdrew its MEEIA filing in early 2012 at least in part due to shifting natural gas prices, KCP&L should have known that it could not reasonably continue to rely on outdated natural gas price projections in its IRP. (Sierra Club Comments at 8-10.)

Contrary to KCP&L’s contention, Sierra Club’s comments do not include a “recommendation to rely exclusively on EIA’s AEO.” Sierra Club believes that a composite forecast is a reasonable approach to projecting future natural gas prices, but only if the composite

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is based on up-to-date information and takes into account the most recent developments in natural gas and electricity markets. The reference to the EIA AEO in Sierra Club's comments was not intended to suggest that KCP&L should have relied on that one source exclusively, but rather that KCP&L should have done an objective "reality check" of its composite forecast results using more current sources such as the EIA AEO and short-term futures markets. If KCP&L had done such a "reality check" with respect to its 2012 IRP filing, it should have concluded that its projection of future natural gas prices was not reasonable. (See Sierra Club Comments at 8-10.)

Another factor in KCP&L's unreasonably high natural gas price projections is that it incorporated into its composite forecast an outlier forecast price that was roughly four times higher than the other three forecasts that KCP&L used, the inclusion of which in the composite increased KCP&L's forecasted natural gas prices for 2040 by 30%. (Sierra Club Comments at 9-10.) The reason why this forecast, which KCP&L attributed to \*\* HC \*\*, was such an outlier is that it was apparently based on \*\*

HC

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If KCP&L had done an objective "reality check" of this aspect of its composite forecast of future natural gas prices, it should have concluded that this outlier forecast was not reasonable and should not have been incorporated into the composite forecast.

KCP&L's response that it will address this deficiency by incorporating up-to-date forecasts into its 2013 update filing is not sufficient, because like its re-analysis of DSM scenarios based on the Navigant study, KCP&L's re-analysis based on the dramatic changes in natural gas prices that have occurred in the last two years will likely result in substantial changes to the NPVRR of different alternative resource plans, in particular with respect to the economic viability of KCP&L's continued investment in aging coal-fired generating units. As the Commission recently recognized, "if all other factors are held constant, lower natural gas prices would tend to result in lower electric power prices, which would diminish the value of continuing to operate" coal generating units. *In re Union Electric Company's 2011 Utility Resource Filing*, File No. EO-2011-0271, Report and Order (Mar. 28, 2012), at 16. As set forth above, the Commission should extend the schedule for this docket to allow for any hearing and final order to occur after KCP&L incorporates updated natural gas price projections into the 2013 update filing. In the alternative, the Commission should set a schedule now for a hearing on the deficiencies with KCP&L's natural gas price projections.

### **C. Failure to Do a Transparent, Unit-by-Unit Analysis of the Economics of Coal Retrofit vs. Retirement**

As explained in Sierra Club's September 6, 2012 comments on the 2012 IRP filing, as well as in the testimony of Bruce Biewald which was filed in KCP&L's rate increase proceeding, Case No. ER-2012-0174, declines in natural gas and market energy prices, among other factors, are leading to a growing number of decisions by utilities to retire decades old coal units that would need significant pollution control investments to continue long term operations. (Sierra Club Comments at 6-7; Biewald Test. at 6-8). These same factors counsel in favor of a careful

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evaluation of whether KCP&L's aging coal-fired generating units should be retired rather than retrofit.

Although KCP&L now asserts that it has commissioned a new analysis of environmental compliance costs of retrofitting its coal-fired generating units from the engineering firm Burns & McDonnell, the results of which will be incorporated into the 2013 update, this re-analysis of the costs of coal retrofits will not address Sierra Club's deficiencies unless it is accompanied by a specific, enforceable commitment by KCP&L to do a careful comparison, unit by unit, of all reasonably foreseeable environmental, capital, operation and maintenance, and fuel costs facing each of the company's coal-fired generating units, versus the cost of retiring and replacing such units with DSM, renewable energy, market purchases, and existing or new natural gas combined cycle capacity. KCP&L did not do a transparent, unit-by-unit analysis as part of its 2012 IRP filing, and the company has not committed to doing so in the 2013 update.

As Sierra Club explained in its comments, a 2011 filing by KCP&L in the Kansas Corporation Commission indicated that, under a low natural gas price scenario, the retirement of all of KCP&L's coal-fired generating units at both the LaCygne and Montrose Power Plants would be the lowest NPVRR option. (Sierra Club Comments at 6-7.) As even KCP&L must admit, in the last two years, natural gas and energy markets have shifted to a low natural gas price scenario. KCP&L's failure to do a more careful, transparent, unit-by-unit evaluation of the economics of retrofit versus retirement is unreasonable on its face, and KCP&L's contention in this Missouri proceeding that retrofit of its aging coal units is still economically defensible is contradicted by the findings that it presented to the Kansas Corporation Commission in 2011.

As set forth above, the Commission should extend the schedule for this docket to allow for any hearing and final order to occur after KCP&L incorporates a more careful, transparent unit-by-unit analysis of the economics of retrofit versus retirement of its aging coal-fired generating units into the 2013 update filing. In the alternative, the Commission should set a schedule now for a hearing on the deficiencies with KCP&L's analysis of these units.

#### **D. Unreasonable Assumptions About OSS**

As set forth in Sierra Club's comments on the IRP, KCP&L projects that it will generate 20-30% more energy than it needs to satisfy its load requirements and sell most or all of this excess energy at a profit to the wholesale market. (Sierra Club Comments at 10.) KCP&L does not explain its basis for this projection in the IRP filing, but (as explained in the Sierra Club comments) it appears to rest on KCP&L's unreasonably high natural gas price projections, which would cause the company's aging coal-fired generating units to appear more competitive in the wholesale market than they actually will be once accurate, up-to-date natural gas price information is incorporated into KCP&L's IRP analysis. (Sierra Club Comments at 10-11.)

An assumption that KCP&L's aging coal-fired generating units will continue to sell the excess energy they generate into the market at a profit (and thus, that economics favor KCP&L spending over \$1.5 billion to retrofit them, rather than retiring them) represents a significant gamble. At a minimum, such gamble should be carefully explained and evaluated in an open and transparent way, not simply baked into complex modeling analyses.

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KCP&L's agreement to track off-system sales as a performance measure in the new integrated analysis that the company is preparing in connection with its 2013 update filing is a good start, but KCP&L should not be given a free pass on its failure to track its assumptions about off-system sales in its 2012 IRP filing. As set forth above, the Commission should extend the schedule for this docket to allow for any hearing and final order to occur after KCP&L provides an adequate explanation of its assumptions about off-system sales with the 2013 update filing. In the alternative, the Commission should set a schedule now for a hearing on the deficiencies with KCP&L's failure to provide an adequate explanation of its off-system sales assumptions in its 2012 IRP filing.

#### **E. Underestimates of Likely Future CO2 Costs and Non-Environmental Capital Requirements for Aging Coal Units**

As set forth in Sierra Club's comments on the IRP, KCP&L has not fully accounted for the likely future CO2 costs that will be faced by its aging coal-fired generating units, nor has it fully accounted for the likely capital investments that will be needed to continue to operate coal-fired generating units at its Montrose Power Plant beyond their originally intended lifespan. (Sierra Club Comments at 11-13.) KCP&L should be required to provide a full explanation of why its assumed future CO2 costs are lower than those of other utilities from all over the country, and why it inexplicably assumed that capital costs at Montrose would decrease rather than increase over time. (Sierra Club Comments at 11-13.) As set forth above, the Commission should extend the schedule for this docket to allow for any hearing and final order to occur after KCP&L provides an adequate explanation of its assumptions about likely future CO2 prices and capital costs at the Montrose Power Plant. In the alternative, the Commission should set a schedule now for a hearing on the deficiencies with KCP&L's failure to provide an adequate explanation of these assumptions in its 2012 IRP filing.

#### **F. Failure to Evaluate Critical Uncertain Factors on a Meaningful Range of Alternative Resource Plans**

As set forth in Sierra Club's comments on the IRP, KCP&L has not provided an adequate explanation of the effects of critical uncertain factors (including, for example, lower natural gas prices, higher CO2 prices, or lower load) on the NPVRR of a full range of possible alternative resource plans. (Sierra Club Comments at 16-17.) As a result, KCP&L has not accounted for the possibility that a range of meaningful changes in the critical uncertain factors – such as, for example, the dramatic decrease in current and projected natural gas prices that has occurred over the last two years, but which KCP&L failed to incorporate into its 2012 IRP analysis – might impact the robustness of KCP&L's preferred plan (which continues to rely heavily on coal rather than natural gas). *See* 4 CSR 240-22.060(3) (utility must develop “a set of alternative plans based on substantively different mixes of supply-side resources and demand-side resources and variations in the timing of resource acquisition to assess their relative performance under expected future conditions as well as their robustness under a broad range of future conditions”). KCP&L should be required to evaluate critical uncertain factors across a broader range of alternative resource plans, and to evaluate them both with respect to single-utility plans for both KCP&L and GMO and any combined company plans that are evaluated. *See* 4 CSR 240-22.060(6) (utility must “describe and document its assessment of the impacts and

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interrelationships of critical uncertain factors on the expected performance of each of the alternative resource plans . . . and analyze the risks associated with alternative resource plans”).

As set forth above, the Commission should extend the schedule for this docket to allow for any hearing and final order to occur after KCP&L incorporates analysis of critical uncertain factors across a full range of alternative resource plans into the 2013 update filing. In the alternative, the Commission should set a schedule now for a hearing on the deficiencies with KCP&L’s analysis of critical uncertain factors.

### **III. Conclusion**

As Sierra Club has identified clear deficiencies and concerns with KCP&L’s 2012 IRP that the company has not yet addressed, Sierra Club respectfully requests that the Commission order that the schedule of any hearing and final order in this docket be extended, as set forth in the Introduction above, until after KCP&L submits its 2013 update filing. In the alternative, Sierra Club respectfully requests that the Commission set a schedule now for a hearing on its deficiencies and concerns.

Respectfully Submitted,



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On behalf of Sierra Club