

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-2014-0257

## COMMENTS OF SIERRA CLUB

Intervenor Sierra Club hereby submits these comments on the Kansas City Power & Light Company Greater Missouri Operations Company (“GMO”) 2014 Integrated Resource Plan (“IRP”) Annual Update Report. On November 26, 2013, in Case No. EO-2013-0538, the Commission ordered GMO to “address,” in this 2014 update, “all issues and criticisms identified in the comments filed in response to its 2013 annual update report.” Many of the criticisms Sierra Club filed in response to the 2013 update were in turn directed to deficiencies in GMO’s 2012 triennial integrated resource plan filing, Case No. EO-2012-0324, which the Commission declined to approve.<sup>1</sup> Therefore, for a number of the deficiencies identified in these comments, the 2014 update marks the third year that GMO has not resolved the issue despite repeated stakeholder input and direction from the Commission.

First, GMO has again selected a preferred plan that is not the least-cost plan, and has again ignored its duty to justify that decision. Second, GMO 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. Third, GMO does not analyze distributed generation technologies as candidate resource options, despite Commission rules explicitly requiring this analysis. Fourth, GMO relies on projected off-system sales to select a

<sup>1</sup> The Commission also ordered that these issues be addressed in the 2013 annual update. *See* Order Regarding 2012 Integrated Resource Plan, Case No. EO-2012-0324 at 3 (Dec. 19, 2012).

resource plan that includes continued investment in the coal-fired Sibley and Lake Road 4/6 plants, increasing ratepayers' exposure to the risks associated with fossil fuel generation, and should identify off-system sales as a critical uncertain factor in any future IRP analysis. Fifth, in its 2015 triennial compliance filing, GMO will need to address developments impacting environmental compliance cost estimates, including an upcoming EPA proposal for greenhouse gas standards under Clean Air Act Section 111(d) and a recent Supreme Court decision reinstating the Cross- State Air Pollution Rule ("CSAPR").

Sierra Club respectfully requests that the Commission issue an order directing GMO to address the issues and deficiencies identified in these comments in its 2015 triennial compliance filing.

**I. GMO Has Not Adequately Justified Selection of a Preferred Resource Plan that Is Not the Least-Cost Plan.**

As it did in last year's IRP filing, GMO has failed to adequately justify selecting a preferred resource plan that does not "[u]se minimization of the present worth of long-run utility costs as the primary selection criterion . . . ." 4 CSR 240-22.010(2)(B). The Company reiterates its desire to own its own capacity rather than purchase capacity on the market and cites this as the justification for its decision to prefer Plan ACGGA, in which the Lake Road plant would be converted to run solely on natural gas and fuel oil, over the least-cost plan that the Company modeled, Plan ABDGA, which would retire the Lake Road plant in 2016 (*see* GMO 2014 IRP Update at 12), despite the fact that there is an approximately \$12 million NPVRR benefit to ratepayers from the lower-cost plan. (GMO 2014 IRP Update at 47).

As Sierra Club commented last year, GMO's explanation falls short of the standard in the IRP rules that "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.” 4 CSR 240-22.010(2)(C). GMO’s desire to own its own capacity benefits GMO’s shareholders, but it does not benefit ratepayers if that capacity has a higher revenue requirement than market purchases. This year, GMO did not even invoke of the risk of rising market prices as it did in last year’s filing. At any rate, Sierra Club has already explained that that risk alone is an inadequate justification. There is always a risk that market prices will be higher than a company’s projections; there is also a risk that they will be lower than the company’s projections. If anything, GMO has done even less this year to describe and document why hedging against the risk of rising prices justifies choosing a resource plan that its own modeling shows will be more expensive for ratepayers.

At a minimum, GMO should have provided specific evidence to justify its implied position that market prices are more likely to be higher than its modeling projects than lower, but the Company did not do so here. GMO’s failure to describe and document its evaluation of these tradeoffs renders its selection of Plan ACGGA over Plan ABDGA deficient under 4 CSR 240-22.010(2)(C). Moreover, GMO’s repeated reliance on a mere preference to own capacity to justify a plan its own modeling predicts will result in higher costs to ratepayers evidences a disregard for the utility’s duty to “provide the public with energy services [. . .] at just and reasonable rates.” 4 CSR 240-22.010(2); (*see also* GMO 2014 IRP Update at 12) (“GMO prefers to operate Lake Road 4/6 on natural gas/fuel oil for the years 2016 through 2018, retiring the unit in 2019.”). It is clear that GMO will only correct this deficiency in response to an order from the Commission specifically directing the Company to describe and document, in greater detail, the process and rationale behind any decision to select a plan that is not the least-cost plan

in the 2015 triennial compliance filing. Sierra Club respectfully requests that the Commission issue such an order.

## **II. GMO Should Evaluate Whether Additional Cost-Effective Wind PPAs Could Meet Energy Demands.**

GMO's 2014 IRP Update does not appear to sufficiently evaluate the possibility of supplementing its supply-side resources with additional renewables such as low-cost wind PPAs. This Commission's rules specify that "renewable energy resources on the utility-side of the meter, including a wide variety of renewable generation technologies" are supply-side resources and "shall be considered as supply-side resource options." CSR 240-22.040(1). GMO is required to "collect generic cost and performance information sufficient to *fairly analyze*" renewable supply-side resource additions. CSR 240-22.040(1) (emphasis added). Instead, GMO considered only two levels of wind additions and adopted arbitrary assumptions that inflated the projected cost of the resource. For example, GMO assumed ownership when calculating its All-In \$/MWh cost for wind generation. (GMO 2014 IRP Update at 72). This assumption probably disadvantages wind resources, given that GMO rejected options that included ownership during its recent RFP process for additional wind. GMO further limited its evaluation of wind resources by modeling only one plan that included wind generation greater than the minimum required to meet RPS standards.<sup>2</sup> GMO selected a combination of this plan, ABDGW, and the preferred plan, ACGGA, as a contingency resource plan. (GMO 2014 IRP Update at 94). This was because even under GMO's questionable assumptions about the cost of wind energy, adding

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<sup>2</sup> GMO has executed a PPA for a 200 MW wind facility in Kansas that is scheduled to begin operating by December 2015. (GMO 2014 IRP Update at 97). Only one of the plans GMO modeled would add any other wind during the 20-year planning period. (GMO IRP Update at 41-45, Tables 25-29). For solar, all plans modeled would add 10 MW in 2018, 6 MW in 2021, and 3 MW in 2023. *Id.*

wind in excess of RPS standards would lower the NPVRR of the Preferred Plan in Mid or High Gas, High CO<sub>2</sub> Price Scenarios. *Id.*

In addition to selecting supply-side resources to meet *capacity* needs, GMO should consider whether renewable PPAs represent low-risk, low-cost options for meeting its customers' *energy* demands. As GMO's own experience demonstrates, long-term wind PPAs can secure energy at competitive prices.<sup>3</sup> When the wind is blowing and the wind energy delivered is the least-cost option, GMO can either temporarily ramp down its coal and gas generation or sell any excess energy off-system. Either option could be a boon to GMO's ratepayers, who would benefit from the resulting decreased fuel and environmental compliance costs and/or from the value of the sales. These effects might also reduce the NPVRR of a given plan.

Utilities and regulators in other jurisdictions have recognized that wind PPAs can provide advantages to ratepayers even when their utility has no need for increased capacity. One example is Alabama Power, which entered into a 20-year, 202 MW wind PPA in September 2011. As the Company explained at the time of the purchase, "the wind power will cost less than its avoided cost and would not increase retail rates. More stringent environmental regulations, rising fuel costs and other factors would likely increase Alabama Power's avoided costs over time [. . .] making the wind PPA an increasingly better deal for customers."<sup>4</sup> Alabama Power expects the 2011 PPA and another wind PPA executed in 2012, totaling to 404 MW, to displace

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<sup>3</sup> See GMO Notification of Preferred Resource Plan Change, Case No. EO-2012-0324, Ex. A at 5-6 (Jan. 17, 2014).

<sup>4</sup> Platts, *State Regulators OK Alabama Power 202-MW Wind PPA* (Sept. 8, 2011), available at: <http://www.tradewindenergy.com/WorkArea/showcontent.aspx?id=2056>.

higher-cost energy that the utility would otherwise produce using other resources.<sup>5</sup> A second example is Georgia Power, which applied to the Georgia Public Service Commission (“GPSC”) in November 2013 to certify two wind PPAs totaling 250 MW. In that certification proceeding, GPSC Public Interest Advocacy Staff concluded that these PPAs represent an extraordinary advantage to ratepayers despite Georgia Power having no need to add capacity for the first five years of the PPA period, in part because they were priced below the Company’s avoided cost.<sup>6</sup>

GMO should model resource plans that incorporate a variety of levels of renewables to supply energy in addition to existing supply-side resources that meet GMO’s capacity needs. When wind is anticipated to be available, models should assume either: 1) decreased generation from other resources, such as the Company’s coal and gas units – and therefore, decreased fuel and compliance costs – and/or 2) increased off-system sales. Two plans for additional wind is too few to model, given that wind prices are increasingly competitive and do not vary with the price of fuel.<sup>7</sup> Furthermore, GMO should develop realistic assumptions for the cost of wind in order to fairly analyze this resource.

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<sup>5</sup> North American Wind Power, *Alabama Utility Begins Receiving Power From Oklahoma Wind Project* (Dec. 17, 2012), *available at*:

[http://www.nawindpower.com/e107\\_plugins/content/content.php?content.10833](http://www.nawindpower.com/e107_plugins/content/content.php?content.10833).

<sup>6</sup> Staff Direct Testimony of Jamie Barber and Carolyn Gilbert, Docket No. 37854 at 14-15 (Mar. 28, 2014).

<sup>7</sup> Sierra Club highlighted GMO’s limited choice of plans as a deficiency before, with respect to DSM. GMO’s inapposite response was that it has “evaluated 22 ARPs alternatives varying DSM levels, retirement units, timing of retirement units, types of generation additions, and amounts of generation additions.” (GMO 2014 IRP Update at 70). GMO misunderstands Sierra Club’s comment, which was directed to the variety of plans modeled, rather than the quantity. If GMO modeled 100 plans but inappropriately restricted the makeup of those plans, the same problem would persist. For example, while GMO modeled one plan, AIDGA, that would retire Sibley Unit 3 for the 2014 IRP Update, it only evaluated a single option to replace the capacity lost: 579 MW of combustion turbine generation. *Id.* at 44. The fact that GMO projects plan AIDGA would be more costly than the preferred plan does not mean that all plans retiring Sibley Unit 3 would be more costly. *Id.* at 70.

### **III. GMO Must Consider Distributed Generation Technologies As Candidate Resource Options.**

This Commission's rules explicitly require GMO to analyze distributed generation technologies during the IRP process: "supply-side candidate resource options that the utility passes on for further evaluation in the integration process shall represent a wide variety of supply-side resource options with diverse fuel and generation technologies, including a wide range of [ . . . ] technologies for distributed generation." 4 CSR 240-22.040(4). GMO is required to analyze "candidate resource options" more thoroughly than other potential resource options, and to include them in one or more alternative resource plans. *See* 4 CSR 240-22.040; 4 CSR 240-22.020(3). Yet, for at least the past three years, GMO has omitted distributed generation technologies from its list of supply-side candidate resource options during the IRP and annual update processes.<sup>8</sup> The Commission should order GMO to comply with 4 CSR 240-22.040(4) in its 2015 triennial compliance filing by evaluating a range of distributed generation technologies and analyzing whether programs to support distributed generation could lower the NPVRR for ratepayers.

### **IV. GMO Should Identify Off-System Sales Revenue as a Critical Uncertain Factor and Begin Reporting It in Future IRP Filings.**

In comments on GMO's 2013 Annual Update Report, Sierra Club expressed its concern that the Company had not properly disclosed its assumptions about the amount and allocation of off-system sales revenue during the IRP process. *See* Comments of Sierra Club, Case No. EO-2013-0538 at 10-11 (Aug. 21, 2013). To some extent, GMO clarified its approach to allocation of off-system sales revenue in the 2014 Annual Update Report. (*See* GMO 2014 IRP Update at

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<sup>8</sup> In the 2012 triennial integrated resource plan filing, Case No. EO-2012-0324, the only candidate resource options GMO selected for further evaluation were coal, nuclear, combined cycle, combustion turbine, centralized wind, centralized solar, conversions of existing resources, and retrofits of existing resources. (GMO 2012 IRP at Volume 4, Table 15, p. 40).

71). However, it is crucial that GMO continue to report the *amount* of off-system sales that its model projects for each alternative resource plan that the Company evaluates. GMO's selection of a preferred resource plan relies heavily on its continued ability to generate significant off-system sales revenue from its aging coal-fired generating fleet. This significantly increases ratepayers' exposure to the risks associated with coal as a resource, and it compounds the seriousness of deficiencies in GMO's IRP analysis that cause the Company to undervalue renewable energy resources, such as long-term wind PPAs, that do not entail similar risks.

In light of the critical role that off-system sales revenue plays in the performance of GMO's preferred resource plan, in the Company's 2015 triennial filing and in any future IRP analysis, the Company should identify off-system sales revenue as a critical uncertain factor under 4 CSR 240-22.060(5) and track it explicitly in its modeling runs. This would then require GMO to "describe and document its assessment of the impacts and interrelationships of [off-system sales revenue] on the expected performance of each of [its] alternative resource plans . . . and analyze the risks associated with [OSS revenue under different] alternative resource plans." 4 CSR 240-22.060(6). In light of the major shifts in energy markets in recent years – due to a substantial decrease in current and projected future natural gas prices, increasing environmental compliance costs and risks for coal-fired generation, and the increasing competitiveness of renewable resources – GMO cannot continue to assume that its aging coal-fired power plants will return to the levels of profitability through off-system sales that the Company may have enjoyed in previous years. The Company must instead begin explicitly evaluating off-system sales revenue as an uncertain factor in the performance of its alternative resource plans in order to address in the IRP process its declining ability to generate off-system sales revenue from its aging coal-fired power plants.



**V. GMO Should Account for Developments Impacting Environmental Compliance Costs.**

With a host of contemporary factors driving coal unit retirements in increasing numbers, prudent resource planning demands a comprehensive, realistic and forward-looking assessment of the economic viability of GMO's Sibley plant, as well as its Lake Road 4/6 plant, if GMO chooses a plan in which it is not timely retired or converted. Therefore, GMO 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.

**a. Greenhouse Gas Regulations**

On June 1, 2014, EPA is scheduled to propose new standards to regulate greenhouse gas emissions from existing coal-fired power plants under Section 111(d) of the Clean Air Act.<sup>9</sup> GMO should consider the impacts of those standards in its IRP analysis for the 2015 triennial compliance filing.

**b. CSAPR**

On April 29, 2014, after GMO filed its 2014 Annual Update Report, the Supreme Court reinstated U.S. EPA's Cross State Air Pollution Rule ("CSAPR"). *See EPA v. EME Homer City, L.P.*, No. 12-1182, Slip Op. Last year, Sierra Club commented that GMO's preferred plan was "highly vulnerable to the possible reinstatement of" CSAPR, which at that time was still being considered by the Supreme Court. CSAPR restricts sulfur dioxide ("SO<sub>2</sub>") and nitrogen oxide ("NO<sub>x</sub>") emissions from power plants due to their impacts on air quality in downwind states. Comments of Sierra Club, Case No. EO-2013-0538 at 7-8 (Aug. 21, 2013). In the 2014 Annual Update Report, GMO responded as follows:

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<sup>9</sup> *See* Presidential Memorandum: Power Sector Carbon Pollution Standards (June 25, 2013), *available at*: <http://www.whitehouse.gov/the-press-office/2013/06/25/presidential-memorandum-power-sector-carbon-pollution-standards>.

In the event the rule is reinstated in part or whole, the Company will comply through a combination of trading allowances within or outside its system in addition to changes in operations as necessary. Due to the significant amount of announced coal unit retirements and reduced generation caused by [Mercury and Air Toxics Standards rule] compliance and the availability and economics of natural gas generation, it is anticipated adequate CSAPR allowances will likely be available to address any allowance trading by the Company for any shortfalls.

(GMO 2014 IRP Update at 71). With this response, GMO recites compliance options and offers vague reassurances, but does not attempt to quantify the cost of complying with the rule. The Commission should order GMO to estimate this cost and incorporate it into the 2015 triennial compliance filing as a probable environmental cost of coal-fired power from the Sibley plant, as well as the Lake Road 4/6 plant, if GMO chooses a plan in which it is not timely retired or converted.

## **VI. Conclusion and Remedies**

For the reasons set forth above, and in light of the fact that GMO has failed to produce a compliant IRP during this entire three-year cycle, Sierra Club respectfully requests that the Commission issue an order requiring GMO to address the issues and deficiencies identified above in its 2015 triennial compliance filing.

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Respectfully submitted,

/s/ Thomas Cmar  
Thomas Cmar  
Staff Attorney  
Earthjustice  
5042 N. Leavitt St., Ste. 1  
Chicago, IL 60625  
(312) 257-9338  
tcmar@earthjustice.org

/s/ Jill Tauber  
Jill Tauber  
Earthjustice  
1625 Massachusetts Ave. NW, Ste. 702

Washington, DC 20036  
(202) 745-5211  
jtauber@earthjustice.org

/s/ Henry Robertson  
Henry Robertson  
Staff Attorney  
Great Rivers Environmental Law Center  
319 No. Fourth St., Ste. 800A  
St. Louis, MO 63102  
(314) 231-4181  
hrobertson@greatriverslaw.org

*Attorneys for Sierra Club*

### **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 21st day of May, 2014, to all counsel of record.

/s/ Thomas Cmar  
Thomas Cmar