BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In re: Union Electric Company's 2014 Utility Resource Filing Pursuant to 4 CSR 240 – Chapter 22	)))	Case No. EO-2015-0084

SIERRA CLUB RESPONSE TO AMEREN MISSOURI'S MAY 1 AND JUNE 22, 2015 FILINGS

Ameren Missouri ("Ameren" or the "Company") filed its 2014 Integrated Resource Plan ("IRP") on October 1, 2014. On March 2, 2015, Sierra Club filed comments on Ameren's IRP. On May 1, 2015, Ameren filed both a response to stakeholders' alleged deficiencies and concerns regarding the Company's IRP, as well as a Joint Agreement where the Company agreed to discuss, in a supplemental filing, its consideration of the need for specific environmental controls at its existing coal-fired generating units. On May 5, 2015, the Commission issued an *Order Directing Filing* of any comments related to Ameren or any other party's May 1, 2015 pleadings by July 1, 2015. On May 29, 2015, Ameren submitted its Supplemental Filing, to which Sierra Club responded on June 12, 2015. On June 22, Ameren filed a response to Sierra Club's June 12 filing. Sierra Club, by and through counsel, hereby submits the attached response to both Ameren Missouri's May 1 and June 22, 2015 filings.

One of the core requirements of the Commission's IRP rules, 4 CSR 240-22.040(1), directs Ameren to "collect generic cost and performance information sufficient to fairly analyze and compare each … potential supply-side resource option[], including … probable environmental costs …."[1] The rules further explain that Ameren must "describe and document"

[1] "Probable environmental cost" is defined as the "expected cost to the utility of complying with new or additional environmental legal mandates, taxes, or other requirements that, in the judgment of the utility decision-makers, may be imposed at some point within the planning horizon which would result in compliance costs that could have a significant impact on utility rates." 4 CSR 240-22.020(47).

its analysis of each supply-side resource option.[2] Here, Ameren's charge to "describe" means that the Company's approach "shall be written in a manner that would allow a stakeholder to thoroughly assess the utility's resource acquisition strategy and each of its components."[3,4]

Despite this straightforward directive, Ameren (1) provided a confounding carbon regulation analysis, and (2) took several iterations of filings before it provided to stakeholders even the most basic explanation of its assumptions regarding pollution control retrofits for its coal-fired generating fleet. Even after responding to comments and supplementing its filings multiple times, the Company continues to muddy the waters and attempt to argue away its obligations, rather than simply explaining its assumptions to stakeholders in "a manner that would allow a stakeholder to thoroughly assess the utility's resource acquisition strategy and each of its components," as the IRP rules require.

The premise behind describing and documenting the Company's assumptions is one of transparency, information sharing, and accountability between and among the Company, the Commission, and stakeholders. Accordingly, Ameren's failure to describe and document its assumptions is a fatal flaw in the IRP process. Rather than rehash pages of comments already submitted, Sierra Club points to two specific instances where Ameren's 2014 IRP – even as

[2] 4 CSR 240-22.040(2).

[3] 4 CSR 240-22.020(14).

[4] Further, Ameren's supply-side analysis "shall identify a list of environmental pollutants for which, in the judgment of the utility decision-makers, legal mandates may be imposed during the planning horizon which would result in compliance costs that could significantly impact utility rates. The utility shall specify a subjective probability that represents utility decision-maker's judgment of the likelihood that legal mandates requiring additional levels of mitigation will be imposed at some point within the planning horizon. The utility, based on these probabilities, shall calculate an expected mitigation cost for each identified pollutant." 4 CSR 240-22.040(2)(B).

supplemented by Ameren through responses to comments and other filings – still fundamentally fails to comply with 4 CSR 240-22.040.

If Corrected, Ameren's Internally Inconsistent Carbon Analysis Would Lead to a Different Preferred Plan

Ameren freely acknowledges that the preferred resource plan modeled in its IRP is not compliant with the U.S. Environmental Protection Agency's ("EPA") Clean Power Plan as proposed.[5] Setting this glaring omission aside, Ameren states in its IRP:

> While we cannot predict the exact effect of these new [carbon emission] standards and rules until such time that they are fully enacted, it is reasonable to assume that they will:
>
> (1) likely discourage investment in new coal fired generation resources, if not virtually eliminate coal fired generation as a viable new resource option until carbon capture and storage technology is demonstrated as a cost-effective technology.
> (2) **increase the relative cost of existing fossil fuel-fired resources (and coal-fired resources in particular)**, and as a consequence impact the market price of energy, though we do not know to what extent either is impacted, individually or in relationship to each other or the cost of alternatives.[6]

Unfortunately, Ameren's IRP modeled this increase in the relative cost with a mere 15% probability that it would occur for Ameren's own coal-fired generating units,[7] which is strikingly at odds with the Company's written assumptions. In reality, Ameren effectively assumes an 85% chance of no carbon cost for its coal-fired generating units—with Ameren assuming that all of the costs of those regulations will be borne by other companies choosing to retire their

[5] *See* Dkt. No. 1, Ameren 2014 IRP, Chapter 10, p.18 (explaining Figure 10.4 by stating that "Ameren is advocating for changes to the EPA's proposed rules that will allow Ameren ... to execute its Preferred Resource Plan ... over a slightly longer period of time.").

[6] Dkt No. 1, Chapter. 5, p. 9.

[7] Dkt. No. 45, Comments on Ameren Missouri's 2014 Integrated Resource Plan (IRP), p. 5.

generating units.[8] Even more perplexing, Ameren's witness Matt Michels recently testified that Labadie, a coal-fired power plant that emits millions of tons of carbon dioxide annually, is likely to *benefit* from greenhouse gas regulation under this scenario because Ameren assumes that greenhouse gas regulations will cause electricity prices to go up while its own generating units will not have to bear additional costs.[9] In other words, what the Company states it assumes—that greenhouse gas regulations will increase the relative cost of generating electricity at coal-fired units—and what it actually assumes via modeling contradict each other. Moreover, Ameren has provided no quantitative evidence to support its assumption that, under the Clean Power Plan or any other potential greenhouse gas regulation, the Company's generating units will not have to bear any direct costs. Rather, Ameren has simply baked this assumption into its modeling, without providing any support for it other than a general statement that it represents the Company's judgment.[10] And while 4 CSR 240-22.040(2)(B) directs Ameren to "specify a subjective probability," the Company's analysis must still be reasonable.

This is not the only inconsistency in Ameren's greenhouse gas assumptions. Within the 15% chance of a carbon price that Ameren modeled, the Company's "high cost" scenario—utilizing a carbon price of $53/ton beginning in 2025—constitutes a mere 3% probability of occurrence[11] despite Ameren's assumption that "costs to comply with EPA's proposed Clean Power Plan [will] be higher than $53/ton."[12] Thus, Ameren failed to model anything higher than

[8] Case No. ER-2014-0258, tr. p. 1938, ll. 1-12.

[9] Case No. ER-2014-0258, tr. p. 1938, l. 13—p. 1939, l. 2.

[10] Case No. ER-2014-0258, tr. p. 1939, ll. 3-13.

[11] Dkt. No. 45, Comments on Ameren Missouri's 2014 Integrated Resource Plan (IRP), p. 5.

[12] Dkt. No. 1, Chapter 1, p. 11.

$53/ton even though it assumes that the Clean Power Plan will require a price higher than $53/ton. And even the $53/ton carbon price is only assumed by Ameren to have a 3% probability of occurring, despite the fact that the Clean Power Plan is due to be finalized by EPA later this summer.[13]

Critically, these contradictions are not simply a difference of opinion between how Sierra Club would run Ameren's model versus how Ameren ran its model. As Dr. Hausman explains in Sierra Club's March 2, 2015 comments, had Ameren properly utilized its assumptions in its IRP analysis, "retirement of Labadie would have been the preferred option on a PVRR basis."[14] This change could save ratepayers hundreds of millions of dollars in avoided capital expenditures at Labadie.

Ameren's Lack of Transparency Violates IRP Rules

In its June 22 filing, Ameren states:

> It should be noted that Sierra Club's Response does not argue that Ameren Missouri did not do the analysis agreed upon in the Joint Filing. Rather, it argues that the analysis should have been done differently; more specifically, that the Sierra Club would have completed the analysis differently. That is not a deficiency. A deficiency occurs when Ameren Missouri fails to do something required by the rules. The Sierra Club's argument is, at best, a concern under the IRP regulations.[15]

This statement from Ameren does not accurately reflect Sierra Club's position. As Sierra Club explained in its June 12 comments in this docket, Ameren had not at that time conducted the analysis agreed upon in the Joint Filing. The Joint Filing stated, in pertinent part:

[13]EPA, Clean Power Plan Proposed Rule, *available at* http://www2.epa.gov/carbon-pollution-standards/clean-power-plan-proposed-rule.

[14] Dkt. No. 45, Comments on Ameren Missouri's 2014 Integrated Resource Plan (IRP), p. 8.

[15] Dkt. No. 59, p. 2, ¶ 8.

> Ameren Missouri's coal plant retrofit and retirement analysis is deficient because it inadequately considers the likelihood of increasingly stringent environmental regulations directly affecting the Company's fleet. (SC Deficiency 2) – Ameren Missouri shall include in a supplemental filing to be made no later than May 29, 2015, a discussion of its consideration of flue gas desulfurization (FGD) and selective catalytic reduction (SCR) retrofits for its existing coal-fired generating fleet. Sierra Club shall file any comments with respect to Ameren Missouri's discussion of FGD and SCR retrofits in its supplemental filing no later than two weeks from the date on which Ameren Missouri makes its supplemental filing. All parties reserve the right to make subsequent comments.[16]

As Sierra Club noted in its June 12 comments, Ameren repeatedly hid the ball when it came to pollution controls needed at Rush Island to control sulfur dioxide ("SO_2") emissions. More pointedly, in four filings over three years, Ameren neglected to mention that the area in which Rush Island resides—a portion of Jefferson County—was first proposed to be, and now is, designated as a one-hour SO_2 NAAQS nonattainment area. The real-world consequence of this designation is that Ameren may need to install hundreds of millions of dollars in pollution controls at Rush Island in the near future. In its June 22 comments, Ameren finally begins to provide an explanation of its assumptions regarding why it believes that Rush Island will not require a scrubber to control SO_2 pollution despite being located in a SO_2 non-attainment area.

Ameren's explanation is far from persuasive, however. For the reasons set forth in Sierra Club's June 12 filing, Sierra Club believes that a likely outcome to the process currently underway between the Missouri Department of Natural Resources ("MDNR") and EPA to bring Jefferson County back into attainment is that Ameren will be forced to comply with SO_2 emission limits at Rush Island that require the plant to either be retrofitted with a scrubber system or retired. There is, at a minimum, an undeniable risk that this could occur if EPA rejects MDNR's current implementation proposal, yet Ameren unreasonably refuses to acknowledge this risk. Ameren's refusal to acknowledge that it may not be successful in resisting these

[16] Dkt. No. 53, p. 3, ¶ 6.a.

additional requirements at Rush Island falls short of the requirements of 4 CSR 240-22.040(2); the Company is simply not being candid with stakeholders and not acknowledging that additional requirements may be imposed.

In addition, in comments filed on March 2 and June 12, Sierra Club observed that Ameren failed to describe and document why it assumes that Sioux will require an SCR in 2020, but neither Labadie nor Rush Island would require the same. Ameren's response is that "[t]his is a very complicated and time-consuming process and the regulatory landscape continues to change and evolve over time."[17] Further, "[a]s information and interpretation of the regulations become more certain, further analysis will be performed to identify the appropriate compliance, including the identification of additional capital investment required to meet the regulation."[18] Ameren's response does not actually resolve Sierra Club's identified deficiency—it merely punts the issue to another day. Ameren has apparently not conducted a proper sensitivity analysis to determine compliance costs for a range of environmental scenarios. If the Company had conducted such an analysis, it would have no problem addressing Sierra Club's identified deficiency.

Ameren's assessment of "probable environmental costs" is an increasingly important component of its planning process, as Ameren plans to spend hundreds of millions of dollars in pollution control retrofits over the next twenty years.[19] Notably, these costs do not contemplate the Clean Power Plan or a scrubber at either or both of the Rush Island units. It is critically important for the utility to disclose its assumptions so that all stakeholders have sufficient

[17] Dkt. No. 59, p. 4, ¶ 11.

[18] Dkt. No. 59, p. 5.

[19] *See* Dkt. No. 1, Chapter 5. Exh. B.

information to evaluate not only the costs to Ameren under its view of the future, but also the real risk that a different future will transpire with different costs.

Ameren's IRP filings fundamentally fail to address the concerns highlighted above and previously described in Sierra Club's comments, rendering the Company's IRP deficient under 4 CSR 240-22.040(2)(B). Accordingly, Sierra Club respectfully requests that the Company agree to prepare, or the Commission order the Company to prepare, a revised triennial IRP filing that corrects the deficiencies identified above and in Sierra Club's comments filed on March 2 and June 12, 2015.

Respectfully submitted,

/s/ Sunil Bector	/s/ Thomas Cmar	/s/ Henry B. Robertson
Sunil Bector	Thomas Cmar	Henry B. Robertson
Admitted Pro Hac Vice	Admitted Pro Hac Vice	Mo. Bar No. 29502
Sierra Club	Earthjustice	Great Rivers Environmental Law Center
85 Second Street, 2nd Floor	1101 Lake Street, Suite 405B	705 Olive Street, Suite 614
San Francisco, CA 94105	Oak Park, IL 60301	St. Louis, MO 63101
415.977.5759 (phone)	312.257.9338 (phone)	314.231.4181 (phone)
415.977.5793 (fax)	212.918.1556 (fax)	314.231.4184 (fax)
sunil.bector@sierraclub.org	tcmar@earthjustice.org	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 electronically mailed to all counsel of record on this 1st day of July, 2015.

/s/ Sunil Bector
Sunil Bector