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

In the Matter of an Investigation of the Cost to	)	
Missouri's Electric Utilities Resulting from	)	File No. EW-2012-0065
Compliance with Federal Environmental Regulations	)	

### RESPONSE COMMENTS OF RENEW MISSOURI AND NRDC

COMES NOW Earth Island Institute d/b/a Renew Missouri ("Renew Missouri"), by and through the undersigned counsel, and offers the below comments in response to the August 25, 2014 comments of Union Electric Company d/b/a Ameren Missouri ("Ameren Missouri") and Peabody Energy Company ("Peabody") in the above case.

### RESPONSE TO COMMENTS OF AMEREN MISSOURI

- 1. At. pg. 14 of its August 25 filing, Ameren Missouri states: "Ameren Missouri's main concern is the cost of the program to our customers." But when asked to describe in detail the most cost-effective way to meet the 21% reduction on its own, Ameren Missouri offers scant details. The one compliance alternative offered by Ameren Missouri involves an extremely expensive scenario that: a) adds unneeded capacity, b) ignores the most cost-effective resource, c) fails to comply with existing Missouri law, d) costs billions of dollars more than alternative scenarios, and finally e) still does not achieve the required reductions by 2030.
- 2. The below Response Comments present a qualitative analysis of Ameren Missouri's proposed 111(d) compliance plan using conservative assumptions to show that several lower-cost alternatives exist in order to achieve the needed reductions. Ameren Missouri has submitted very little information regarding their "Business-as-Usual" scenario or how they arrived at their \$4 billion cost for compliance. Accordingly, we welcome any input regarding the assumptions found in the attached "Exhibit 1 Ameren Compliance Scenarios."

3. Ameren Missouri lays out its proposed compliance scenario on pg. 13 of its August 25 filing:

[O]ne potential path to achieve compliance with the proposed rule as currently written is described in the following sentences. That plan would require *Meramec's* retirement to be accelerated to the end of 2019, 150 MW of additional wind or a comparable amount of nuclear capacity be added, and the addition of new gasfired combined cycle generation to be accelerated from 2034 to 2020 and increased from 600 MW to 1,200 MW. The cost of this "GHG Compliance Plan" would be approximately \$4 billion over the next 20 years above the cost of the "business-asusual" plan we call the "Baseline Transition Plan."

### A. Ameren Missouri's Proposal Fails to Comply with State Law and Fails to Achieve the Needed Reductions

- 4. First, it is important to note that Ameren Missouri's above compliance scenario fails to comply with existing state law. Missouri's Renewable Energy Standard ("RES") requires all investor-owned utilities to acquire 15% of their power from renewable sources by 2021. Section 393.1025-1030, RSMo. Ameren Missouri's proposal would leave the Company with approximately 1.5% renewable energy by 2030, nearly a decade after they were legally required to achieve 15%. (See Exhibit 1) For this reason, Ameren Missouri's proposed compliance path is both unreasonable and illegal.
- 5. Second, Ameren Missouri's proposal, as the Company has described it so far, fails to achieve the required 21% reduction in carbon emissions.<sup>2</sup> Ameren Missouri's proposal would lower the Company's 2012 emissions rate of 1,944 lbs/MWh to a 2030 level of about 1,612 lbs/MWhs. (see Exhibit 1) This is a reduction of about 17%, well short of the needed 21%.

### B. Ameren Missouri's Proposal is More Expensive than Other Compliance Alternatives that Achieve More Reductions

<sup>&</sup>lt;sup>1</sup> This number is based on Ameren Missouri's 2012 generation mix based on available information from EPA Plant Level Data, EIA form 860. This number also excludes any distributed generation that may come online from 2014-2030. We welcome any corrections to this data that Ameren can provide.

<sup>&</sup>lt;sup>2</sup> Again, we welcome information from Ameren that provides sufficient detail to establish that its proposal does indeed result in the required level of emissions reductions.

- 6. Even if we were to accept that Ameren Missouri's proposal was both feasible and legal under state and federal law, the Company is proposing a compliance path that costs far more than other available compliance scenarios while still failing to achieve the needed reductions.
- 7. Exhibit 1 compares Ameren Missouri's proposed scenario for compliance with several other alternative compliance scenarios. Ameren Missouri has asserted that its proposed scenario would impose on customers a price tag of \$4 billion above their business-as-usual plan, while still not achieving the required reductions by 2030.<sup>3</sup> Our analysis shows that, on a levelized cost basis, two alternative compliance scenarios would result in significantly lower marginal costs than Ameren Missouri's high-cost proposed compliance plan. Please refer to Figures 1.a 1.d below for each compliance scenario's generation mix as compared to Ameren Missouri's 2012 generation mix.<sup>4</sup>
- 8. Ameren Missouri's above scenario (Figure 1.b) relies heavily on the addition of new combined cycle natural gas ("NGCC") plants. It envisions an addition of 1,200 MW of new natural gas capacity, despite the fact that building new NGCC plants is among the least cost-effective ways of reducing carbon emissions. Vice President Mike Menne recently admitted to the St. Louis Post-Dispatch that they "don't really need that generation." Furthermore, this scenario poses significant difficulties, as identified on pg. 13 of Ameren Missouri's filing (adding new NGCC capacity before 2020, obtaining capital and permits, securing gas

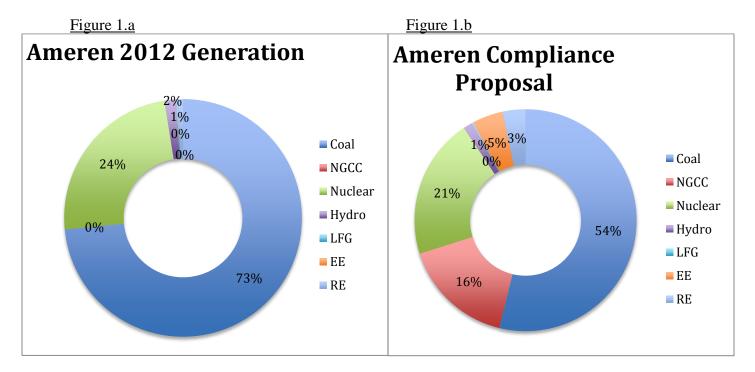
<sup>&</sup>lt;sup>3</sup> See also Ameren Missouri presentation, "EPA's Proposed Greenhouse Gas Rule," submitted in File No. EW-2012-0065 on August 20<sup>th</sup>, 2014, pg. 5-6.

<sup>&</sup>lt;sup>4</sup> Ameren 2012 Generation based on available information in EPA Plant Level Data, EIA form 860.

<sup>&</sup>lt;sup>5</sup> Jacob Barker, "Ameren: 1,200 megawatts of natural gas needed to comply with emissions rules." St. Louis Post-Dispatch, August 18, 2014. <a href="http://www.stltoday.com/business/local/ameren-megawatts-of-natural-gas-needed-to-comply-with-emissions/article\_a7bc950c-1039-581e-9690-7d351de0f00c.html">http://www.stltoday.com/business/local/ameren-megawatts-of-natural-gas-needed-to-comply-with-emissions/article\_a7bc950c-1039-581e-9690-7d351de0f00c.html</a>

transportation contracts and water resources, interconnection studies by MISO, and new transmission lines).

9. Ameren Missouri's proposal would keep the Company's power mix at about 72% fossil fuels by 2030, roughly the same as 2012 levels. (See Figures 1.a and 1.b) Ameren Missouri's proposed scenario would also lock in new sources of carbon-emitting generation that would continue to pollute for generations and take decades for customers to pay off. Meanwhile, far cheaper options for reducing carbon are available to the Company that could actually save its customers money while reducing pollution more effectively and much sooner.

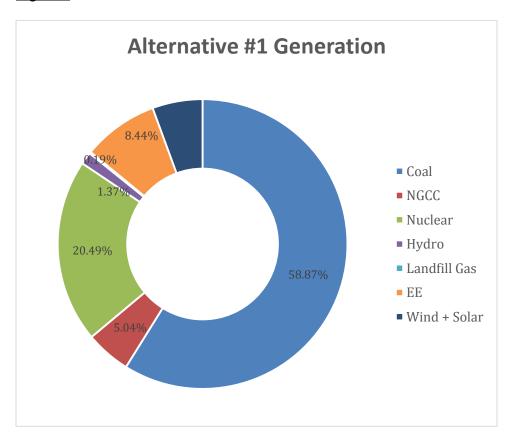


10. The two alternative scenarios proposed below – "Alternative 1" (Figure 2) and "Alternative 2" (Figure 3) – achieve greater reductions and would cost far less than Ameren Missouri's proposal, using conservative levelized-costs-of-energy ("LCOE") assumptions.<sup>6</sup>

<sup>&</sup>lt;sup>6</sup> Our levelized cost assumptions are found in Exhibit 1, cells K54-N63, and are intended as a comparison to Ameren Missouri'. Costs are spread over a 21-year planning horizon (2014-2035). This is in response to Ameren Missouri's Aug. 18, 2014 Presentation, submitted in File No. EW-2012-0065, in which Ameren Missouri claims it could achieve reductions equivalent to the EPA plan (i.e. 21%) at a cost of \$4 billion by 2035 (pg. 5-6). Ameren Missouri has not provided elsewhere how it arrived at the \$4 billion figure.

11. Alternative 1 imagines Ameren Missouri reducing the amount of new NGCC generation to 400 MW. Next, it increases investments in energy efficiency to achieve an 8.44% cumulative demand reduction, a very modest level of efficiency when compared to what is already being achieved across the country. Finally, Alternative 1 increases investment in renewable energy (wind and solar) to total 5.6% the generation mix. Applying conservative levelized costs, this scenario would cost about \$210 million less per year than Ameren Missouri's proposed scenario. (See Exhibit 1)

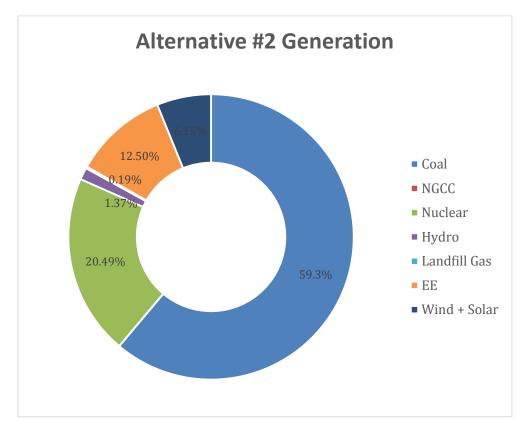
Figure 2



12. Alternative 2 would have Ameren Missouri eliminate all new NGCC generation, and instead increase investments in efficiency to achieve about a 12.5% demand reduction by 2030. This amount of efficient still quite moderate considering the MEEIA goals of 9.9% by 2020 and, and considering ACEEE's estimate that Missouri could save 21% from energy

efficiency by 2030. Alternative 2 also sees Ameren investing in wind and solar to achieve roughly 6.15% renewable energy. Using our LCOE cost assumptions, Alternative 2 would cost approximately \$405 million less per year than Ameren Missouri's proposal, actually saving customers money in the long-term compared to Businesses-as-Usual. Alternative 2 would also reduce carbon emissions by a greater degree than Ameren Missouri's proposal. (See Exhibit 1)



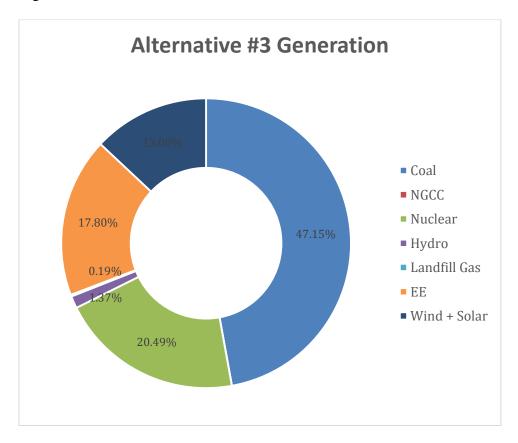


13. The scenario proposed in Ameren Missouri's August 25, 2014 filing is simply more expensive and creates more pollution than alternative scenarios that place even a modest or moderate emphasis on energy efficiency and renewables. There are available ways to comply with Missouri's 21% reduction target that save customers money while reducing carbon pollution. However, Ameren Missouri has not disclosed any analysis of these options, nor has it provided any basis on which to prefer its costlier, more polluting plan.

# C. Ameren Missouri Could Achieve Even More Reductions Sooner by Simply Meeting Targets in Existing State Law

14. A third alternative – "Alternative 3" – reflects how Ameren Missouri could achieve greater reductions simply by complying with targets in existing state law. By meeting Missouri's mandatory RES target (15% renewable energy by 2021) and the voluntary savings target of the Missouri Energy Efficiency Investment Act ("MEEIA") (9.9% by 2020), Ameren Missouri could achieve a 39% emissions reduction by the end of 2020. (See Figure 4) This is accomplished without any new NGCC, and at a cost equal to or less than Ameren Missouri's proposed plan. (See Exhibit 1)<sup>7</sup>

Figure 4



<sup>&</sup>lt;sup>7</sup> These cost assumptions (found in Exhibit 1, cells I67 and N48-49) project an actual amount of renewable energy equal to 13%, assuming some RE is located in-state and takes advantage of the 1.25 multiplier. These assumptions do not include projections for distributed generation installed from 2013-2030, which would only further offset Ameren's compliance costs.

Essentially, Ameren Missouri could achieve its needed reductions ten years early for the same cost as its proposed \$4 billion compliance plan simply by meeting the targets for renewable energy and energy efficiency in existing state law.

### RESPONSE TO COMMENTS OF PEABODY

15. Although Peabody responded to all of the Commission's questions in its August 25, 2014 comments, these Response Comments seek mainly to respond to Peabody's comments regarding the EPA's authority to regulate carbon in the method that has been proposed. Generally, we believe questions of EPA's authority are not appropriate considerations before the Commission. Moreover, EPA's authority to regulate carbon emissions has been upheld by the U.S. Supreme Court several times. However, we offer these comments to rebut several of Peabody's legal conclusions.

#### A. The "Section 112 Exclusion"

- 16. On pg. 5 of its comments, Peabody claims that that the EPA lacks authority to regulate Greenhouse Gases ("GHGs") under Section 111(d) of the Clean Air Act ("CAA").

  Peabody's support for the above proposition is what is commonly referred to as the "Section 112 exclusion," which holds states that the EPA lacks authority to regulate pollutants under Section 111(d) if those pollutants are emitted from a source category which is already regulated under Section 112. GHGs are emitted from coal plants, a source category which is regulated under Section 112. Thus, according to Peabody, EPA lacks authority to regulate GHGs under Section 111(d).
- 17. Peabody's argument relies on the language of Section 111(d) that is found in the U.S. Code. The version of Section 111(d) found in the U.S. Code does not include the full extent of amendments made to Section 111(d) as part of the 1990 Clean Air Act Amendments. Two

slightly differing amendments were passed during the same session: one from the U.S. Senate and one from the U.S. House of Representatives. The version of Section 111(d) found in the U.S. Code only includes the House amendment; the Senate amendment is left out.

- 18. The law signed by the President, which is found in the U.S. Statutes at Large, is controlling and trumps the U.S. Code. The Statutes at Large incorporate both the House and Senate amendments. When viewed together, these two amendments create ambiguity.

  In light of the above mentioned ambiguity, the following reasonable interpretation of the Section 112 exclusion should be used: *Hazardous Air Pollutants listed under Section 112(b) that are emitted from a source category regulated under Section 112 of the Clean Air Act cannot be regulated under Section 111(d)*.
- 19. The above interpretation is reasonable and gives some effect to both the Senate and House amendments. It is not reasonable to give full effect to the House amendment, as Peabody proposes, because a literal reading would prevent the EPA from regulating any air pollutant from a source category which is regulated under Section 112. This result would be entirely inconsistent with Congress' intent in the 1990 Amendments to require the EPA to regulate more substances, and not to eliminate the EPA's ability to regulate large categories of air pollutants. Not to mention, this interpretation would entirely ignore the Senate amendment.
- 20. Peabody's interpretation would also fly in the face of the fact that the EPA has historically regulated non-hazardous air pollutants under Section 111(d), even where those air pollutants were emitted from a source category actually regulated under Section 112. Numerous source categories are regulated under Section 112. Giving full effect to the House Amendment would result in virtually every pollutant being excluded from regulation under Section 111(d).

- 21. Under the above mentioned reasonable interpretation, GHGs emitted from EGUs can be regulated under Section 111(d). Although EGUs are a source category that is regulated under Section 112, GHGs are not a Hazardous Air Pollutant listed under Section 112(b). Therefore, Section 111(d) does not preclude the EPA from establishing guidelines covering GHGs emitted from EGUs.
- 22. The above interpretation, supported by the EPA, is entitled to Chevron deference, a doctrine of statutory interpretation flowing from the case of *Chevron U.S.A.*, *Inc. v. Natural Resources Defense Council Inc.* 467 U.S. 837 (1984). Specifically, Chevron deference guides a reviewing court in examining an administrative agency's interpretation of a statute that it is charged with administering. The first question of Chevron deference is determining whether Congress has directly addressed the interpretative question at issue. If so, the unambiguously expressed intent of Congress must be followed. If unambiguous Congressional intent is not available, the reviewing court essentially must follow the agency's interpretation, so long as it is a reasonable construction of the statute.
- 23. As mentioned above, the Supreme Court has repeatedly affirmed that the CAA grants authority to regulate carbon emissions. In *Massachusetts v. EPA*, the Supreme Court found that greenhouse gases including carbon dioxide "fit well within the CAA's capacious definition of air pollutant." 549 U.S. at 528-529. The court left the decision of whether carbon dioxide emissions constitute human endangerment to the EPA, who have subsequently answered this question in the affirmative. In the 2011 case of *United Air Regulatory Group v. EPA*, the Court reaffirmed that GHGs are indeed "air pollutants" in the general sense that they can be regulated under the Clean Air Act. 684 F. 3d 102.

### B. Peabody's Proposal for PSC Docket to Examine Utilities' Planned Compliance

On pg. 2 of its comments, Peabody states: "The Missouri PSC should open a proceeding to examine utilities' contemplated resource plans concerning 111d compliance." We agree with Peabody's suggestion. The Commission should open a docket in which utilities can submit their contemplated resource plans for 111d compliance. Such a proceeding would allow stakeholders a chance to comment on utilities' proposed compliance plans as well as propose plans of their own. This docket should allow a transparent comparison between alternative compliance scenarios, making it clear to the Commission, stakeholders, and the public which scenarios represent the most cost-effective and prudent ways of achieving the required reductions.

WHEREFORE, Renew Missouri respectfully files these Response Comments regarding the August 25, 2014 comments of Ameren Missouri and Peabody Energy Company.

Respectfully submitted,

|s| Andrew J. Linhares

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ATTORNEY FOR EARTH ISLAND INSTITUTE d/b/a RENEW MISSOURI

### **CERTIFICATE OF SERVICE**

I hereby certify that copies of the foregoing have been served electronically on all counsel of record this 16<sup>th</sup> day of September, 2014.

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