BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Ameren Missouri's	)	
Submission of its 2015 RES Compliance	)	File No. EO-2016-0286
Report and 2016-2018 Compliance Plan.	)	

RESPONSE TO COMMENTS OF PARTIES

COMES NOW Union Electric Company d/b/a Ameren Missouri ("Ameren Missouri" or "Company"), and in response to the comments filed by various parties in this case, respectfully states as follows:

1. On April 15, 2016, Ameren Missouri submitted its Renewable Energy Standard ("RES") Compliance Plan for calendar years 2016 through 2018 ("RES Plan"). At the same time, Ameren Missouri submitted its RES Compliance Report for 2015 ("RES Report"). On June 23, 2016, after discussions and agreement between itself and Staff, Ameren Missouri filed a Supplemental Compliance Report to include items inadvertently omitted and to make a change to the 2015 reconciliation to correct prior unintentional retirements.

2. Comments on Ameren Missouri's RES Plan and RES Report were filed by several parties, including Earth Island Institute d/b/a Renew Missouri ("Renew Missouri"), United For Missouri, Inc. ("UFM") and the Missouri Department of Economic Development – Division of Energy ("DE"). Significantly, neither UFM nor the Missouri Public Service Commission Staff ("Staff") found any deficiencies in the Ameren Missouri's RES Report (as supplemented on June 23, 2016) or in the 2016-2018 RES Plan.

3. On July 6, 2016, the Commission issued an order allowing responses to these Comments to be filed by July 29, 2016. Ameren Missouri will address the Comments of each party individually.

I. RENEW MISSOURI COMMENTS

4. Renew Missouri's Comments repeat several allegations it has made (which Ameren Missouri has answered) in previous Ameren Missouri RES filings. Each of these allegations is addressed in turn.

Replacement of Renewables in Non-Renewable Portfolio

5. Renew Missouri alleges that Ameren Missouri's Retail Rate Impact ("RRI") calculation fails to meet the requirements of 4 CSR 240-20.100(5) because the Company did not, in creating the required portfolios, replace existing renewable generation with non-renewable generation.

6. Renew Missouri's interpretation is of 4 CSR 240-20.100(5) directly contradicts the language of the Commission's rule, with which Ameren Missouri is required to comply when completing its RES Plans and RES Reports. The Commission's RES rules do not require the inclusion of "imaginary" fossil fuel resources to exactly replace renewable energy for purposes of constructing the non-renewable portfolio. The rule requires that the non-renewable portfolio "be determined by adding to the utility's existing generation and purchased power resource portfolio, excluding all renewable resources, *additional* non-renewable resources *sufficient to meet the utility's needs* on a least-cost basis for the next ten (10) years." (Emphasis added.) This language requires the removal of existing renewable resources from the non-renewable portfolio. Ameren Missouri did that – the non-renewable portfolio excludes the costs and benefits of Keokuk, Maryland Heights, O'Fallon, the solar facilities at the Company's offices in St. Louis, and the Pioneer Prairie wind purchased power agreement. The rules only require the addition of non-renewable resources when it is necessary to meet the utility's needs. Ameren Missouri does not need to add resources, even if all of its existing renewable resources disappeared.

7. Ameren Missouri's planning threshold does not call for the addition of resources unless it expects to need 300 MW or more of total capacity resources. This reflects the degree to which the Company expects to be able to rely on the market for available capacity in MISO to ensure that it meets its load and reserve margin obligation requirements. The Company expects to be long on capacity by enough of a margin that even the removal of 150 MW of existing capacity would not trigger the need to add new capacity.

8. The Commission has already recognized that its rule does not require a utility to add resources that are not needed to serve customers. In File No. EX-2014-0352, which is the rulemaking case in which the RES rules were last modified, the Commission addressed a proposal for a template to be used for calculating the non-renewable portfolio. In that case, Ameren Missouri pointed out that the "…proposal would require the inclusion in the non-renewable portfolio of additional non-renewable energy even when that additional energy is not needed to serve customers…" The Commission was concerned that forcing the inclusion of non-renewables when they are not needed would render the RRI meaningless. With that backdrop, the Commission rejected the proposal.[1]

9. Renew Missouri notes that Empire calculates the 1% RRI differently than both Ameren Missouri and KCPL.[2] Ameren Missouri and KCPL's methodologies, however, are consistent with each other. Additionally, the Company has used this methodology (with some modifications) each year since the rules became effective, not just in its RES Plan and RES Report, but across multiple proceedings including its Integrated Resource Plan filings and solar rebate tariff filings. As a part of those proceedings, the Commission has reviewed the RRI

[1] File No. EX-2014-0352, Order of Rulemaking, September 4, 2015, p. 6.

[2] The Company has not studied Empire's calculation to determine what, if any, distinguishing factors may exist; the differences could be as simple as Empire needed additional resources after it removed its renewable resources from its portfolio.

calculation. For example, the Commission indicated that Ameren Missouri would hit the RRI cap (which is a result of the methodology at issue in this case) when it issued the order allowing the Company to cease paying solar rebates once it had paid out the rebate pool dollars. The order states, "…the Commission now expressly finds Ameren has shown it will reach the maximum average retail rate increase by showing it will pay out the $91.9 million cap on solar rebates agreed upon and approved by the Commission in ET-2014-0085." [3] In other words, there is no basis upon which to order Ameren Missouri to change its calculation methodology, while there is precedence for maintaining the existing methodology.

Keokuk as Qualifying Hydropower

10. Renew Missouri argues that Keokuk does not qualify as a renewable resource under the RES because the aggregate size of the facility is larger than the 10 megawatts limit in the RES. This argument, of course, ignores the language of the statute as well as the Commission's and DE's RES rules that implement the statutory language.

11. The statutory definition of renewable reads as follows:

> 393.1025. As used in sections 393.1020 to 393.1030, the following terms mean:
>
> (5) "***Renewable energy resources", electric energy produced from*** wind, solar thermal sources, photovoltaic cells and panels, dedicated crops grown for energy production, cellulosic agricultural residues, plant residues, methane from landfills, from agricultural operations, or from wastewater treatment, thermal depolymerization or pyrolysis for converting waste material to energy, clean and untreated wood such as pallets, ***hydropower (not including pumped storage) that does not require a new diversion or impoundment of water and that has a nameplate rating of ten megawatts or less***, fuel cells using hydrogen produced by one of the above-named renewable energy sources, and other sources of energy not including nuclear that become available after November 4, 2008, and are certified as renewable by rule by the department. (Emphasis added.)

12. 4 CSR 240-20.100, from the Commission's RES rules, defines qualifying hydropower as:

[3] File No. ER-2014-0350, Order Granting Application for Rehearing, p. 1.

(1)(N) Renewable energy resource(s) means electric energy, produced from the following:

…9. ***Hydropower*** (not including pumped storage) that does not require a new diversion or impoundment of water and that **has *generator nameplate ratings of ten (10) megawatts or less***; (Emphasis added.)

`

13. DE's RES rules define qualifying hydropower as:

10 CSR 140-8.010(2)(A)8) provides in pertinent part as follows:

"[**h**]***ydropower***, not including pumped storage, that does not require a new diversion or impoundment of water and that ***each generator has a nameplate rating of ten megawatts (10 MW) or less***." (Emphasis added.)

14. The Commission's RES rules, consistent with the statute, are abundantly clear that it is the *individual generators* (i.e., "generator nameplate ratings") that must be fewer than 10 megawatts. The definition adopted by DE also clearly states that it is the *individual generator* (i.e., "each generator") that must be fewer than 10 megawatts. These rules are consistent with the statutory language which specifically references "a nameplate."

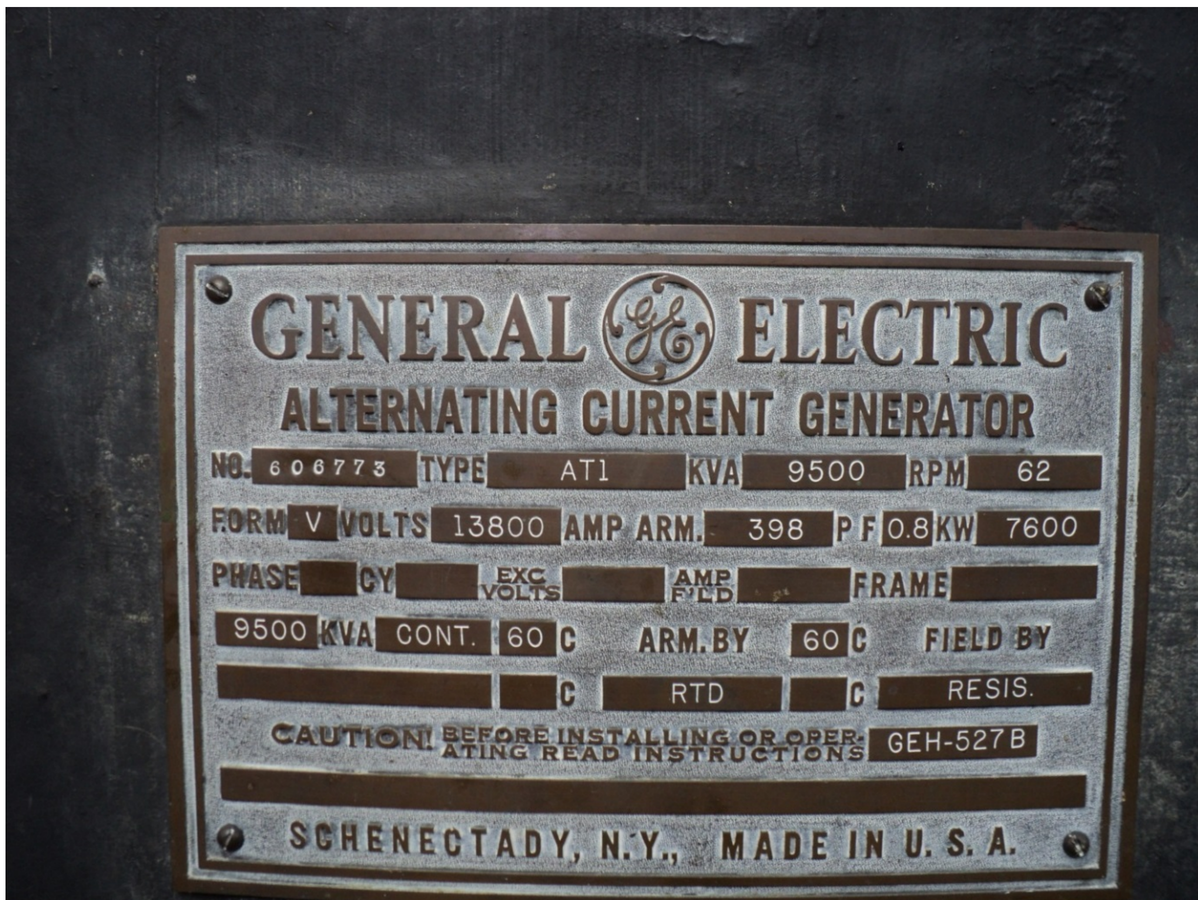
15. With that backdrop, let's examine Renew Missouri's arguments. Renew Missouri points to the fact that Keokuk has a total aggregate output (based on nameplate ratings) of more than 10 megawatts. That statement is true; Keokuk's aggregate output, or the nameplate of *all* generators in the plant *added together*, exceeds 10 megawatts. This argument neglects the fact that neither the statute nor any of the rules implementing the statute references aggregate nameplate capacity. Instead, the statutory definition focuses on energy "produced from hydropower" with "a nameplate" of ten megawatts or less. The rules, correctly, implement the statute by focusing on the size of individual generators.

16. One may ask, what exactly is a nameplate? It is a metal plate, attached to a generator, indicating that unit's megawatt size. The statute and rules refer to the "nameplate

rating" of each generator in a power plant because only generators have nameplate ratings. This is borne out by standard industry usage of the phrase "nameplate rating." For example, the Edison Electric Institute's (EEI) Glossary of Electric Industry Terms defines "nameplate rating" as:

> The full-load continuous rating of a generator prime mover or other electrical equipment under specified conditions as designated by the manufacturers. It is usually indicated on a nameplate attached mechanically to the individual machine or device.[4]

This is picture of an actual nameplate from a generator at Keokuk.



The Keokuk Plant contains 15 separate generators, each of which has a different nameplate attached. Importantly, each generator at Keokuk has a nameplate rating of less than

[4] Edison Electric Institute, Glossary of Electric Industry Terms, April 2005 p. 99.

ten megawatts. Nameplate rating does not, as Renew Missouri asserts, commonly mean an aggregate rating for the entire power plant.

17. Renew Missouri points to a form Ameren Missouri files with the Federal Energy Regulatory Commission ("FERC"), in which hydropower nameplates are reported in total rather than by individual generator. For ease of reference, Ameren Missouri reproduces the chart from the FERC form[5] that Renew Missouri cited in its Comments.

HYDROELECTRIC GENERATING PLANT STATISTICS (Large Plants) Large plants are hydro plants of 10,000 Kw or more of installed capacity (name plate ratings)	
Column C Plant Name:	Keokuk
Total installed cap (Gen name plate Rating in MW)	127.20

This FERC form bolsters Ameren Missouri's point regarding "nameplate rating" made above. First, the FERC form is clearly referencing the entire plant rather than the individual generators, thus the title "Hydroelectric Generating Plant Statistics." Second, and importantly, it does not say "nameplate" or "a nameplate," it says "name plate ratings." That word is plural and indicates the individual nameplate ratings are to be added together. Finally, the FERC form clearly indicates that it is providing the "total installed cap [capacity]." Again, the word "total" means the form is requesting the *aggregate* of all nameplates. This is exactly what Ameren Missouri reported – the *aggregate* of the individual nameplate ratings of the associated generators. Instead of "nameplate rating," 393.1025 could have stated "total nameplate" or "aggregate nameplate" or "nameplates" but it did not. The statute clearly says "a nameplate rating."

[5] FERC Form 1, Electric Utility Annual Report for the year 2012, filed by Union Electric Company.

18. Renew Missouri argues that Ameren Missouri does not assign a value to its Keokuk renewable energy credits[6] (RECs) because hydropower RECs are rarely used for compliance almost anywhere else. Ameren Missouri takes no position on what other state's statutes may or may not require; (and unless they contain the exact language of Missouri statute, those laws are not relevant to this discussion) however, other states' laws do not in inform the Company's decision not to assign a value to Keokuk's RECs. Ameren Missouri does not assign a value to any of the RECs created by any of its owned renewable facilities. In other words, Ameren Missouri does not assign a value to its Keokuk RECs, to its O'Fallon RECs, or to its Maryland Heights Renewable Energy Center (a landfill gas facility) RECs. Renew Missouri's argument reads much complexity into a very simple business decision.

19. Interestingly, if Keokuk did not qualify as a RES renewable resource, Ameren Missouri's maximum spend for RES compliance under the 1% RRI would also go down, resulting in fewer dollars available for renewable resources. That is because 1) the net costs of Keokuk (a non-renewable resource under this hypothetical alternative definition) would be included in the non-renewable portfolio used for the 1% RRI calculation, and 2) the net costs of Keokuk are negative because its market benefits (i.e., the value of its capacity and energy sold into the MISO market) is greater than its total cost of operation. Because the costs of the non-renewable portfolio would be lower, so too would 1% of those costs, which establishes the total cost that can be incurred to comply with the RES. One may wonder whether changing Keokuk's status as a renewable resource (i.e., reclassifying it from renewable to non-renewable) would then "free up" a portion of the available RES compliance costs for additional renewable resources. However, this could not possibly be the case (regardless of whether the net costs of

[6] REC retirement is the mechanism by which Missouri utilities comply with the RES.

Keokuk were positive or negative) since the Commission's rules already prohibit the inclusion of costs for renewable resources owned or under contract prior to October 2010 – accordingly, there are no costs to further exclude from the Company's RES compliance costs if Keokuk is not considered a renewable resource. Renew Missouri, likely without intending to do so, is arguing for a solution that would actually reduce Ameren Missouri's ability to invest in new renewable resources. That is not the outcome desired by Ameren Missouri and, the Company would guess, not the result desired by Renew Missouri.

20. Renew Missouri's objection is actually to the language of the current law, not to Ameren Missouri's method of complying with that law. Renew Missouri may not like the language of the law or of these rules and it may wish that it had drafted different language so that the statutory restriction applies to the entire hydropower facility, but the language is clear and unambiguous when it says, "a nameplate rating."

II. DE COMMENTS

21. DE has raised similar concerns as those raised by Renew Missouri regarding the implementation of the existing law. The Company will not repeat its rebuttal of those points here. DE did raise an additional issue, however, when it stated that Ameren Missouri did not include a comparison of impacts from avoided greenhouse gas emissions. However, because Ameren Missouri operates in the Midcontinent Independent System Operator, Inc. ("MISO") footprint, the addition of renewable resources does not mean that the Company's non-renewables will generate less as part of a RES-compliant portfolio. In fact, there will be no discernable change, meaning no impact (positive or negative) to greenhouse gases.

22. DE also questioned whether the Commission (along with DE) should change its definition of "renewable energy resources." DE's comments implicitly acknowledge that

Ameren Missouri's RES Report and RES Plan meet the definition of that phrase in both DE's own rules and in the Commission's rules. Whether the definition should be changed in the future (and Ameren Missouri believes that it should not, for the reasons stated above), that change cannot happen in this case, and any future change will not impact Ameren Missouri's compliance with the Commission's RES rules as they currently exist and as they existed in 2015.

WHEREFORE, Ameren Missouri respectfully requests the Commission reject the arguments raised by Renew Missouri and the Division of Energy, and accept the Company's RES 2015 Compliance Report and its RES Compliance Plan for 2016-2018.

Respectfully submitted,

UNION ELECTRIC COMPANY,
d/b/a Ameren Missouri

/s/ Wendy K. Tatro
Wendy K. Tatro, # 60261
Director & Assistant General Counsel
Ameren Missouri
1901 Chouteau Avenue
P.O. Box 66149, MC 1310
St. Louis, MO 63103
(314) 554-3484 (phone)
(314) 554-4014 (fax)
AmerenMOService@ameren.com

CERTIFICATE OF SERVICE

The undersigned certifies that a true and correct copy of the foregoing document was sent by electronic transmission, facsimile or email to counsel for parties in this case on this 29th day of July, 2016.

/s/ *Wendy K. Tatro*