

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

In the Matter of the Determination of Special	)	
Contemporary Resource Planning Issues to be	)	
Addressed by Ameren Missouri in its Next	)	File No. EO-2016-0037
Triennial Compliance Filing or Next Annual	)	
Report.	)	

**AMEREN MISSOURI’S COMMENTS ON THE PROPOSED LIST OF  
SPECIAL CONTEMPORARY ISSUES**

COMES NOW Union Electric Company d/b/a Ameren Missouri (Ameren Missouri or Company) and, pursuant to 4 CSR 22-080(4)(B), submits to the Missouri Public Service Commission (Commission) the following Comments on the Proposed List of Special Contemporary Issues:

1. 4 CSR 240-22.080(4) requires Missouri’s electric utility companies to consider and analyze “special contemporary issues” in their Integrated Resource Plan (IRP) triennial compliance filing and in their annual IRP update reports.

2. In September of 2015, the Missouri Department of Economic Development – Division of Energy (DE), Sierra Club and the Missouri Public Service Commission Staff (Staff) each filed a list of proposed special contemporary issues for Ameren Missouri’s next triennial filing.

3. The language of 4 CSR 240-22.080(4) describes the purpose of the special contemporary issues list as “...to ensure that evolving regulatory, economic, financial, environmental, energy, technical, or customer issues are adequately addressed by each utility in its electric resource planning.” In addition, the Rule provides that “[e]ach special contemporary issues list will identify new and evolving issues, but may also include other issues such as

unresolved deficiencies or concerns from the preceding triennial compliance filing.” 4 CSR 240.080(4).

4. Ameren Missouri has reviewed the proposed special contemporary issues lists proposed by the other parties and, as set forth in Attachment A, believes that some of the issues proposed by the parties should be included in the Company’s 2016 annual update while others do not merit treatment as special contemporary issues in that such issues fall outside of the scope contemplated by and in 4 CSR 240.080(4), because they are not “new and evolving” and/or do not pertain to “unresolved deficiencies or concerns” from previous IRP filings.

5. With this in mind, Ameren Missouri submits Attachment A with this pleading, representing its comments on the proposed list of special contemporary issues. Ameren Missouri looks forward to continuing to work with stakeholders to address the issues presented in this docket.

WHEREFORE, Ameren Missouri submits its attached comments on the proposed list of special contemporary issues and requests.

Respectfully Submitted,

/s/ Wendy K. Tatro

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**ATTORNEYS FOR UNION ELECTRIC  
COMPANY d/b/a AMEREN MISSOURI**

**CERTIFICATE OF SERVICE**

I do hereby certify that a true and correct copy of the foregoing document has been hand-delivered, transmitted by e-mail or mailed, First Class, postage prepaid, this 1<sup>st</sup> day of October, 2015, to counsel for all parties on the Commission's service list in this case.

/s/ Wendy K. Tatro

## 2015 Special Contemporary Issues Ameren Missouri Comments

### Introduction and Summary

The Missouri Public Service Commission's ("Commission") Chapter 22 rules governing electric utility resource planning include consideration of special contemporary issues (4 CSR 240-22.080[4]) as ordered by the Commission. 4 CSR 240-22.080(4) characterizes special contemporary issues generally as, "evolving regulatory, economic, financial, environmental, energy, technical, or customer issues," that utilities must adequately address in their resource planning. The Commission has provided additional guidance on the assessment of proposed special contemporary issues in its order in Docket EO-2012-0039. Staff and other parties have filed proposed special contemporary issues pursuant to 22.080(4)(A). Ameren Missouri provides these comments pursuant to 22.080(4)(B), which allows the subject utility and other parties to file comments on the proposals of Commission Staff (Staff) and the other parties no later than October 1, 2015.

In making its decision about what specific issues utilities must address, the Commission must consider the significance and urgency of issues and the time available in which to address them, both individually and in total. As a basic test, such issues must be "special," they must be "contemporary," and they must, in fact, be "issues." This means that the issues must not only meet a threshold of significance in terms of their potential effect on resource decisions, but that the potential effect must also be imminent. With respect to the time requirement for analysis, it must be recognized that in order to support the filing of its IRP Annual Update report in early March,<sup>1</sup> and allow time for the drafting, review and finalization of that report, analysis must be completed by early January. Since the Commission may issue its order on special contemporary issues as late as November 1, the Company may have only two months in which to perform all of its analysis, including special contemporary issues. As stated later in this response, Ameren Missouri already intends to include analysis of compliance with the Clean Power Plan (CPP), a highly complex regulation for which specific compliance requirements will be continually evolving over at least the next year and probably longer. The Commission should carefully consider whether inclusion of certain special contemporary issues provides added value or distracts from the analysis of such important emerging issues.

The Company's review of the suggested special contemporary issues proposed by the parties indicates that some of the issues proposed by the parties merit treatment as special contemporary issues by the Commission. For those issues that are determined by the Commission to be special contemporary issues, it is important to define how the Company will address them. Following is a list of the issues

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<sup>1</sup> 4 CSR 240-22.080(3) requires that utilities hold their annual update workshops on or about April 1 and that their annual update report be filed no later than 20 days prior to the workshop.

suggested by Staff, Missouri Department of Economic Development-Division of Energy (DE) and the Sierra Club and the Company's recommendation for the Commission's determination as to whether each issue should be treated as a special contemporary issue and how the Company would plan to address those issues determined to be special contemporary issues. Ameren Missouri looks forward to the Commission's decision in this matter.

### **Issues Proposed by the Parties and the Company's Assessment**

- **Staff Issue A:** Review the impact of foreseeable emerging energy efficiency technologies throughout the 20-year planning period.

**Ameren Missouri's Assessment and Recommendation:** As part of its most recent DSM potential study, Ameren Missouri has considered emerging energy efficiency technologies and included that analysis to inform the potential for energy efficiency savings in its 2014 IRP filing. Staff has provided no evidence or explanation as to a need to go beyond what is currently analyzed and included in the Company's IRP filing. Therefore, this should not be considered a special contemporary issue.

- **Staff Issue B:** Review the impact of foreseeable emerging energy storage technologies throughout the 20-year planning period.

**Ameren Missouri's Assessment and Recommendation:** As part of its most recent IRP filing, Ameren Missouri has considered and screened emerging storage technologies, and included pumped-storage technology in its evaluation of alternative resource plans. Staff has provided no evidence or explanation as to a need to go beyond what is currently analyzed and included in the Company's IRP filing or why it is urgent to redo such analysis. Therefore, this should not be considered a special contemporary issue.

- **Staff Issue C:** Analyze and document the future capital and operating costs faced by each Ameren Missouri coal-fired generating unit in order to comply with the following environmental standards:
  - (1) Clean Air Act New Source Review provisions;
  - (2) 1-hour Sulfur Dioxide National Ambient Air Quality Standard;
  - (3) National Ambient Air Quality Standards for ozone and fine particulate matter;
  - (4) Cross-State Air Pollution Rule, in the event that the rule is reinstated;
  - (5) Clean Air Interstate Rule;
  - (6) Mercury and Air Toxics Standards;
  - (7) Clean Water Act Section 316(b) Cooling Water Intake Standards;
  - (8) Clean Water Act Steam Electric Effluent Limitation Guidelines;
  - (9) Coal Combustion Waste rules;
  - (10) Clean Air Act Section 111(d) Greenhouse Gas standards for existing sources;

- (11) Clean Air Act Regional Haze requirements; and
- (12) Clean Power Plan.

**Ameren Missouri's Assessment and Recommendation:** As part of its on-going resource planning process, Ameren Missouri assesses the need for mitigation for environmental regulation compliance and updates costs of mitigation as necessary. Ameren Missouri also intends to include analysis of compliance with the Clean Power Plan in its 2016 IRP Annual Update report.

- **Staff Issue D:** Analyze and document the cost of any transmission grid upgrades or additions needed to address transmission grid reliability, stability, or voltage support impacts that could result from the retirement of any existing Ameren Missouri coal-fired generating unit in the time period established in the IRP process.

**Ameren Missouri's Assessment and Recommendation:** The Company has analyzed and included costs of transmission grid upgrades or additions needed to address transmission grid reliability, stability, or voltage support impacts that could result from retirement of its existing coal plants as part of its analysis for the 2014 IRP. The Staff has provided no evidence or explanation as to a need to go beyond what is currently required or analyzed in this regard. Therefore, this should not be considered a special contemporary issue.

- **Staff Issue E:** Analyze and document the range of potential levels of distributed generation in Ameren Missouri's service territory for the 20-year planning horizon and the potential impacts of each identified level of distributed generation, and in particular distributed solar generation, on Ameren Missouri's preferred resource plan. The potential impacts should quantify both the amount of electrical energy the distributed generation is expected to provide to the grid and the amount of electrical energy that the distributed generation customers are expected to consume on site that will offset the amount that Ameren Missouri would normally provide to those customers.

**Ameren Missouri's Assessment and Recommendation:** The Company has analyzed and included an expected level of distributed generation penetration in its load forecast scenarios for its 2014 and will continue to do so for its Annual Update. The Company also has included an analysis of a much higher level of distributed generation proliferation based on the U.S. Department of Energy's Sunshot initiative and documented the results in its 2014 IRP. That analysis showed that the high-distributed generation case could allow for the deferral of combined cycle gas generation that would otherwise be needed in 2034. The Staff has provided no evidence or explanation as to a need to go beyond what is currently required or analyzed in this regard. Therefore, this should not be considered a special contemporary issue.

- **Staff Issue F:** On March 26, 2014, HR 4298, the Grid Reliability and Infrastructure Defense Act, was introduced in the U.S. House to amend the Federal Power Act (“FPA”) in order to protect the bulk power system against physical, cyber, electromagnetic pulse (“EMP”) and other threats and vulnerabilities. HR 2417, the Secure High-Voltage Infrastructure for Electricity from Lethal Damage Act, was previously introduced to protect the bulk power system and electric infrastructure against natural and man-made EMP threats. Summarize the current, near term (next three years) and long term activities and costs that Ameren Missouri is pursuing and/or contemplating to protect the electrical system infrastructure of the Company EMP threats and indicate any potential impact to Ameren Missouri’s preferred resource plan.

**Ameren Missouri’s Assessment and Recommendation:** Physical/cyber security threats and EMP issues are highly sensitive in nature. Consequently, in File No. EW-2013-0011 regarding these issues, the Commission ordered:

“No notifications or reports concerning the matters outlined in Staff’s recommendation shall be made in documentary form, i.e. no physical, digital or electronic reports shall be produced or filed in any docket, workshop, investigation or case, either noncontested or contested; nor shall the information provided to Staff be transmitted electronically to Staff or shared with any other entity.”

Ameren Missouri has decided to update the Commissioners annually on its plans to deal with these issues and has already done so on May 16, 2015. Ameren Missouri does not believe this should be included in any IRP Updates, and therefore, this should not be considered a special contemporary issue.

- **Staff Issue G:** Review the options available to Ameren Missouri for providing customer financing for energy efficiency measures. Discuss Ameren Missouri’s current, near-term (next three years) and long-term activities and plans for providing customer financing for energy efficiency measures.

**Ameren Missouri’s Assessment and Recommendation:** Ameren Missouri would be amenable to include a discussion of possibilities in this area.

- **DE Issue 1:** Describe and document how the preferred plan of the Company’s last and current annual or triennial Integrated Resource Plans (“IRPs”) position the utility for full or partial compliance with the U.S. Environmental Protection Agency’s (“EPA”) Clean Power Plan (“CPP”) under Section 111(d) of the Clean Air Act, as released in final form on August 3, 2015. Please include in this regard:

- a. An evaluation of how renewable energy, energy efficiency and other demand-side resources (including combined heat and power) deployed by the Company after January 1, 2013 could contribute to compliance;
- b. An evaluation of how renewable energy, and energy efficiency and other demand-side resources (including combined heat and power) deployed by the Company after the submission of a final State Implementation Plan could qualify under EPA's proposed Clean Energy Investment Program ("CEIP");
- c. A description of additional investments (in fiscal, capacity, and energy terms by year) which will be required by the Company to meet the targets in the CPP under scenarios including: a statewide rate-based or mass-based emissions goal; a "trading-ready" approach; and participation in the CEIP;
- d. The barriers to achieving these additional investments;
- e. The price of carbon used by the Company in the analyses above; and,
- f. An indication of the Company's preferences regarding various compliance options under a state implementation plan.

**Ameren Missouri's Assessment and Recommendation:** Ameren Missouri acknowledges that how the Company complies with the CPP is a critically important issue and already plans to evaluate compliance with CPP in the 2016 Annual IRP Update. At the same time, Ameren Missouri notes that the process of establishing Missouri's state implementation plan will necessarily involve further discussion among a number of parties, and the development of that plan, as well as details regarding allocations and other specifics, will in turn affect the availability of compliance options, preferences for compliance methods and the overall cost to customers. If the Commission decides any or all of these items (a-f) are special contemporary issues, it should be mindful of the fact that even the preliminary state implementation plan, which is due next September, will be unknown at the time Ameren Missouri files its 2016 IRP Annual Update; as a result, anything stated in that update will be subject to significant change.

- **DE Issue 2:** Describe any assessments of the value of solar ("VOS") performed or used by the Company specifically for its Missouri service territory.

**Ameren Missouri's Assessment and Recommendation:** Ameren Missouri has included a detailed solar analysis for its Missouri service territory in its 2014 IRP and will continue to update the costs and benefits as part of its on-going resource planning. Ameren Missouri has not performed any analysis of a "Value of Solar" construct for customer-owned solar generation and is not aware of any intentions on the part of the Missouri General Assembly, the Commission, or any other state agency to seek to implement such a construct. The DE has provided no evidence or explanation as to a need to go beyond what is currently required or



analyzed in this regard or supporting the notion that this is an emerging issue for Missouri. Therefore, this should not be considered a special contemporary issue.

- **DE Issue 3:** Identify and evaluate the quantifiable non-energy benefits (“NEBs”) which could be included in the Company’s demand-side management portfolio planning process for the purposes of IRP planning. Such NEBs may include, but are not limited to, those considered during working docket EW-2015-0105 (In the Matter of a Working Docket to Review the Commission’s Missouri Energy Efficiency Investment Act (MEEIA) Rules 4 CSR 240-3.163, 4 CSR 240-3.164, 4 CSR 240-20.093 and 4 CSR 240-20.094) and as approved by the Commission for submission to the Secretary of State under EX-2016-0034 (In the Matter of a Proposed Amendment, Rescission, and Consolidation of Commission Rules Relating to Demand-Side Programs). Additionally, evaluate the impact of an NEB percentage “addier” as considered during working docket EW-2015-0105 on the Company’s demand-side management portfolio planning process for the purposes of IRP planning. Discuss the Company’s preference for either a study to determine NEBs or the use of a NEBs percentage addier.

**Ameren Missouri’s Assessment and Recommendation:** Inclusion of NEBs in DSM planning is not a new concept; it has been discussed in the MEEIA rule revision process. Ameren Missouri contends there are better suited forums for discussion of NEBs than an individual utility’s IRP update and, therefore, this should not be considered a special contemporary issue.

- **DE Issue 4:** To the extent not already discussed in the Company’s IRP filing, evaluate the potential load associated with electric vehicles within the Company’s Missouri service territory and discuss how the preferred plan addresses the additional load requirements.

**Ameren Missouri’s Assessment and Recommendation:** Electric vehicle related load has been included in the Company’s load forecast in its IRP filing; it has minimal impact on energy and does not impact capacity planning. This issue is neither new nor urgent. The basic drivers that have an impact on electric vehicle loads have not changed since the Company’s 2014 IRP filing, and the DE has provided no evidence or explanation as to a need to go beyond what is currently required or analyzed in this regard. Therefore, this should not be considered a special contemporary issue.

- **DE Issue 5:** To the extent not already discussed in the Company’s IRP filing, evaluate the need to modernize the utility’s delivery infrastructure in order to ensure and enhance system resiliency, reliability and sustainability.

**Ameren Missouri’s Assessment and Recommendation:** Ameren Missouri continues to assess the age and condition of its delivery infrastructure, and maintains and replaces equipment as

appropriate or necessary. This issue is discussed in detail in Chapter 7 of the 2014 IRP filing. Therefore, this should not be considered a special contemporary issue.

- **Sierra Club Issue 1:** Analyzing and documenting the probable future capital and operating costs faced by each Ameren coal-fired generating unit in order to comply with all existing, pending, or potential environmental standards, including:
  - a. Clean Air Act New Source Review provisions;
  - b. 1-hour Sulfur Dioxide National Ambient Air Quality Standard;
  - c. National Ambient Air Quality Standards for ozone and fine particulate matter;
  - d. Cross-State Air Pollution Rule, including the anticipated 2016 update to the rule to incorporate interstate transport requirements for the 2008 ozone National Ambient Air Quality Standard;
  - e. Mercury and Air Toxics Standards;
  - f. Clean Water Act Section 316(b) Cooling Water Intake Standards;
  - g. Clean Water Act Steam Electric Effluent Limitation Guidelines;
  - h. Coal Combustion Waste rules;
  - i. Clean Air Act Section 111(d) Greenhouse Gas standards for existing sources; and
  - j. Clean Air Act Regional Haze requirements.

**Ameren Missouri's Assessment and Recommendation:** This issue is similar to Staff Issue C. As part of its on-going resource planning process, Ameren Missouri assesses the need for mitigation for environmental regulation compliance and updates costs of mitigation as necessary. As has been mentioned previously, Ameren Missouri also intends to include analysis and discussion of compliance with the Clean Power Plan in its 2016 IRP Annual Update report.

- **Sierra Club Issue 2:** Analyzing and documenting the cost of any transmission grid upgrades or additions needed to address transmission grid reliability, stability, or voltage support impacts that could result from the retirement of any existing Ameren coal-fired generating unit;

**Ameren Missouri's Assessment and Recommendation:** This issue is similar to Staff Issue D. The Company has analyzed and included costs of transmission grid upgrades or additions needed to address transmission grid reliability, stability, or voltage support impacts that could result from retirement of its existing coal plants. The Sierra Club has provided no evidence or explanation as to a need to go beyond what is currently required or analyzed in this regard. Therefore, this should not be considered a special contemporary issue.

- **Sierra Club Issue 3:** Analyzing and documenting on a unit-by-unit basis the net present value revenue requirement of the relative economics of continuing to operate each Ameren coal-fired generating unit versus retiring and replacing each such unit in light of all of the environmental, capital, fuel, and O&M expenses needed to keep each such unit operating as compared to the cost of other demand-side and supply side resources;

**Ameren Missouri's Assessment and Recommendation:** A unit-by-unit analysis is far beyond what is reasonable or necessary in an annual update, especially when the Commission has rejected the very same recommendation by the Sierra Club for the Company's 2014 triennial IRP filing, which, by its nature, must be more detailed than an update. Such an analysis would require arbitrary and detailed allocations of costs for common plant facilities. It would unnecessarily complicate the analysis by introducing countless combinations of retired and operating units for which compliance must be determined largely at the plant and fleet levels. For example, the Clean Power Plan does not seek to impose standards at the generating unit level but rather at the generation portfolio level; the Cross-State Air Pollution Rule imposes standards at the coal fleet level. Finally, Ameren Missouri has already included an evaluation of retirement of each of its four coal-fired energy centers as part of its analysis documents in its 2014 triennial IRP filing. To avoid unnecessary complication or repetition with no added benefit to the analysis, this should not be considered a special contemporary issue.

- **Sierra Club Issue 4:** Analyzing and documenting the technical, maximum achievable, and realistic achievable energy and demand savings from demand-side management, and incorporating each level of savings into Ameren's resource planning process;

**Ameren Missouri's Assessment and Recommendation:** Ameren Missouri's most recent DSM potential study includes analysis of technical, maximum achievable, and realistic achievable energy and demand savings projections as part of Ameren Missouri's standard practice. Ameren Missouri is currently planning for its next potential study to support its 2017 IRP and 2019-2021 MEEIA programs. We expect this new study to be completed in late 2016. Sierra Club has provided no evidence or explanation as to a need to go beyond what is currently required or analyzed in this regard, even if an updated potential study could be completed in just a couple of months. Therefore, this should not be considered a special contemporary issue.

- **Sierra Club Issue 5:** Analyzing and documenting cost and performance information sufficient to fairly analyze and compare utility scale wind and solar resources, including distributed generation, to other supply side alternatives;

**Ameren Missouri's Assessment and Recommendation:** Ameren Missouri commissioned Black and Veatch to do a study on renewable resources and used the results of this study in its 2014 IRP filing. The study included costs and operational characteristics of wind and solar resources. Ameren Missouri also included a discussion of distributed generation and a comparison of customer-owned versus utility-scale solar. The Sierra Club has provided no evidence or explanation as to a need to go beyond what is currently required or analyzed in this regard. Therefore, this should not be considered a special contemporary issue.

- **Sierra Club Issue 6:** Analyzing the impact of emerging energy efficiency technologies throughout the planning period.

**Ameren Missouri's Assessment and Recommendation:** This is similar to Staff Issue A. As part of its most recent DSM potential study, Ameren Missouri has considered emerging energy efficiency technologies and included that analysis to inform the potential for energy efficiency savings in its 2014 IRP filing. The Sierra Club has provided no evidence or explanation as to a need to go beyond what is currently analyzed and included in the Company's IRP filing. Therefore, this should not be considered a special contemporary issue.