

**STATE OF MISSOURI
PUBLIC SERVICE COMMISSION**

At a session of the Public Service Commission held at its office in Jefferson City on the 26th day of October, 2016.

In The Matter of a Determination of Special)
Contemporary Resource Planning Issues to be)
Addressed by Ameren Missouri in its Next)
Triennial Compliance Filing or Next Annual)
Update Report)

File No. EO-2017-0073

**ORDER ESTABLISHING SPECIAL CONTEMPORARY RESOURCE
PLANNING ISSUES**

Issue Date: October 26, 2016

Effective Date: November 1, 2016

A provision in the Commission’s electric utility resource planning rule, 4 CSR 240-22.080(4), requires Missouri’s electric utilities to consider and analyze special contemporary issues in their integrated resource plan (IRP) triennial compliance filings or in their annual IRP update reports. The regulation provides that by September 15 of each year, Staff, Public Counsel, and other interested stakeholders may file suggested issues for consideration. The regulation allows the utilities and other stakeholders until October 1 to file comments regarding the suggested issues. The Commission must then issue an order by November 1 of each year specifying the list of special contemporary issues that each electric utility must address.

The Commission’s Staff, the Missouri Department of Economic Development – Division of Energy, and Brightergy / Natural Resources Defense Council (NRDC) filed suggested special contemporary issues for Union Electric Company d/b/a Ameren Missouri

to analyze and respond to in its 2017 IRP Triennial Compliance Report. Ameren Missouri filed responses to those suggestions. In addition, on October 24, Staff filed a response to questions raised by the Commission at its October 19 agenda meeting. The Commission must now determine what special contemporary issues Ameren Missouri should address.

This is not a contested case. The Commission does not need to hear evidence before reaching a decision and does not need to make findings of fact and conclusions of law in announcing that decision.¹ The Commission's rule gives the Commission broad discretion in determining what issues a utility should be required to address, indicating:

[t]he purpose of the contemporary issues lists is to ensure that evolving regulatory, economic, financial, environmental, energy, technical, or customer issues are adequately addressed by each utility in its electric resource planning. Each 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.²

After considering these factors, the Commission will adopt the list of special contemporary issues set forth in this order. The Commission has chosen these issues because they are of particular interest and importance and should be addressed in Ameren Missouri's IRP filing. Ameren Missouri may already plan to address these issues in its IRP Triennial Compliance Report apart from their designation as special contemporary issues. Or it may believe that it has already adequately addressed some of these issues in a previous IRP filing, or some other filing. If that is so, then it does not need to undertake any additional analysis because of this designation and may simply explain in its upcoming IRP filing exactly where the Commission can find that other analysis. The same approach is acceptable if Ameren Missouri intends to address any of these issues in a future IRP filing.

¹ *State ex rel. Public Counsel v. Public Service Com'n*, 259 S.W.3d 23, 29 (Mo. App. W.D. 2008)

² 4 CSR 240-22.080(4).

In that instance, Ameren Missouri need not undertake duplicative analysis and may instead explain where the Commission will find analysis of the below issues.

THE COMMISSION ORDERS THAT:

1. Ameren Missouri shall analyze and document the following special contemporary issues in its 2017 Triennial Compliance Report:

A. Include the following as uncertain factors that may be critical to the performance of alternative resource plans in accordance with 4 CSR 240-22.060(5)(M):

- (1) Foreseeable emerging energy efficiency technologies;
- (2) Foreseeable energy storage technologies; and
- (3) Foreseeable distributed generation, including but not limited to distributed solar generation, combined heat and power (CHP), and micro-grid formation.

B. Document Ameren Missouri's most recent economic analysis for its system-wide implementation of AMI meters. Provide projected implementation dates and annual budget for AMI implementation and include the capital and operating cost impacts in the integrated resource analysis.

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) Mercury and Air Toxics Standards;

- (6) Clean Water Act Section 316(b) Cooling Water Intake Standards;
- (7) Clean Water Act Steam Electric Effluent Limitation Guidelines;
- (8) Coal Combustion Waste rules;
- (9) Clean Air Act Section 111(d) Greenhouse Gas standards for existing sources;
- (10) Clean Air Act Regional Haze requirements; and
- (11) Clean Power Plan.

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.

E. Develop and analyze at least one alternative resource plan which accelerates the retirement of the Meramec generating plant and, if necessary, additional older generating units such that Ameren Missouri's capacity position after meeting all MISO reserve requirements is less than 10% in each year of the 20-year planning horizon.

F. Analyze and document the impact of electric vehicle usage for the 20-year planning period upon the high-case load forecasts when complying with 4 CSR 240-22.060(5)(A).

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.

H. Describe and document how the preferred plan of the Company's Integrated Resource Plans (IRPs) positions 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, assuming that the rule is upheld by the courts in its current form, except as compliance timelines may need to be modified as a result of the delay in implementation resulting from the U.S. Supreme Court's stay. Please include in this regard:

- (1) Qualitative and quantitative evaluations 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;
- (2) Qualitative and quantitative evaluations of how renewable energy, 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);
- (3) A description and quantification 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 a trading-ready "mass-based" approach, with and without participation in the CEIP;
- (4) Qualitative and quantitative descriptions of the barriers to achieving these additional investments;
- (5) The price of carbon used by the Company in the analyses above and a justification for this price;
- (6) A description and explanation of the Company's preferences regarding specific compliance options under a state implementation plan; and

- (7) A description of all meetings, analyses, or other efforts made towards preparation for compliance with the CPP (and CEIP, as applicable).

To the extent that any uncertainty is involved in determining compliance pathways under the CPP (and CEIP, as applicable) based on the scenarios provided above, please describe and document the Company's choices under the most probable compliance scenarios, with an explanation of why the Company believes these scenarios are the most probable.

- I. Evaluate, describe, and document the feasibility, cost-reduction potential, and potential benefits of joint DSM programs, marketing, and outreach with water utilities.

- J. Describe, document, and evaluate potential DSM programs which could address the needs of customers that might otherwise "opt out" of participation in MEEIA.

- K. Evaluate the potential demand and energy load associated with electric vehicles within the Company's Missouri service territory, discuss how the preferred plan addresses the additional demand and energy load requirements, and evaluate potential means for shifting the additional demand and energy load to off-peak periods. Describe all current and planned electric vehicle initiatives undertaken by the Company.

- L. Describe and document the roles which energy storage and conservation voltage reductions could play in the Company's system planning, particularly with regards to DSM and distributed energy resources.

- M. Evaluate the need to upgrade and enhance the utility's delivery infrastructure in order to ensure and advance system resiliency, reliability and sustainability.

- N. Separately describe and document how the utility's investments in grid modernization, DSM (as evaluated in the current or most recent IRP) and renewable

energy will ensure that the public interest is adequately served and that other policy objectives of the state are met (see 4 CSR 240-22.010).

O. Describe and document how the utility's standby rates, cogeneration tariffs, and interconnection standards facilitate the development of customer-owned distributed generation resources and microgrids.

P. Study feasibility of providing all customers with interval meter data. Review the options available to provide customers with real-time, building level data, sub-meter, line and device level data.

Q. Review plans to make Time of Use rates available to all customers.

R. Discuss plans to increase deployment of distributed generation resources, including, but not limited to, net metering limitations, interconnection procedures, and billing practices for solar customers.

2. This order shall become effective on November 1, 2016.

BY THE COMMISSION



A handwritten signature in black ink that reads "Morris L. Woodruff".

Morris L. Woodruff
Secretary

Hall, Chm., Stoll, Kenney,
Rupp, and Coleman, CC., concur.

Woodruff, Chief Regulatory Law Judge