

**STATE OF MISSOURI  
PUBLIC SERVICE COMMISSION**

At a session of the Public Service  
Commission held at its office in  
Jefferson City on the 30<sup>th</sup> day of  
October, 2019.

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-2020-0047**

**ORDER ESTABLISHING SPECIAL CONTEMPORARY RESOURCE  
PLANNING ISSUES**

Issue Date: October 30, 2019

Effective Date: November 9, 2019

A provision in the Commission's electric utility resource planning rule, 20 CSR 4240-22.080(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, the Commission's 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 Natural Resources Defense Council (NRDC), Sierra Club, and the Office of the Public Counsel filed suggested special contemporary issues for Union Electric Company d/b/a Ameren Missouri to analyze and respond to in its 2020

triennial IRP Filing. Ameren Missouri filed responses to those suggestions. 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.<sup>1</sup> 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.<sup>2</sup>

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 triennial IRP filing. Ameren Missouri may already plan to address these issues in its triennial IRP filing apart from their designation as special contemporary issues, or, it may believe 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 its upcoming triennial IRP filing. 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

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

<sup>2</sup> 20 CSR 4240-22.080(4).

does not intend that a utility spend an unreasonable amount to address any special contemporary issue. If Ameren Missouri finds that the cost to address a special contemporary issue is excessive, it may explain its concerns in its next IRP filing, while addressing the issue to the extent reasonably possible.

To give Ameren Missouri as much time as possible to examine these issues before its next IRP filing, the Commission will make this order effective in ten days.

**THE COMMISSION ORDERS THAT:**

1. Union Electric Company d/b/a Ameren Missouri shall analyze and document the following special contemporary issues in its 2020 triennial IRP filing:

A. When complying with 20 CSR 4240-22.060(5)(M), include the following as uncertain factors that may be critical to the performance of alternative resource plans:

(i) Foreseeable demand response technologies, including, but not limited to, integrated energy management control systems, linking smart thermostats, lighting controls and other load-control technologies with smart end-use devices;

(ii) Foreseeable energy storage technologies; and

(iii) Foreseeable distributed energy resources, including, but not limited to, distributed solar generation, distributed wind generation, combined heat and power (CHP), and microgrid formation. Develop and provide a database of information on distributed generation (both utility owned and customer owned) and distributed energy storage (both utility owned and customer owned) for purposes of evaluating current penetration and planning

for future increases in the levels of distributed generation and energy storage.

B. When complying with 20 CSR 4240-22.060(5)(A), analyze and document the impact of electric vehicle adoption and charging station installations for the 20-year planning period upon the low-case, base-case and high-case load forecasts.

C. 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 coal-fired generating unit in the time period established in the IRP process.

D. Model scenarios related to environmental upgrades to the Rush Island and Labadie coal-fired plants as mandated by the federal courts.

E. In addition to the exercise prescribed in 4 CSR 24-22.045, analyze integrated distribution planning as a way to manage the distribution grid in a manner that reduces peaks and fills valleys in load profiles, and lowers overall system costs with a combination of energy efficiency, demand response, electric vehicles, distributed generation, storage, advanced metering, and pricing strategies such as time-of-use rates (TOU) and inclining block rates (IBR).

F. Analyze and assess the use of mechanisms such as green tariffs and community solar to increase the availability of distributed generation for large and small customers.

G. Analyze and document the prospects for using securitization to advance the retirement of coal generation assets, and channel the savings into

more economical investments such as demand-side management, building wind and solar generation, and storage. Securitization is essentially lower cost, long-term financing that that ratepayers take out and pledge to repay using a portion of their future electricity bills using a long-term, lower-cost bond that will save customers money, some of which can be used as new capital.

H. Analyze and assess the benefits of supporting the development and funding of a High Performance Building Hub to address information and financing (including bridge financing for project development) for building owners – especially affordable housing. Look at Building Energy Exchange (an informational resource for the building industry in New York) and NYC Energy Efficiency Corporation (a specialty financing corporation) as possible models.

I. Staff’s report in EW-2019-0370 regarding its investigation of utility self-scheduling practices in the RTO market concluded that ratepayers were not being “actively harmed” by the practice of self-scheduling, but admitted that Staff lacked the data and resources to answer the fundamental questions of whether Missouri utilities are bidding into the markets at below production costs or otherwise harming ratepayers through “increased outage rates, decreased off-system sales revenue, increased operations and maintenance costs, shortened life of assets, increased outage frequency, decreased reliability, increased LMPs at the load node, and/or generally increased energy prices across the RTO’s footprint” (Staff Report at 13). Ameren Missouri shall address these issues in its IRP since only it possesses the necessary bid formulation and production cost data.

J. Analyze and screen electric vehicle charging infrastructure as a candidate resource option.

K. Analyze and develop as candidate resource options the satisfaction of municipal and corporate renewable energy goals, particularly the plan of the St. Louis Board of Aldermen to have the City's electricity sector be met entirely by efficiency and renewable resources by 2035, which, when enacted into law by ordinance, may become a legal mandate within the meaning of 20 CSR 4240-22.060(3)(A).

L. Analyze and document the costs of putting flue gas desulfurization (scrubbers) on Labadie and Rush Island.

M. Analyze and document the future capital and operating costs faced by each Ameren Missouri coal-fired generating unit in order to comply with all existing, pending, or potential environmental standards, including until they have been finally withdrawn or replaced:

- (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;
- (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 using cost of removal as well as cap-and-cover; and
- (10) Clean Air Act Regional Haze requirements.

N. Analyze and document the criteria by which units are assigned various operational designations (e.g. “must run”) for use in all Company economic modeling and resource planning.

O. Analyze and document on a unit-by-unit basis the net present value revenue requirement of the relative economics of continuing to operate each Ameren Missouri 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.

P. Analyze and document the technical, maximum achievable, and realistic achievable energy and demand savings from demand-side management, and incorporate each level of savings into Ameren Missouri’s resource planning process.

Q. Analyze and document the levels of achievable combined heat and power and incorporate such achievable CHP into Ameren Missouri’s evaluation of demand side management.

R. Analyze and document cost and performance information sufficient to fairly analyze and compare utility scale wind and solar resources, included distributed generation, to other supply side alternatives.

2. This order shall become effective on November 9, 2019.

**BY THE COMMISSION**



A handwritten signature in cursive script that reads "Morris L. Woodruff".

Morris L. Woodruff  
Secretary

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

Woodruff, Chief Regulatory Law Judge

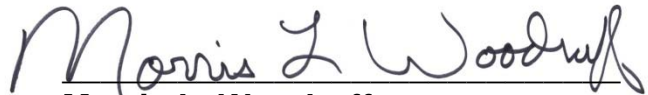
**STATE OF MISSOURI**

**OFFICE OF THE PUBLIC SERVICE COMMISSION**

**I have compared the preceding copy with the original on file in this office and I do hereby certify the same to be a true copy therefrom and the whole thereof.**

**WITNESS my hand and seal of the Public Service Commission, at Jefferson City, Missouri, this 30<sup>th</sup> day of October 2019.**



  
**Morris L. Woodruff**  
**Secretary**

## **MISSOURI PUBLIC SERVICE COMMISSION**

**October 30, 2019**

**File/Case No. EO-2020-0047**

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***Enclosed find a certified copy of an Order or Notice issued in the above-referenced matter(s).***

***Sincerely,***

A handwritten signature in black ink that reads "Morris L. Woodruff". The signature is written in a cursive, flowing style.

***Morris L. Woodruff***  
***Secretary***

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Recipients listed above with a valid e-mail address will receive electronic service. Recipients without a valid e-mail address will receive paper service.