

**STATE OF MISSOURI
PUBLIC SERVICE COMMISSION**

At a session of the Public Service
Commission held at its office in
Jefferson City on the 1st day of
November, 2017.

In The Matter of a Determination of Special)
Contemporary Resource Planning Issues to be)
Addressed by KCP&L Greater Missouri Operations)
Company in its Next Triennial Compliance Filing)
Or Next Annual Update Report)

File No. EO-2018-0045

**ORDER ESTABLISHING SPECIAL CONTEMPORARY RESOURCE
PLANNING ISSUES**

Issue Date: November 1, 2017

Effective Date: November 10, 2017

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 parties may file suggested issues for consideration. The regulation allows the utilities and other parties 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, the Natural Resources Defense Council (NRDC), and the Office of the Public Counsel filed suggested special contemporary issues for KCP&L Greater Missouri

Operations Company (GMO) to analyze and respond to in its 2018 Triennial IRP filing. GMO responded to those suggestions, indicating its willingness to respond to each proposed special contemporary issue. The Commission must now determine what special contemporary issues GMO 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 GMO's IRP filing.

THE COMMISSION ORDERS THAT:

1. GMO shall analyze and document the following special contemporary issues in its Triennial 2018 IRP filing:

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

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).

(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.

B. When complying with 4 CSR 240-22.060(5)(A), analyze and document the impact of electric vehicle usage for the 20-year planning period upon the 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. Identify and evaluate the quantifiable non-energy benefits (NEBs) that could be included GMO's utility's demand-side management (DSM) portfolio planning process for the purposes of IRP planning under the Commission's recently revised Missouri Energy Efficiency Investment Act (MEEIA) rules. Additionally, evaluate the impact of a NEBs percentage "add" on GMO's demand-side management portfolio planning process for the purposes of IRP planning. Discuss GMO's preference for either a study to determine NEBs or the use of a NEBs percentage adder.

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

F. Describe and document the benefits and detriments for integrated resource planning to require achievement of targets under MEEIA.

G. Describe, document, and evaluate potential DSM programs which could address the needs of customers that might otherwise “opt out” of participation in MEEIA. In this evaluation, describe and document potential participation and savings (both energy and demand), as well as program costs and cost-effectiveness. Additionally, describe and document the impacts of additional customer “opt-outs” on the MEEIA charges to customer classes and the ability to achieve estimated savings targets.

H. Evaluate the potential demand and energy load associated with electric vehicles within GMO's 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 GMO.

I. Describe and document the roles that energy storage and conservation voltage reductions could play in GMO's system planning, particularly with regard to DSM and distributed energy resources.

J. Evaluate the need to upgrade and enhance GMO's delivery infrastructure to ensure and advance system resiliency, reliability and sustainability.

In this evaluation, describe and document the potential job growth which utility investments in delivery infrastructure could create.

K. Separately describe and document how GMO's investments in grid modernization, DSM (as evaluated in the current or most recent IRP) and renewable energy will ensure the public interest is adequately served and other policy objectives of the state are met (see 4 CSR 240-22.010). For example, please describe and document the potential for job creation and economic development.

L. Describe and document GMO's coordination with the State Emergency Management Agency to ensure readiness for physical and cybersecurity threats.

M. Describe and document GMO's efforts to address the corporate social responsibility and renewable energy purchasing goals of commercial, industrial, institutional, and public-sector customers for increased access to renewable energy and distributed generation resources.

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

O. Describe and document the extent to which federal investment, production, and other tax credits reduce the costs for utility plant.

P. 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).

Q. 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.

R. 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 satisfying corporate renewable energy goals to attract new businesses to the service territory.

S. Provide an explanation for stranded costs and ratepayer impact for the premature retirement of the Montrose coal plant:

(i) The total cost of all stranded assets, who will pay the stranded costs, and, if GMO expects the customers to pay the stranded costs, the impact on customer rates;

(ii) All “cost of removal” considerations (dismantle, demolition) for plants that are retired early;

(iii) Costs associated with transmission upgrades or additions necessary for transmission grid reliability, stability, or voltage support affected by retirement.

T. Model scenarios that examine the impact of the retirement of 10% and 25% of all of the coal generation of Southwest Power Pool (SPP) members and replacement with wind generation energy and capacity including:

(i) The effect on reliability of energy availability on an hourly basis;

(ii) The effect on SPP monthly market prices, taking into account the impact of the reliability of energy availability;

(iii) The expected impact on the amount of energy purchased from the SPP Integrated Marketplace;

(iv) The effect on GMO's customers' rates (including FAC rates) by season; and

(v) The effect of inclusion of Mountain West Transmission into the SPP.

U. For the upcoming energy efficient potential study, include adoption (or "take") rate considerations that are modified (+/-) with the following elements:

(i) Modified rate design scenarios (Inclining Block Rates, Time of Use, fluctuations in fixed charges +/- at \$2, \$5 and \$10); and

(ii) Increase in volatile weather (additional Heating Degree Days and Cooling Degree Days).

2. This order shall become effective on November 10, 2017.

BY THE COMMISSION



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

Morris L. Woodruff
Secretary

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

Woodruff, Chief Regulatory Law Judge

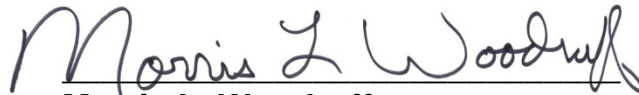
STATE OF MISSOURI

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 1st day of November 2017.




Morris L. Woodruff
Secretary

MISSOURI PUBLIC SERVICE COMMISSION

November 1, 2017

File/Case No. EO-2018-0045

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

Sincerely,



Morris L. Woodruff
Secretary

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