

**STATE OF MISSOURI
PUBLIC SERVICE COMMISSION**

At a session of the Public Service
Commission held at its office in
Jefferson City on the 24th day of
October, 2018.

In the Matter of a Determination of Special)
Contemporary Resource Planning Issues to be)
Addressed by The Empire District Electric)
Company in Its Next Triennial Compliance)
Filing or Next Annual Update Report)

File No. EO-2019-0066

**ORDER ESTABLISHING SPECIAL CONTEMPORARY RESOURCE
PLANNING ISSUES**

Issue Date: October 24, 2018

Effective Date: November 3, 2018

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, 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 Missouri Department of Economic Development – Division of Energy, the Natural Resources Defense Council (NRDC), Sierra Club, and the Office of the Public Counsel filed suggested special contemporary issues for The Empire

District Electric Company to analyze and respond to in its 2019 Triennial IRP Filing. Empire filed responses to those suggestions. The Commission must now determine what special contemporary issues Empire 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 Empire's IRP filing. Empire 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 Empire intends to address any of these issues in a future IRP filing. In that instance, Empire need

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).

not undertake duplicative analysis and may instead explain where the Commission will find analysis of the below issues.

In choosing the special contemporary issues that each electric utility must address, the Commission has tried to be consistent among the utilities. Empire is in a different situation than the other utilities in that it will be making its more extensive triennial IRP filing next year rather than just an annual update as will be filed by the other utilities. In addition, Empire indicated its willingness to address several issues that the other utilities argued should not be treated as special contemporary issues. The Commission certainly does not want to discourage Empire from addressing those additional issues, but it does not intend to impose a greater burden on Empire than is imposed on the other electric utilities. For that reason, those issues that only Empire will be asked to address will be listed separately as issues that Empire may address if it chooses to do so.

THE COMMISSION ORDERS THAT:

1. The Empire District Electric Company shall analyze and document the following special contemporary issues in its 2019 Triennial IRP Filing:

A. Document Empire's most recent economic analysis for its system-wide implementation of AMI meters. Provide projected implementation dates and annual budget for AMI implementation.

B. 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) Foreseeable demand response, including, but not limited to, aggregation and development of technologies such as integrated energy management

control systems, linking smart thermostats, lighting controls, and other load-control technologies with smart end-use devices;

(2) Foreseeable energy storage; and

(3) 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 levels of distributed generation and energy storage.

C. 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 low-case, base-case, and high-case load forecasts.

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 likely future retirements of any existing coal-fired generating unit in the time period established in the IRP process.

E. Provide the most recent analysis of the costs and benefits of Empire's system-wide implementation of AMI meters. Provide projected implementation dates and annual budget for AMI implementation and – if Empire is performing integrated resource analysis – include the capital and operating cost impacts in the integrated resource analysis. If an analysis of AMI costs and benefits does not exist, please provide a detailed explanation of why it does not exist.

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 satisfying corporate renewable energy goals to attract new businesses to the service territory. (Securitization is essentially a lower cost, long-term loan 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, document, and screen the prompt retirement of the Asbury plant as a resource option.

I. Describe and document how utility investments in grid modernization, DSM, and distributed energy resources can improve customer energy service options and substitute for supply-side investments under the utility's contingency plan.

J. Describe and document the roles which energy storage and conservation voltage reductions could play in the utility's system planning, particularly with regards to extreme weather situations, DSM, and distributed energy resources.

K. Evaluate the potential demand and energy load associated with electric vehicles within the utility'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 the utility, including how such initiatives have been affected by the Western District Court of Appeals' ruling in WD80911.

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

M. Describe and document the extent to which each of the utility's generating assets is or is not competitive within the utility's applicable Regional Transmission Organization or Independent System Operator.

N. Describe and document the utility's plans regarding the authorities and requirements contained in Senate Bill 564 (2018), including, but not limited to, the following sections of the legislation:

(1) Section 393.1610, RSMo. (Investments in Small Scale and Pilot Projects);

and

(2) Section 393.1665, RSMo. (Utility-Owned Solar Facilities).

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

P. Describe and document the potential impacts on the utility of the EPA's proposed federal Affordable Clean Energy rule, including, but not limited to, the following aspects of the rule:

(1) The use of on-site efficiency upgrades as the best system of emission reduction for reducing carbon dioxide emissions;

(2) Changes to the New Source Review permitting program; and

(3) Changes to the implementation of Section 111(d) of the Clean Air Act regarding the EPA's emission guideline issuance and state plan development and submission.

Q. Analyze and screen electric vehicle charging infrastructure as a candidate resource option in light of the Court of Appeals Western District's decision in *KCP&L v. PSC*, No. WD80911 (Aug. 7, 2018), that such an investment may be recoverable in rate base.

R. Analyze, document, and screen renewable energy + battery storage as an alternative to existing coal-fired generation, comparable to Xcel Energy's proposed Colorado Clean Energy Plan in Colorado PUC Docket No. 16A-0396E.

S. Analyze and document the future capital and operating costs faced by each Empire coal-fired generating unit in order to comply with all existing, pending, or potential environmental standards, including:

- (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, including the anticipated 2016 update to the rule to incorporate interstate transport requirements for the 2008 ozone National Ambient Air Quality Standard;
- (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; and
- (10) Clean Air Act Regional Haze requirements.

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

U. Analyze the impact of emerging energy efficiency technologies throughout the planning period.

V. Analyze whether it would be appropriate for Empire to develop and implement a Missouri Energy Efficiency Investment Act (MEEIA) program.

W. Analyze and document low, base, and high scenarios of projected off-system sales revenues under a range of assumed natural gas prices, CO₂ prices and coal prices.

2. If it chooses to do so, The Empire District Electric Company may analyze and document the following special contemporary issues in its 2019 Triennial IRP Filing:

AA. Analyze and document the feasibility and cost-savings implications (if any) in utilizing concrete blocks and cranes as a battery storage option for resource needs.

BB. Describe and document how the utility's standby service rates, cogeneration tariffs, and interconnection standards facilitate or impede the development of customer-owned distribution generation resources and microgrids. If the utility's standby service rates impede the development of customer-owned generation and microgrids, address the plans the utility has for the review of standby service rates and their revision. Document customer and potential customer inquiries and complaints received by the Company through all forms

of customer communication, including but not limited to, call center communications, e-mail, social media, and others.

CC. Describe and document how the utility's investments in grid modernization, DSM, 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). For example, describe and document the potential for job creation and economic development.

DD. Describe and document the benefits and detriments for integrated resource planning to require achievement of targets under MEEIA, either based on those targets found in the MEEIA rules or other targets determined feasible by the utility. If the utility chooses to use targets other than those found in the MEEIA rule, state why the utility chose such targets and why those found in the rule are infeasible.

EE. Identify and evaluate the quantifiable non-energy benefits (NEBs) which could be included in the utility's demand-side management (DSM) portfolio planning process. This should be done for the purposes of IRP planning under the Commission's recently revised Missouri Energy Efficiency Investment Act (MEEIA) rules and with reference to either primary or secondary research conducted by the utility. Additionally evaluate the impact of a NEBs percentage "add-on" on the utility's DSM portfolio planning process for the purposes of IRP planning. Discuss the utility's preference for either a study to determine NEBs or the use of a NEBs percentage add-on.

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

GG. Describe and document the utility's current distribution system planning process. Additionally, evaluate the benefits of requiring distribution system planning that facilitates customer usage of distributed energy resources.

HH. Describe and document the utility's coordination with the State Emergency Management Agency to ensure readiness for physical and cyber security threats.

II. Describe and document the potential impacts of the U.S. District Court of Appeals for the District of Columbia Circuit's decision in *Utility Solid Waste Activities Group, et al. v. Environmental Protection Agency* (EPA) regarding rules pertaining to coal combustion residuals. Additionally, include the utility's assessment of the potential impacts of this ruling when considered in conjunction with the federal Water Infrastructure Improvements for the Nation Act and state Senate Bill 659 (2018). In so doing, identify all landfills and ponds currently or previously used by the utility, or its predecessors for the disposal of coal combustion residuals and include information such as, but not limited to, disposal site age, usage status, liner type, hazard assessments, and ground and surface water monitoring results.

JJ. Develop and document for use in all economic modeling and resource planning low, base, and high projections for natural gas prices, CO₂ prices and coal prices.

KK. Develop and document the prospects for the future price of electricity in the wholesale market, and the impact of any changes in wholesale market prices on Empire's ability to generate revenue through off-system sales.

LL. 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.

MM. Describe and document the utility's plans regarding the authorities and requirements contained in Senate Bill 564 (2018), including, but not limited to, the following sections of the legislation:

(1) Section 386.266, RSMo. (Rate Adjustments Outside of General Rate Proceedings, Surveillance Monitoring Report);

(2) Section 393.170, RSMo. (Certificate of Convenience and Necessity);

(3) Sections 393.1400 and 393.1655, RSMo. (Plant-in-Service Accounting, Capital Investment Plan, Rate Base Increase Regulatory Liability and Limitations); and

(4) Section 393.1640, RSMo, (Discounted Electric Rates).

3. This order shall become effective on November 3, 2018.

BY THE COMMISSION



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

Morris L. Woodruff
Secretary

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

Woodruff, Chief Regulatory Law Judge

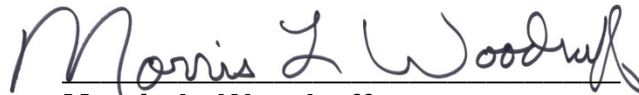
STATE OF MISSOURI

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 24th day of October 2018.




Morris L. Woodruff
Secretary

MISSOURI PUBLIC SERVICE COMMISSION

October 24, 2018

File/Case No. EO-2019-0066

**Missouri Public Service
Commission**

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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.