BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In The Matter of a Determination of Special)	
Contemporary Resource Planning Issues to)	
be Addressed by The Empire District Electric)	File No. EO-2015-0042
Company In its Next Triennial Compliance)	
Filing or Next Annual Update Report)	

STAFF'S SUGGESTED SPECIAL CONTEMPORARY RESOURCE PLANNING ISSUES FOR THE EMPIRE DISTRICT ELECTRIC COMPANY

COMES NOW the Staff of the Missouri Public Service Commission ("Commission"), by and through counsel, and, pursuant to 4 CSR 240-22.080(4), requests the Commission include the issues indicated below in the list of special contemporary resource planning issues the Commission orders The Empire District Electric Company ("Empire") to analyze and document in Empire's triennial compliance filing to be filed with the Commission on April 1, 2015, pursuant to 4 CSR 240-22.080(1)(A) and 22.080(4).

- 1. Commission Rule 4 CSR 240-22.010(2) states, in part, that the "fundamental objective of the resource planning process at electric utilities shall be to provide the public with energy services that are safe, reliable, and efficient, at just and reasonable rates, in compliance with all legal mandates, and in a manner that serves the public interest and is consistent with state energy and environmental policies." With this rule in mind, the Staff proposes the following special contemporary resource planning issues for Empire.
- 2. The Staff's suggested special contemporary issues for Empire are as follows:

a. In a report, the North America Electric Reliability Corporation ("NERC") documented the findings of a Grid Security Exercise (Grid Ex II) conducted in November 2013 to demonstrate the cyber and physical vulnerabilities of the electrical grid. 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.

Please summarize the current, near term (next three years) and long term future activities and costs that Empire is pursuing and/or contemplating to protect the electrical system infrastructure of the Company from cyber, physical and EMP threats and indicate any potential impact to the Company's preferred resource plan.

- b. Analyze the impact of foreseeable emerging energy efficiency technologies throughout the 20-year planning period.
- c. Analyze the impact of foreseeable emerging energy storage technologies throughout the 20-year planning period.
- d. Analyze and document the future capital and operating costs faced by each Empire 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;
- Clean Air Act Section 111(d) Greenhouse Gas standards for existing sources; and
- 11) Clean Air Act Regional Haze requirements.
- e. 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 Empire coal-fired generating unit in the time period established in the IRP process, to the extent not already included in the 2015 IRP filing.
- f. Analyze and document the range of potential levels of distributed generation in the Company'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 the Company'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 the Company would normally provide to those customers.

WHEREFORE, the Staff recommends the Commission adopt the above listed special contemporary resource planning issues in its order that contains the list of special contemporary resource planning issues for Empire to analyze and document in its April 1, 2015 triennial compliance filing, pursuant to 4 CSR 240-22.080(1)(A) and 22.080(4).

Respectfully submitted,

/s/ Robert S. Berlin

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CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing have been mailed, hand-delivered or transmitted by facsimile or electronic mail to all counsel of record this $15^{\rm th}$ day of September, 2014.

/s/ Robert S. Berlin