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-2016-0040
Company in Its Next Triennial Compliance)	
Filing or Next Annual Update Report)	

STAFF SUGGESTIONS FOR SPECIAL CONTEMPORARY RESOURCE PLANNING ISSUES

COMES NOW, Staff of the Missouri Public Service Commission, by and through the undersigned counsel, and for its response to the Commission's August 20, 2015, Order Opening A File Regarding Special Contemporary Resource Planning Issues And Offering An Opportunity To File Suggestions, respectfully states:

- 1. The Empire District Electric Company ("Empire") is to submit to the Commission its triennial compliance filing on April 1, 2016.¹
- 2. The Commission is to issue an order containing a list of special contemporary issues for Empire to analyze and document in its next triennial compliance filing.²
- 3. The purpose of the special 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.³
- 4. Pursuant to Commission Rule 4 CSR 240-22.080(4)(A), Staff suggests Empire include and address the following special contemporary issues in its April 1, 2016, triennial compliance filing:
 - A. Review the impact of foreseeable emerging energy efficiency technologies throughout the 20-year planning period.
 - B. Review the impact of foreseeable emerging energy storage technologies throughout the 20-year planning period.

¹ 4 CSR 240-22.080(1)(B). ² 4 CSR 240-22.080(4).

- C. 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;
 - (10) Clean Air Act Section 111(d) Greenhouse Gas standards for existing sources;
 - (11) Clean Air Act Regional Haze requirements; and
 - (12) 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 Empire coal-fired generating unit in the time period established in the IRP process.
- E. Analyze and document the range of potential levels of distributed generation in Empire'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 Empire'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 Empire would normally provide to those customers.
- F. 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. Summarize the current, near term (next three years) and long term activities and costs that Empire is pursuing and/or contemplating to protect the electrical system infrastructure of the Company against EMP threats and indicate any potential impact to Empire's preferred resource plan.

G. Review the options available to Empire for providing customer financing for energy efficiency measures. Discuss Empire's current, near term (next three years) and long-term activities and plans for providing customer financing for energy efficiency measures.

WHEREFORE, Staff suggests Empire address in its April 1, 2016, triennial compliance filing the special contemporary issues set forth above.

Respectfully submitted,

/s/ Marcella L. Mueth

Marcella L. Mueth
Assistant Staff Counsel
Missouri Bar No. 66098
Attorney for the Staff of the
Missouri Public Service Commission
P. O. Box 360
Jefferson City, MO 65102
(573) 751-4140 (telephone)
(573) 751-9285 (fax)
marcella.mueth@psc.mo.gov

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing have been mailed, electronically mailed, sent by facsimile or hand-delivered to all counsel of record this 15th day of September 2015.

/s/ Marcella L. Mueth