

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of a Determination of Special)	
Contemporary Resource Planning Issues to be)	File No. EO-2020-0044
Addressed by Empire District Electric Co.)	
in its Next Triennial Compliance Filing)	
or Next Annual Update Report)	

LIST OF SUGGESTED SPECIAL CONTEMPORARY ISSUES OF SIERRA CLUB

Pursuant to 20 CSR 4240-22.080(4), Sierra Club hereby recommends the following as special contemporary issues for consideration and analysis by Empire District Electric.

1. Analyze and screen electric vehicle charging infrastructure as a candidate resource option.
2. Analyze, document and screen renewable energy + battery storage as an alternative to existing coal-fired generation.
3. 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;
4. 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;
5. 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;
6. 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to comply with all existing, pending, or potential environmental standards, including, until they have been finally withdrawn or replaced:

- a. Clean Air Act New Source Review provisions;
 - b. 1-hour Sulfur Dioxide National Ambient Air Quality Standard;
 - c. National Ambient Air Quality Standards for ozone and fine particulate matter;
 - d. Cross-State Air Pollution Rule;
 - e. Clean Air Interstate Rule;
 - f. Mercury and Air Toxics Standards;
 - g. Clean Water Act Section 316(b) Cooling Water Intake Standards;
 - h. Clean Water Act Steam Electric Effluent Limitation Guidelines;
 - i. Coal Combustion Waste rules using cost of removal as well as cap-and-cover;
 - j. Clean Air Act Regional Haze requirements.
7. Analyzing and documenting 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;
8. Analyzing and documenting the criteria by which units are assigned various operational designations (e.g., “must run”) for use in all Company economic modeling and resource planning;
9. Analyzing and documenting on a unit-by-unit basis the net present value revenue requirement of the relative economics of continuing to operate each Ameren 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;

10. Analyzing and documenting the technical, maximum achievable, and realistic achievable energy and demand savings from demand side management, and incorporating each level of savings into Ameren resource planning process;
11. Analyzing and documenting the levels of achievable combined heat and power and incorporating such achievable CHP into Empire's evaluation of demand side management;
12. The Commission's investigation of utility self-scheduling practices in the RTO markets is relevant to the primary goal of minimizing long-run utility costs and tradeoffs with that goal, 20 CSR 4240-22.010(2)(B & C); to supply side retirements, 22.060(3)(C)1; to capacity and energy supplied to the grid 22.060(4)(B)3 & 6; to "Purchased power availability, terms, costs, optionality and other benefits," 22.060(5)(G) and fixed O&M costs, 22.060(5)(I); as well as the T&D analysis in 20 CSR 4240-22.045. Staff's report in the investigatory docket, EW-2019-0370, 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). Empire should address these issues in its annual update since only it possesses the necessary bid formulation and production cost data; and

13. Analyzing and documenting cost and performance information sufficient to fairly analyze and compare utility-scale wind and solar resources to other supply-side alternatives.

Respectfully submitted,

/s/ Henry Robertson

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CERTIFICATE OF SERVICE

I hereby certify that a true and correct PDF version of the foregoing was filed on EFIS and sent by email on this 13th day of September, 2019, to all counsel of record.

/s/ Henry Robertson

Henry Robertson