



The Empire District Electric Company d/b/a Liberty
Case No. EA-2025-0299
Missouri Public Service Commission Data Request - 0069

Data Request Received: 2025-12-23

Response Date: 2026-01-12

Request No. 0069

Witness/Respondent: Shaen Rooney

Submitted by: Trevor Rucker, trevor.rucker@psc.mo.gov

REQUEST:

Paragraph 21 of the Application states “The F-class combustion turbine was selected as the preferred solution because it offered the lowest installed capacity cost per kilowatt...” Paragraph 36 of the Application states “The technology selection process, supported by independent studies, demonstrates that the F-class turbine offers the lowest installed capacity cost per kilowatt among feasible alternatives.” Lines 11-16 on page 8 of the Direct Testimony of Shaen T. Rooney discusses how the J-Class Frame unit was approximately \$200 per kW less expensive than the F-Class Frame unit, but Liberty still chose the F-Class turbine. Schedule SR-3 reflects the cost per kW difference discussed in the Direct Testimony of Shaen T. Rooney.

A. Please explain the cost per kW discrepancy between Liberty’s Application and the direct testimony filed in support of the Application.

B. Please explain in detail why Liberty selected the simple cycle F-Class Frame gas turbine rather than the simple cycle J-Class Frame gas turbine.

RESPONSE:

- A. There is no discrepancy – Liberty’s application does not include comparisons of \$/kW between generating technologies.
- B. Although the J-class turbine is estimated to cost approximately \$200/kW less than the F-class turbine, it offers a nameplate capacity that is 75% greater. This larger capacity drives an estimated 60% increase in total project costs. These additional costs would be incurred to install 170 MW of capacity five years ahead of schedule, as outlined in the Company’s 2025 IRP preferred plan. After careful consideration, the Company determined that accelerating this investment would not align with stakeholder priorities, particularly regarding affordability given the Company’s existing firm load.