

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of the Application of The Empire District)
Electric Company d/b/a Liberty to Obtain a Certificate of) Case No. EA-2025-0299
Convenience and Necessity to Support Resource Adequacy)

**APPLICATION FOR A
CERTIFICATE OF CONVENIENCE AND NECESSITY**

COMES NOW The Empire District Electric Company d/b/a Liberty (“Liberty” or the “Company”), and, pursuant to RSMo. §393.170 and Commission Rule 20 CSR 4240-20.045, submits its verified Application for a Certificate of Convenience and Necessity to support resource adequacy and respectfully states as follows to the Missouri Public Service Commission (“Commission”):

Applicable Statutory and Commission Rule Provisions

1. RSMo. §393.170.1 provides that no “electrical corporation . . . shall begin construction of a gas plant, electric plant, water system or sewer system, other than an energy generation unit that has a capacity of one megawatt or less, without first having obtained the permission and approval of the commission.”

2. RSMo. §393.170.3 then provides that the Commission “shall have the power to grant the permission and approval herein specified whenever it shall after due hearing determine that such construction or such exercise of the right, privilege or franchise is necessary or convenient for the public service.”

3. Commission Rule 20 CSR 4240-20.045(2)(A) provides, in part, that “(a)n electric utility must obtain a certificate of convenience and necessity prior to . . . (c)onstruction of an asset pursuant to section 393.170.1 . . .”

4. Commission Rule 20 CSR 4240-20.045(1)(A) defines “asset,” in part, as: “1. An electric generating plant, or a gas transmission line that facilitates the operation of an electric

generating plant, that is expected to serve Missouri customers and be included in the rate base used to set their retail rates regardless of whether the item(s) to be constructed or operated is located inside or outside the electric utility's certificated service area or inside or outside Missouri."

5. Commission Rule 20 CSR 4240-20.045(3) provides that, in addition to the general filing requirements of Rule 2.060(1), the following additional requirements "apply to all applications for a certificate of convenience and necessity, pursuant to sections 393.170.1 and .2, RSMo: (A) The application shall include facts showing that granting the application is necessary or convenient for the public service; (B) If an asset to be operated or constructed is outside Missouri, the application shall include plans for allocating costs, other than regional transmission organization/independent system operator cost sharing, to the applicable jurisdiction; and (C) If any of the items required under this rule are unavailable at the time the application is filed, the unavailable items may be filed prior to the granting of authority by the commission, or the commission may grant the certificate subject to the condition that the unavailable items be filed before authority under the certificate is exercised."

6. It is within the Commission's discretion to determine when the evidence indicates the public interest would be served by the grant of a CCN. The Commission has traditionally considered the five factors set forth in *In Re Tartan Energy*, GA-94-127, 3 Mo.P.S.C.3d 173, 177 (1994): need; qualified to own, operate, control, and manage the facilities and provide the service; financial ability; economic feasibility; and promotion of the public interest.

7. The need, or necessity, requirement does not mean "essential" or "absolutely indispensable," but rather that the proposed project will be an improvement justifying its cost. The Commission has previously indicated that positive findings with respect to the first four *Tartan* factors will, in most instances, support a finding that the fifth factor – promotion of the public interest – has been satisfied. The Commission has also held it is a balancing process, with a cost-

benefit analysis in which all benefits and detriments in evidence are considered, and approval is granted upon a finding of no net detriment.

8. Through this verified Application for a Certificate of Convenience and Necessity, supported by direct testimony, Liberty proposes the construction of a new combustion turbine generator with a capacity of approximately 250 MW. This filing demonstrates Liberty's full compliance with RSMo. §393.170 and Commission Rules 20 CSR 4240-2.060 and 20.045, and addresses each of the five *Tartan* factors considered by the Commission.

Liberty's Background Information and General Filing Requirements

9. Liberty is a "public utility" and an "electric corporation" pursuant to RSMo. §393.1700.1(6), with its Missouri operations subject to the jurisdiction of the Commission as provided by law.

10. Liberty is a Kansas corporation with its principal office and place of business at 602 Joplin Street, Joplin, Missouri. Liberty is qualified to conduct business and is conducting business in Missouri, as well as in the states of Arkansas, Kansas, and Oklahoma. Liberty is engaged, generally, in the business of generating, purchasing, transmitting, distributing, and selling electricity. (20 CSR 4240-2.060(1)(A), (H))

11. A certified copy of Liberty's Restated Articles of Incorporation, as amended, was filed in Case No. EF-94-39, and a certificate from the Missouri Secretary of State that Liberty, a foreign corporation, is authorized to do business in Missouri was filed with the Commission in Case No. EM-2000-369. This information is current and correct, and the referenced documents are incorporated herein by reference. (20 CSR 4240-2.060(1)(G))

12. Liberty has no pending actions, aside from dockets pending before this Commission, or final unsatisfied judgments or decisions against it from any state or federal agency or court that

involve customer service or rates. Liberty's annual report and assessment fees are not overdue. (20 CSR 4240-2.060(1)(K), (L))

13. All correspondence, communications, notices, orders, and decisions of the Commission with respect to this matter should be sent to the undersigned counsel. (20 CSR 4240-2.060(1)(I))

14. Commission Rule 20 CSR 4240-4.017(1) provides that "(a)ny person that intends to file a case shall file a notice with the secretary of the commission a minimum of sixty (60) days prior to filing such case." Liberty filed its Notice of Intended Case Filing to initiate this proceeding on April 29, 2025.

Asset Location and Timing

15. The new unit will be located at the Company's State Line Power Station in Joplin, Missouri. The legal description for the real estate is contained in the attached Appendix A.

16. Other than Liberty's own electric transmission lines and the gas pipeline that serves this property, the proposed construction will cross no electric, gas, or telephone conduit, wires, cables, and lines of regulated and nonregulated utilities, railroad tracks, or underground facility, as defined in RSMo. §319.015.

17. All proposed construction will be within the existing State Line Power Station property boundaries. As such, no landowner notice is required in connection with the filing of this CCN application.

18. The Company anticipates that construction will begin in late 2028 or early 2029 and that the new unit will be available for service in the second quarter of 2030.

Liberty's Integrated Resource Plan ("IRP")

19. To support resource adequacy, Liberty proposes to construct a generating facility featuring a single F-class combustion turbine with an approximate capacity of 250 MW, as described above.

20. The proposed asset is designed to implement the supply-side resource acquisition strategy outlined in Liberty's 2025 IRP. This plan, developed in response to evolving Southwest Power Pool ("SPP") resource adequacy requirements and recent market and regulatory changes, calls for the addition of an approximate 250 MW F-class combustion turbine to support reliable, cost-effective service for Liberty's customers. The project reflects the Company's commitment to maintaining system reliability and meeting future capacity needs as detailed in the updated IRP. Please refer to Aaron J. Doll's direct testimony which establishes the need for the proposed generating facility by demonstrating how Liberty's updated IRP aligns with evolving SPP requirements and Missouri regulatory standards to support reliable, cost-effective service for customers.

21. Liberty's 2025 IRP acquisition strategy calls for the addition of approximately 240 MW of frame combustion turbine generation utilizing existing interconnection infrastructure. Following a comprehensive technology selection study conducted on Liberty's behalf, several generation options were evaluated for technical feasibility, cost, and operational performance. The F-class combustion turbine was selected as the preferred solution because it offered the lowest installed capacity cost per kilowatt, best meeting customer and stakeholder priorities for affordability and reliability. Please refer to the direct testimony of Company witness Shaen T. Rooney which demonstrates that Liberty's site and technology selection for the proposed generating facility was conducted through a transparent, objective, and criteria-based process,

ensuring the chosen solution is prudent, cost-effective, and compliant with Missouri CCN requirements.

22. To support its site and technology selection process, Liberty engaged 1898 & Co. to conduct a comprehensive study evaluating potential generation technologies and locations. This analysis provided an objective, criteria-based assessment to identify the most suitable solution for meeting Liberty's capacity needs.

Need for the Project, Liberty's Qualifications, Feasibility of the Project

23. This generating plant will consist of a single F-class combustion turbine with a capacity of approximately 250 MW. The F-class turbine is a mature technology, noted for efficiency, reliability, and fast-start capability. This turbine's primary fuel will be pipeline natural gas, with Jet A (stored on site) as backup.

24. The turbine will use a dry low-NOx system for NOx control, but a selective catalytic reduction ("SCR") system will be installed if required by the Prevention of Significant Deterioration ("PSD") permit to be obtained from the Missouri Department of Natural Resources.

25. The asset will include a new generator step-up transformer, and a new 0.3-mile-long transmission line will connect the plant to a new position in the Company's existing State Line substation. The scope of construction includes site preparation; foundation installation; electrical, gas and fuel oil interconnects; mechanical and electrical construction; installation of the owner-provided equipment; construction of new liquid fuel storage tanks; and commissioning and testing.

26. The new asset will be operated by State Line Power Plant personnel. Liberty employees are experienced and well trained, and Liberty, as a utility, has significant experience operating, controlling, and managing electrical power facilities.

27. Routine maintenance on the generating units and any balance of plant assets will be performed by State Line Power Plant personnel, while routine maintenance on the substation will

be performed by Liberty Substation Operations personnel. Major maintenance to be performed on intervals defined in the generating units' operation and maintenance manuals will be performed by the original equipment manufacturer's service personnel under a long-term service agreement.

28. Any significant forced outage of the unit would be managed in the same way that Liberty manages such an outage on its similar generation units such as State Line Unit 1 or the units at the Energy Center. Diagnosis of the cause of an outage and the scope of repair would begin with review of data available from the unit's instrumentation and controls. Based on the scope of repair, Liberty will determine whether the unit's prompt return to service can best be accomplished by Liberty personnel, original equipment manufacturer's personnel, a contractor, or some combination of the above. If the failure were to occur during the new asset's warranty period, Liberty would utilize whatever warranty provisions exist in the supply agreements or engineering, procurement, and construction ("EPC") contract to bring about a timely return to service of the asset and protect its customers from the expense to complete the repair.

Financial Ability, Economic Feasibility, Financing and Procurement

29. The Empire District Electric Company, the applicant herein, is a subsidiary of Liberty Utilities Co. ("LUCo"), which is a subsidiary of Algonquin Power & Utilities Corp. ("APUC").

30. Through its operating utilities, LUCo provides safe and reliable regulated utility services to over one million customer connections, with the support of numerous skilled employees, as well as contractors as necessary and appropriate.

31. As part of the technology review study commissioned by the Company, 1898 & Co. produced a feasibility (Class 4) estimate for the delivery of this project, including purchase of major equipment, construction, and the Company's indirect costs (labor, insurance, taxes, overhead, contingency, etc.). A Class 4 estimate has an accuracy range of -30 to +50%.

32. Liberty plans to finance this project through a combination of cash generated from

operations and borrowings, including participation in the Company's money pool, long-term debt, and other debt instruments. This funding approach will be finalized as project planning progresses. By leveraging internally generated cash and established credit facilities, Liberty ensures access to the financial resources necessary for successful project completion. The Company will continue to monitor market conditions and refine its financing strategy as needed to optimize costs and effectively manage risk.

33. Liberty will develop detailed specifications for a request for proposals ("RFP") and release it for competitive bidding to contractors with proven experience in projects of similar scope and complexity. The selected contractor will be responsible for engineering, procurement, construction, and commissioning of the facility. Project management will be led by experienced Liberty personnel, supported by external engineering expertise. A Class 4 feasibility estimate has been completed, and competitive bidding will be used for all EPC services. Robust contractual provisions will address schedule, cost, and performance risks, while contingency plans are in place to manage unforeseen challenges such as supply chain disruptions and labor shortages.

Conclusion: Promotion of the Public Interest

34. The proposed generating facility will provide substantial benefits to Liberty's customers and the wider Missouri community, advancing the public interest. As demonstrated throughout this application and accompanying testimony, there is a well-established need for the new asset. Liberty possesses the expertise and financial resources required to own and operate the facility, and the project is economically sound. Together, these factors underscore the prudence and value of Liberty's proposal.

35. The addition of a 250 MW F-class combustion turbine will enhance Liberty's ability to meet the SPP evolving resource adequacy requirements, especially in light of rising winter planning reserve margins and the challenges posed by recent extreme weather events. This

strategic investment will support the ongoing delivery of safe and reliable electric service, minimizing the risk of outages and bolstering system stability during periods of peak demand. Liberty has carefully evaluated a range of alternatives to address this need and is pursuing a prudent, competitive procurement process. The new asset will not only support compliance with SPP's planning reserve requirements but will also strengthen the resilience of Liberty's electric system, enabling the Company to continue providing dependable service to its customers.

36. 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. By prioritizing affordability, Liberty is acting in the best interests of its customers, minimizing long-term rate impacts while maintaining high standards of service.

37. The project is consistent with Missouri's least-cost planning principles and supports the state's objectives for reliable, efficient, and sustainable energy supply. The facility's flexible design allows for future adaptation to changing market and regulatory conditions, including potential integration of renewable resources and advanced emissions controls.

38. Liberty is committed to complying with all applicable environmental regulations, including the PSD permitting process. The facility will utilize advanced NOx control technologies and, if required, install selective catalytic reduction (SCR) systems to ensure compliance with air quality standards.

39. Construction and operation of the new generating unit will create jobs and stimulate economic activity in the Joplin area, supporting local businesses and contributing to the region's growth.

40. Considering the potential benefits and detriments of the project, as set forth above, Liberty has demonstrated that there will be no net detriment and that, in fact, the grant of the requested CCN and completion of the proposed project will be in the public interest.

WHEREFORE, Liberty requests an order granting the Company a certificate of convenience and necessity to support resource adequacy, as well as a determination of the prudence of the decision to construct/operate the new asset subject to the Commission's subsequent review of costs.

Respectfully submitted,

/s/ Diana C. Carter

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CERTIFICATE OF SERVICE

I hereby certify that the above document was filed in EFIS on this 24th day of October, 2025, and sent by electronic transmission to the Staff of the Commission and the Office of the Public Counsel.

/s/ Diana C. Carter

VERIFICATION

On behalf of The Empire District Electric Company d/b/a Liberty, and pursuant to Commission Rules, the undersigned, upon his oath and under penalty of perjury, hereby states that the above filing is true and correct to the best of his information, knowledge, and belief.

/s/ Tim Wilson

Central Region President - Electric