



The Empire District Electric Company d/b/a Liberty

Interconnection Queue Process for Missouri Large Load Customers

Purpose:

This document ("**Document**") explains the procedures and requirements for the orderly queue for processing a new request from a new or existing Large Load Customer (the "**Applicant**") to interconnect to the transmission facilities of The Empire District Electric Company d/b/a Liberty ("**Empire**", together with the Applicant shall be referred to as the "**Parties**", and each a "**Party**") in Missouri.

A Large Load Customer is a new or existing customer of Empire seeking a demand of not less than 10 MW at a single common Point of Interconnection ("**POI**") sourced from the transmission system for its facility(es) in Missouri (the "**Project**").

The requirements specified in this Document are necessary for the safe and reliable operation of Empire's transmission and distribution facilities and the security of the transmission system controlled by the Southwest Power Pool, Inc. ("**SPP**"), to which Empire is a member. As the Transmission Service Provider and Planning Coordinator for Empire and many other utilities, SPP maintains an Open Access Transmission Tariff ("**SPP OATT**") and Planning Criteria documents that address the study and planning requirements specific to the SPP-controlled transmission system. Upon request of a Load Responsible Entity like Empire, SPP will study new or changed loads on Empire's transmission system in an Area Qualification study process set out in Attachment AQ of the SPP OATT as required. The Attachment AQ process is incorporated into this Document and the Applicant should ensure it has reviewed and can adhere to all obligations contained within Attachment AQ.

The requirements specified in this Document are necessary for the Parties to comply with Missouri state public utility law and regulations including section 393.130(7) of the Missouri Revised Statutes in Senate Bill No. 4 (2025) ("**SB4**"), North American Electric Reliability Corporation ("**NERC**") Reliability Standards, the SPP OATT and Planning Criteria, and federal public utility law and regulations.

References to the SPP OATT and Planning Criteria and the NERC Reliability Standards are made throughout this Document. The SPP OATT and Planning Criteria can be accessed via the SPP website at www.spp.org. NERC Reliability Standards can be found at <http://www.nerc.com/>.

This Document is reviewed and updated from time to time and as needed by Empire. Updated versions will be available on Empire's website, which can be found at:

<https://central.libertyutilities.com/all/large-load-customer-requests.html>

Responsibility of the Applicant:

- The Applicant requesting interconnection as a Large Load Customer is responsible for the design, installation, operation, and maintenance of its own equipment in accordance with Empire's requirements, the National Electrical Code (NFPA70), the National Electrical Safety Code (ANSI C2) ("NESC"), if applicable, any requirements imposed on Empire or the Applicant arising from SB4 and/or any tariffs of Empire approved by the Missouri Public Service Commission, all applicable federal and state laws and regulations, good utility practice, and other regulatory or governing bodies having jurisdiction. Interconnection of the Applicant's facilities with Empire's facilities shall further be governed by any applicable statute, rule, order, provision, guide, or code of an organization, council, and institute, regulatory or governing body having jurisdiction over such matters. The Applicant's interconnection with Empire's bulk electric system facilities may be permitted provided such interconnection complies with the procedures and requirements set forth herein.
- The Applicant shall be responsible for installing, setting, and maintaining all protective devices necessary to protect Empire's facilities.
- The Applicant shall be responsible for compliance with all permits, licenses, fees, rules, regulations, standards, agreements, ordinances, inspections, and other requirements imposed by Empire or any regulatory or governmental body having jurisdiction. There is no obligation on the part of Empire to interconnect, or to remain interconnected when the Applicant's facilities are out of compliance. In addition, the Applicant shall be responsible for, and Empire shall require, the Applicant's facilities or the interconnection between the Applicant's facilities and Empire's facilities to be modified in accordance with all applicable statutes, rules, orders, provisions, guides, or codes of an organization, council, institute, regulatory or governing body having jurisdiction over such matters.
- The Applicant shall disconnect its facilities anytime its facilities pose a dangerous condition, and such disconnection is appropriate to protect the safety of Empire's employees, customers, general public, or to maintain integrity of the Empire's facilities.
- The Applicant is responsible for coordinating with Empire during the engineering / detailed design phase of the Project to ensure coordination of protective relay devices.
- This Document addresses interconnection and does not address the requirements for electric service. The Applicant will need to engage separately with Empire to discuss the process for requesting electric service.

Large Load Customer Queue Application Process

1) **Step 1: Application Consultation**

- a) **Action:** The Applicant shall engage with Empire in a pre-application consultation meeting (the **"Pre-Application Consultation"**) *before* submitting a formal application for a queue position as a Large Load Customer. The email address for all communications related to Large Load Interconnection is: largeloadrequest@libertyutilities.com.
- b) **Purpose:** Discuss the scope of the Project (size, phasing, timeline, location), high-level system capacity constraints, data requirements, the SPP Attachment AQ study process, and potential applicability of Missouri state programs or regulations and Empire tariffs (e.g., any specific requirements under SB4 related to critical infrastructure review or approval).

Because this Document does not address the requirements for electric service, a separate process for non-interruptible loads requiring firm generation capacity will be explained at the Pre-Application Consultation. Empire shall also conduct a preliminary review of the Applicant's financial capacity to support the Project during this Pre-Application Consultation.

- c) **Applicant Role:** Provide Empire with preliminary, non-binding characteristics of the Project including expected in-service date, load ramp, location and land rights, load characteristics, curtailment (willing, and if so, capability), financing.
- d) **Empire Role:** Provide preliminary, non-binding information based on available system data. Outline application requirements and potential study costs/timelines per Attachment AQ. Inform the Applicant of known state-level requirements that may impact the Project or interconnection, including those from SB4.

Phase I: Application Submittal

2) **Step 2: Formal Application Submission (Service Request)**

- a) **Action:** The Applicant submits a completed request package for the proposed facility (the **"Application"**). For an Application to be determined to be "complete," it must include the following:
 - i) A complete standardized application form (per Attachment AQ or Empire equivalent).
 - ii) A detailed Project description (load profile, reliability needs, requested in-service date).
 - iii) Evidence demonstrating full site control to which shall include but not be limited to:
 - (1) documentation reasonably demonstrating: (1) ownership of, a leasehold interest in, or a right to develop a site of sufficient size for the purpose of constructing the Applicant's Project and equipment required to interconnect to Empire's infrastructure required for service; (2) an option to purchase or acquire a leasehold interest in a site of sufficient size

for the purpose in (1) above; (3) exclusivity or other business relationship between the Applicant and the entity having the right to sell, lease or grant the Applicant the right to possess or occupy a site of sufficient size for such purpose in (1); or (4) other evidence of site control reasonably acceptable to Empire.

iv) Site plan showing adequate acreage and facilities to support the Project including sufficient right to ingress and egress such site for the purposes of construction, operation and maintenance of the Project.

v) Application fees:

(1) A "Non-Refundable Fee": \$50,000 (cash)

(2) A "Study Deposit": \$150,000 cash or irrevocable letter of credit in a form acceptable to Empire and issued by a US bank or foreign bank with a US branch acceptable to Empire.

(a) The Applicant is responsible for all study costs including engineering, SPP Study Deposits, and other studies as deemed necessary by Empire.

(b) Empire shall be entitled to send the Applicant monthly invoices demonstrating costs incurred by Empire should the Study Deposit be fully expended before completion of the queue process. If costs associated with studying the Applicant's Project exceed the Study Deposit, Empire shall notify the Applicant that it requires an additional deposit, which the Applicant shall promptly pay to Empire no later than five (5) business days following receipt of such an invoice from Empire. Empire will require additional funds for such Study Deposit in \$100,000 increments.

vi) Energy Supply Plan: The Applicant shall describe the energy load requirements of its Project over the duration of its facilities' life as well as its preferred source of electricity, if any, for Empire to review in consideration of its current and forecasted supply mix. The Applicant shall describe whether it requires a firm or interruptible supply of electricity. This Document does not address the requirements for electric service. The Applicant must participate in a separate process for non-interruptible loads requiring firm generation capacity.

vii) Preliminary Financial Information: Documentation acceptable to the Empire demonstrating the Applicant's financial standing and capability to pursue a project of this scale, which may include:

(1) An investment grade rating with a minimum LT Issuer credit rating of "BBB-" or higher (Fitch and S&P) or "Baa3" or higher (Moody's) or "BBB(low)" or higher (DBRS);

(2) The Applicant's corporate annual report and three years fully audited financials including notes;

(3) Acceptable collateral in the form of a financial letter of credit issued by a Canadian bank or a major commercial bank that has an issuer rating or a credit rating on its long term, unsecured, unsubordinated debt of "A-" or better by Standard & Poor's (S&P), "A3" or

better by Moody's Investors Service (Moody's), "A-" or better by Fitch, or "A (low)" or better by Dominion Bond Rating Service Limited (DBRS) or U.S. commercial bank or trust company or the U.S. branch of a foreign bank that, in either case, (i) is not an affiliate of either party, (ii) has assets of at least \$10 billion, and (iii) has a Credit Rating of at "A3" or better from Moody's, "A-" or better from S&P, "A-" or better by Fitch, or "A(low)" or better by Dominion Bond Rating Service (DBRS)

- b) If multiple applications for interconnection propose the same POI, they shall be reviewed by Empire for completeness in priority based on the date of submission of the Application.

3) **Step 3: Application Completeness Review and Queue Position Assignment**

- a) **Action:** Empire shall use reasonable efforts to acknowledge receipt of the Application within 5 business days of receipt. Empire will use reasonable efforts consistent with the volume of new applications for interconnection to notify the Applicant within 20 business days whether the Application is complete, deficient, or rejected.
 - i) If the Application is deemed deficient, Empire will notify the Applicant of any deficiencies, and the Applicant shall have 10 business days to correct all deficiencies and resubmit its Application. If the Applicant cures all such deficiencies and its Application is deemed complete by Empire within such cure period, its complete Application shall be dated the date that Empire deems it complete. If the Applicant does not cure all deficiencies within such cure period, it shall be considered withdrawn, subject to Empire's right to grant an extension of such cure period if the Applicant is pursuing to cure all deficiencies using good faith efforts. The Applicant is not assigned a queue position until the Applicant has submitted an application that Empire deems complete.
 - (1) A deficient and un-cured Application may result in forfeiture of the Non-Refundable Fee and the forfeiture of unused funds from the Study Deposit by Empire if the Applicant does not correct all deficiencies within the cure period above.
 - ii) An Application may be rejected if a substantial portion is not complete or supporting documentation is missing. If the Application is rejected, the Application will have no position in the queue.

Phase 2: Queue Entry & Studies Initiation

- 4. **Step 4: Queue Assignment Action:** Upon deeming the Application complete, Empire assigns the Application a queue position based on the date upon which the Application was deemed complete by Empire.
 - o **Empire Role:** Maintain and potentially publish (non-confidential details) the interconnection queue. Formally notify the Applicant of their queue position and Attachment AQ deposit requirements, tariffs, and this Document.
- 5. **Step 5: Scoping Meeting**

- **Action:** Empire hosts a scoping meeting with the Applicant which shall take place no later than two weeks after an Application is deemed complete.
- **Purpose:** Define the scope, assumptions, and methodology for the required load interconnection studies under Attachment AQ. Discuss potential POIs and alternatives. Develop energy supply assumptions to estimate a plausible interconnection date for the Project.
- **Participants:** Empire planning/engineering team and the Applicant technical team.

6. **Step 6: Attachment AQ Load Interconnection Studies**

- **Action:** Empire, in the capacity of transmission customer in SPP, and SPP shall perform certain studies as required by SPP OATT Attachment AQ. This may include a Delivery Point Assessment (“DPA”) or equivalent system impact studies.
- **Purpose:** Evaluate the impact of the Applicant’s load on the transmission system’s reliability, stability, and power quality. Identify necessary system upgrades (substations, lines, protection systems) required to accommodate the Applicant’s load reliably. Determine preliminary cost estimates and construction timelines for these upgrades, following Attachment AQ procedures for cost allocation.
- **Study Components:** Load flow analysis, short circuit analysis, stability analysis, protection coordination review, and identification of impacts on transmission facilities.
- **Timeline:** Can range significantly (e.g., 90-180+ days) depending on complexity, study clustering, and Empire/consultant resources. Requires Applicant-provided load models. Empire agrees to initiate such studies as soon as reasonably practicable using commercially reasonable efforts.
- **Cost:** Funded by the Applicant’s Study Deposits (draw-down account, true-up may be required).

Phase 3: Detailed Studies & Agreements

7. **Step 7: Load Interconnection Study Review & Decision Point**

- **Action:** Empire shall provide the Applicant the draft study report(s) (e.g., DPA) as soon as practicable for review and comment. Empire will set up a meeting with the Applicant shortly thereafter to discuss the findings of the study report(s). Final report will be provided upon completion by SPP.
- **Decision Point:** Based on the final study report(s) results (required upgrades, costs, timelines under Attachment AQ), the Applicant shall notify Empire no later than 15 days following Empire’s delivery of the study report(s) to the Applicant as to whether it wishes to (i) proceed with the request for transmission service and interconnection as outlined

in its Application, (ii) withdraw its Application, or (iii) request supplemental studies by Empire.

- **Requirement:** The Applicant may need to provide additional deposits or financial security for the supplemental study, as required by Empire, Attachment AQ, or Empire's tariff.

8. **Step 8: Supplemental Study (for the direct connection of Applicant's Facilities)**

- **Action:** If Empire system upgrades are identified as being required in the initial study report(s) and the Applicant proceeds with the Application, supplemental studies may be required (such as a facilities study) ("**Supplemental Studies**").
- **Purpose:** Develop detailed engineering designs, specifications, more refined cost estimates (+/- 25%), and a definitive construction schedule for all necessary interconnection facilities and network upgrades.
- **Timeline:** Varies based on complexity (e.g., 60-120+ days).
- **Cost:** The cost of the Supplemental Studies shall be solely borne by the Applicant and initially funded by the Study Deposit. Additional financial security may be required from the Applicant, as requested by Empire.

9. **Step 9: Supplemental Study Review & Decision Point**

- **Action:** Empire shall provide the draft Supplemental Study report(s) to the Applicant as soon as practicable, and Empire shall schedule a meeting with the Applicant to discuss its findings shortly thereafter. Empire and the Applicant shall work to finalize the Supplemental Study report(s) using commercially reasonable efforts.
- **Decision Point:** Final opportunity for the Applicant to commit to the Project's costs and timelines before executing binding agreements.
- **Requirement:** The Applicant confirms intent to proceed and provides necessary financial security for network upgrades as required by the final facilities study(ies) report(s), Attachment AQ, and Empire tariffs.

10. **Step 10: Service & Interconnection Agreement(s) Negotiation & Execution**

- **Action:** Empire and the Applicant shall negotiate the terms of agreements required to carry out the Project which may include: Network Integration Transmission Service Agreement, Interconnection Agreement, Energy Supply Agreement, and Notice to Construct based on SPP study results and applicable tariffs (including Attachment AQ) (collectively, the "**Interconnection Customer Agreements**"). Such Interconnection Customer Agreements may be subject to the terms of agreements between Empire and SPP.

- **Content:** The Interconnection Customer Agreements shall define technical specifications, operational requirements, responsibilities, cost allocation (per Attachment AQ), security requirements, milestones, and commercial terms for both transmission service and physical interconnection required to carry out the Project. The Interconnection Customer Agreements will also incorporate or be subject to applicable Missouri state laws (e.g., SB4) as well as other applicable regulations, laws and statutes.
- **Timeline:** The expected timeline to negotiate the Interconnection Customer Agreements is approximately 60–90 days.
- **Outcome:** The Interconnection Customer Agreements may be contingent on third party approvals, including those from regulators and governing bodies (e.g., under SB4).

Phase 4: Implementation

11. Step 11: Engineering, Procurement, and Construction (“EPC”)

- **Action:** Empire and the Applicant undertake the detailed design, procurement of equipment, and construction of their respective facilities and upgrades as defined in the Interconnection Customer Agreements. Regular coordination meetings between the Parties will be held.
- **Funding:** Applicant provides funding/security for network upgrades pursuant to the Interconnection Customer Agreements.

12. Step 12: Testing & Commissioning

- **Action:** Once construction of all required infrastructure is complete, Applicant’s equipment and systems shall be required to undergo rigorous testing and commissioning procedures in accordance with Empire’s standards and protocols and applicable laws, regulations and codes of regulatory or governing bodies having jurisdiction, to ensure safe, reliable integration and operation of each Party’s facilities and the grid. The Applicant shall be required to ensure it causes no adverse effect on Empire’s system, as contemplated by the Interconnection Customer Agreements, or as otherwise directed by Empire.
- **Purpose:** Ensure safe, reliable integration and operation of each Party’s facilities.

13. Step 13: Commercial Operation

- **Action:** Upon successful commissioning and fulfillment of the Interconnection Customer Agreements’ terms, including any final state operational permits or approvals (potentially related to SB4), Empire will work to grant permission for the Applicant’s facilities to commence commercial operation and interconnect to the grid, taking transmission service, as contemplated by the Interconnection Customer Agreements.