

Guidelines for Interconnection of Large Qualifying Generation Systems to Lumbee River EMC's Distribution System

The Applicant installing a Large Qualifying Generation system with a nameplate rating of over 25 kw, and with plans to interconnect to Lumbee River EMC's distribution grid with the intent of selling power back to the Cooperative must submit a "Lumbee River EMC Interconnection Application for Large Qualifying Facilities over 25 kW" form requesting interconnection. Upon approval of this application and prior to interconnection, the Applicant's system must be verified by the Cooperative as meeting all interconnection standards and the Applicant will be required to enter into a written agreement with the Cooperative, which specifies the installation and operating requirements to ensure that personal safety and system reliability will not be compromised. This agreement is known as the "Lumbee River Electric Membership Corporation Standard Interconnection Agreement for Distributed Generation Facilities."

Steps to Achieve Interconnection /Parallel Operation

- 1) Submit a "Lumbee River EMC Interconnection Application for Large Qualifying Facilities over 25 kW" application, a "Requirements for Interconnection of Large Qualifying Facilities over 25 kW to Lumbee River EMC's Distribution System" form, and any requested information. These forms are available from the Cooperative.
- 2) The application is reviewed by the Cooperative's engineering staff.
- 3) Proposed interconnection is deemed possibly feasible (pending the Engineering Study results) or not feasible.
- 4)
 - a) **If proposed interconnection is deemed possibly feasible**, applicant will have to pay an Engineering Study fee of \$7,000 to be entered into the queue. The results from the Engineering Study will determine if the project is feasible and what modifications will have to be made to accommodate the project. The Applicant and the Cooperative will sign the "Lumbee River Electric Membership Corporation Standard Interconnection Agreement for Distributed Generation Facilities" prior to interconnection. In order to interconnect the Applicant's equipment to the Cooperative's distribution system, Lumbee River EMC will order and purchase all required metering equipment necessary for the purpose of power production measurement. The Applicant will be responsible for reimbursement to Lumbee River EMC for such equipment expenses. The Applicant is responsible for costs incurred by the Cooperative pursuant to the interconnection standard. Applicant will also be advised of any additional costs incurred by the Cooperative pursuant to the interconnection, and payment must be made prior to the Cooperative making the interconnection. The Applicant must ensure that the installation complies with the National Electric Code (NEC) and all applicable local codes (latest editions) and that the system has been inspected and approved by the electric inspector that has legal jurisdiction.
 - i) Once the Engineering Study fee is paid by the Applicant they will be entered into a queue for the given circuit/substation to which they wish to interconnect.
 - ii) Once the results of the primary Engineering Study have been submitted to the applicant they will have 10 business days to affirm that they wish to interconnect. The next Applicant in the queue will be notified of the remaining capacity for the given circuit/substation after the primary Applicant has made their decision.
 - iii) If the secondary Applicant wishes to proceed with the Engineering Study the Study will be performed and step ii will be repeated until the capacity is reached.
 - iv) If the secondary Applicant does not wish to proceed to the Engineering Study, \$1,500 will be retained from the Engineering Study fee for administrative costs and the remaining \$5,500 will be refunded to the Applicant.
 - b) **If rejected**, the Cooperative will advise the Applicant why the project was not approved, and what is required to bring it into compliance.

***Note:** Should applicant choose to begin construction prior to the project being approved by the Cooperative, they do so with the understanding the system/interconnection is subject to final approval by the Cooperative. Installation of additional Cooperative-owned interconnection facilities, at the Applicant's expense, may be required by the Cooperative at a later date if the Applicant's generation system, despite compliance with the interconnection standards, causes safety, reliability or power quality problems.*

- 5) At the time of application for interconnection and prior to Lumbee River EMC arranging for the Cooperative's interconnection facilities, the Applicant must provide verification:
 - That the renewable energy system(s) equipped with a voltage inverter, shall be manufactured, installed and operated in compliance with Underwriters' Laboratory

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(UL) standard 1741 for distributed generation systems and has been identified and listed as "Utility Interactive."

(Note: Induction type generators shall be approved on a case by case basis.)

- That the system installation complies with the National Electric Code (NEC) and all applicable local codes (latest editions) and that the system has been inspected and approved by the electrical inspector have legal jurisdiction. See list of applicable standards.
- That the system shall be installed, operated and maintained in accordance with the manufacturers, government and industry standards and specifications.
- A disconnect switch will be installed between the Utility's electric system and the Applicant's generator.

**Note: A distributed generation equipment system (meaning all interface components including switchgear, inverters, integrated generator or other interface devices) may be considered eligible for interconnected generation if it has been submitted by a manufacturer to a nationally recognized testing and certification laboratory (NRTL) and has been tested, identified, and listed by the NRTL as meeting UL standard 1741 for continuous interactive operation with a utility grid.*

- 6) The Applicant submits payment for the Cooperative's interconnection aid-to-construction and any additional charges as may be necessary to meet the Cooperative's interconnection standard.
- 7) Prior to interconnection, the Cooperative will inspect and test that the Applicant's renewable energy generation system meets safety and power quality requirements.
- 8) The Cooperative sets the metering interconnection device(s) to record the energy produced and delivered to the Cooperative by the Applicant's renewable energy generator system.
- 9) The Cooperative makes the necessary changes to the Applicant's account so billing statements will list the applicable charges when the net generation capacity of the facility is between 25 kW and 500 kW.