

**SHELBY ELECTRIC COOPERATIVE
BOARD POLICY 307**

INTERCONNECTION AND PARALLEL OPERATION OF DISTRIBUTED GENERATION

I. OBJECTIVE

To define the process for Interconnection with, and Parallel Operation of, a Distributed Generation Project (DGP) on the electrical system of the Cooperative.

II. SCOPE AND APPLICABILITY

This policy applies to Interconnection on the electrical system of the Cooperative of any Distributed Generation Project (DGP) designed for Parallel Operation that meets all applicable electrical codes and standards. This policy is administered in concert with policies of the Cooperative pertaining to Interconnection of and Service to Qualifying Facilities under Public Utility Regulatory Policies Act (PURPA) (Board Policy 321), Net Metering and Cooperative Credit for Excess Member-Generated Electric Energy (Board Policy 308), and Small Distributed Generation Facilities Incentive (Board Policy 323). This policy does not apply to generation operated in isolation, as is the case for emergency standby generators.

To the extent that requirements and processes of this policy for Interconnection of a Distributed Electricity Generation Facility (DEGF), as defined herein, include certification and operation as a Qualifying Facility (QF) under PURPA, such QF-related requirements and processes shall not be applicable to the Interconnection of an Eligible Renewable Electrical Generating Facility (EREGF), as defined herein.

Interconnection of a Qualifying Facility (QF) with a Nameplate Rating greater than 100 kilowatts of alternating current (AC), regardless of whether the Interconnection is requested on the Cooperative's electrical system or the electrical system of Prairie Power, Inc. (PPI), the electric generation and transmission cooperative of which the Cooperative is a member, shall, in accordance with PPI's Policy #509 (Interconnection Policy for Cogenerators and Small Power Producers under Public Utility Regulatory Policies Act (PURPA)), comply with interconnection requirements, policies, rules, terms procedures and cost recovery methodology adopted by PPI.

DEFINITIONS FOR PURPOSES OF THIS POLICY

“Cooperative” means Shelby Electric Cooperative which owns and operates the power lines delivering electrical power and energy to the premises of its members within a defined geographic service territory.

“Requestor” means a member (whether an individual person or an entity) of the Cooperative making an Interconnection Request for the Interconnection of a DGP at the member’s specific service location premises.

“Distributed Generation Project” or “DGP” means a Distributed Electricity Generation Facility (DEGF) or an Eligible Renewable Electrical Generating Facility (EREGF).

“Distributed Electricity Generation Facility” or “DEGF” means an electric-generating facility that: (i) has a Nameplate Rating not exceeding 100 kilowatts of alternating current (AC) capacity, (ii) is a Qualifying Facility (QF) as defined in the policies of the Cooperative pertaining to Interconnection of and Service to Qualifying Facilities under Public Utility Regulatory Policies Act (PURPA) (Board Policy 321), (iii) is interconnecting with the electrical system of the Cooperative, and (iv) is not administered under the net metering provisions of Board Policy 308 (Net Metering and Cooperative Credit for Excess Member-Generated Electric Energy).

“Eligible Renewable Electrical Generating Facility” or “EREGF” means (i) a generator powered by solar electric energy, wind, dedicated crops grown for electricity generation, anaerobic digestion of livestock or food processing waste, fuel cells, or micro turbines powered by renewable fuels, or hydroelectric energy, (ii) with a generator capacity of 10kW AC or less, (iii) which is not certified as a Qualifying Facility, and (iv) is eligible for coverage under Board Policy 308 (Net Metering and Cooperative Credit for Excess Member-Generated Electric Energy).

“Small Distributed Generation Facilities” or “Small DG” means one or more electricity production resources which meet all of the following criteria: (1) owned by a Member of the Cooperative; (2) located in the retail service area of the Cooperative; (3) connected to and operating on the Member’s low-voltage electric premises wiring associated with a single, specified service metering point; (4) the total combined Nameplate Rating for such resources at the single, specified service metering point is less than or equal to 50 kilowatts and sized to offset no more than 110% of the Member’s load over the previous 12 months (if 12 months of data is not available, the average amount of a similar Member shall be used); (5) such resources produce electric energy using biomass, waste, renewable resources, including wind, solar energy, and water; and (6) such resources are not taking service under PPI Policy #504 (net metering) or the Cooperative Policy #308 or under PPI Policy #509 (QF) or the Cooperative Policy # #321.

“Nameplate Rating” means the maximum electrical energy production capability of the Distributed Generation Project, specified in kilowatts of alternating current, deliverable to the Point of Interconnection.

“IEEE” means the Institute of Electrical and Electronic Engineers, Inc.

“IEEE Standard 1547” means the most current revision, at the time of the DGP interconnection request submittal, of IEEE Standard 1547. The current revision of IEEE Standard 1547 is titled “Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power Systems Interfaces”.

“IEEE Standard 1547.1” means the amended release of the Institute of Electrical and Electronic Engineers, Inc. (IEEE) Standard 1547.1 at the time of the DGP interconnection request submittal. The current title of this standards is “Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems” as amended and supplemented, at the time the Interconnection Request is submitted.

“UL Standard 1741” means the amended release of Underwriters Laboratories (UL) Standard 1741 standard titled “Inverters, Converters, and Controllers for Use in Independent Power Systems,” November 7, 2005 edition, as amended and supplemented.

“MISO” means the Midcontinent Independent System Operator.

“Parallel Operation” means AC electrical generation operated in electrical synchronism with the voltage and frequency of the grid in a manner consistent with applicable electrical codes and standards, and in accordance with good utility practice.

“Point of Interconnection” means the physical point where (i) the facilities of the Requestor’s DGP meet the facilities of the Cooperative, (ii) title to energy, capacity, or both is transferred, and (iii) energy, capacity, or both is delivered from the Requestor’s DGP.

“Interconnection” or **“Interconnect”** means the physical electrical connection interface between two electrical systems owned by different parties.

“member” means a member of the Cooperative which is provided electrical power and energy by the Cooperative through a retail service meter.

“Interconnection Request” means a request from the Requestor to the Cooperative to Interconnect Requestor’s DGP to the Cooperative’s electrical system and is comprised of the following three items, as applicable: (a) a fully-executed and completed Application for Distributed Generation Project, including the Distributed Generation Project General Description and Electrical Characteristics (Attachment A hereto); (b) for a DEGF, an original signed copy of the Requestor Certification of Qualifying Facility Under Public Utility Regulatory Policies Act (PURPA) (Attachment B hereto); and (c) remittance to the Cooperative of (i) a non-refundable application fee and (ii) any required analysis deposit. An Application for Distributed Generation Project is not deemed active until the Application for Distributed Generation Project has been determined to be complete and has been annotated with a Holding Date indicating entry into the Queue.

“Holding Date” means the date and time corresponding to the Cooperative determination that an Interconnection Request is complete and is placed in the Queue. This determination includes receiving all applicable paperwork, application fee, and analysis deposit.

“Queue” means the formal order of DGPs, arranged in order of their corresponding Holding Dates.

“Queue Date” means the date and time corresponding to the Cooperative determination that analysis of a DGP may commence within the Queue. Analysis of the Interconnection Request for a particular DGP begins once construction, installation, and energization of all DGPs having prior Holding Dates within the Queue that would or may impact the analysis of the Interconnection Request of the particular DGP have been completed. If analysis of the Interconnection Request for a particular DGP would not be impacted by the completion construction, installation, and energization of other DGPs having Holding Dates in the Queue prior to the Holding Date of that particular DGP, analysis of the Interconnection Request of that particular DGP may commence even though analysis of Interconnection Requests and construction, installation, and energization for such other DGPs with prior Holding Dates have not yet been completed.

III. PROCESSING INTERCONNECTION REQUESTS

- A. A Requestor seeking to interconnect a DGP shall submit to the Cooperative an executed Interconnection Request.
- B. The Interconnection Request will be reviewed by the Cooperative for completeness. Once the Interconnection Request is determined by the Cooperative to be complete, the Interconnection Request shall be annotated by the Cooperative to indicate placement into the Queue and assignment of the Holding Date for that Interconnection Request. An annotated copy of the Interconnection Request shall be provided to the Requestor initiating the Interconnection Request.
- C. Interconnection Requests shall be evaluated for their impact on the electrical system of the Cooperative and any other affected utility in the order of the Holding Dates within the Queue, except that, if analysis of the Interconnection Request for a particular DGP would not be impacted by the Interconnection Request of other DGPs having Holding Dates in the Queue prior to the Holding Date of that particular DGP, analysis of the Interconnection Request of that particular DGP may commence even though analysis of Interconnection Requests and construction, installation, and energization for such other DGPs with prior Holding Dates have not yet been completed. The Interconnection Request shall be annotated by the Cooperative to indicate the commencement of analysis of the Interconnection Request and the issuance of the Queue Date.

Beginning on the Queue Date, the Cooperative will use reasonable efforts to meet the following schedule for analysis and work; however, the Cooperative shall not be legally bound by the timeframes set forth in this schedule.

- D. Within 30 business days of the Queue Date (for a DGP with a Nameplate Rating of less than 50 kW) or within 60 business days of the Queue Date (for a DGP with a Nameplate Rating of 50 kW or greater, but not greater than 100 kW), the Cooperative shall analyze the Interconnection of the DGP regarding interaction with and effect upon the electrical system of the Cooperative. In doing so, the Cooperative will determine and specify any enhancements to the electric system of the Cooperative necessary to accommodate the Interconnection of the DGP.
- E. Within 35 business days of the Queue Date (for a DGP with a Nameplate Rating of less than 50 kW) or within 65 business days of the Queue Date (for a DGP with a Nameplate Rating of 50 kW or greater, but not greater than 100 kW), the Cooperative, in its sole and unfettered judgement, will determine if there is a likelihood of material electrical impact to third-party utility electrical systems. If the Cooperative determines that there is a likelihood of material impact to third-party utility electrical systems, the Cooperative will notify the Requestor of the Cooperative's obligation to notify the third-party utility, and the right of the third-party utility to require its own analyses of impacts. The Cooperative will arrange for discussions with the third-party utility as required. The Requestor will be responsible for all costs related to the third-party utility analyses, and the Requestor will be required to arrange for any required payments to the third-party utility. In the event a third-party utility analysis is necessary, the subsequent schedule as described in paragraphs F through Q of this Section III will be adjusted day-for-day as it corresponds to the completion of the third-party utility analyses.
- F. Within 40 business days of the Queue Date (for a DGP with a Nameplate Rating of less than 50 kW) or within 70 business days of the Queue Date (for a DGP with a Nameplate Rating of 50 kW or greater, but not greater than 100 kW), the Cooperative shall communicate in writing to the Requestor any added electrical elements, improvements, enhancements, systems, or other consequential additions, changes, or operational restrictions to the Cooperative electrical system necessary to accommodate the Interconnection. A commensurate budgetary estimate shall be prepared by the Cooperative at this same time. The Cooperative shall formally notify the Requestor in writing of this budgetary estimate and shall clearly state the Cooperative plans no further action at this time, pending the execution of an Interconnection Construction Agreement (Attachment C).
- G. If the Cooperative will incur no cost associated with the Interconnection, within 40 business days of the Queue Date, the Requestor shall be notified in writing whether the Interconnection Request has been approved by the Cooperative.

- H. If there are costs to be incurred by the Cooperative to facilitate the Interconnection, within 60 business days of the Queue Date (for a DGP with a Nameplate Rating of less than 50 kW) or within 90 business days of the Queue Date (for a DGP with a Nameplate Rating of 50 kW or greater, but not greater than 100 kW), the Requestor shall execute an Interconnection Construction Agreement in the form of Attachment C and place on deposit with the Cooperative an amount equal to 110% of the budgetary cost estimated for the Interconnection. Upon completion of the Interconnection-related work, any unused funds shall be remitted to the Requestor along with an accounting of the costs incurred. It shall be the responsibility of the Requestor to pay the full and total cost of the Interconnection even if such amount is in excess of the deposit(s). As the Interconnection work progresses, should the actual costs be then forecast to exceed 110% of the full budgetary estimate on deposit with the Cooperative, the Cooperative shall request additional funds to be placed on deposit with the Cooperative. Failure by the Requestor to do so in the timeframe specified by the Cooperative may, based on the sole and unfettered judgement of the Cooperative, result in the Cooperative temporarily ceasing all work on the Interconnection.
- a. Requestor's payment of construction costs shall be treated as a contribution to the Cooperative in aid of construction only, and Requestor shall not acquire any ownership interest in the metering, wiring, safety devices, or other equipment installed by the Cooperative at Requestor's service location.
 - b. Failure by the Requestor to place funds on deposit with the Cooperative within 30 days after the date specified in the schedule above shall result in the Interconnection Request being cancelled and voided. A subsequent request by the Requestor to renew or resume the cancelled Interconnection Request shall be treated as an entirely new Interconnection Request.
- I. The third-party utility analysis may conclude that added electrical elements, improvements, enhancements, systems, or other consequential third-party electric system additions, changes, or operational restrictions are necessary to accommodate the Interconnection. Arrangements with the third-party utility for payment of any related costs are the responsibility of the Requestor. The Cooperative will coordinate activities among the Requestor, the Cooperative, and the third-party utility to the best of the Cooperative's ability, but explicitly does not warrant the process or outcome.
- J. At the sole and unfettered discretion of the Cooperative, the Cooperative shall provide the Requestor with certain requirements and related specifications pertaining to the design and construction of the Interconnection as it regards the work required of the Requestor. Such specifications may include required electrical protection schemes, voltage coordination arrangements, or any other

considerations in keeping with good utility practice including, but not limited to, (i) IEEE Standard 1547 (ii) IEEE Standard 1547.1, and (iii) UL 1741.

- K. The Interconnection work on behalf of the Cooperative shall be completed in keeping with the normal and conventional work practices, hours, and priorities of the Cooperative. The Cooperative will not warrant a completion date of the work required for the Interconnection.
- L. The Cooperative will notify the Requestor in writing of completion of the Interconnection work undertaken by the Cooperative. Notice of completion of the Interconnection work is not an authorization for energization of the DGP or the Interconnection by the Requestor.
- M. The Requestor shall formally notify the Cooperative in writing of completion of the Interconnection work required of the Requestor and, at the Cooperative's sole and unfettered discretion, the Requestor may be required by the Cooperative to provide a Certificate of Completion from a certified licensed electrician. Notwithstanding the completion of the Interconnection work required of the Requestor, the main electrical disconnect controlling the electrical interfacing of the DGP with the electrical system of the Cooperative shall remain open and locked. At this time, the Requestor shall provide the Cooperative with a certificate of insurance as required in this Policy.
- N. If a third-party utility required certain work to be done to facilitate the Interconnection, the Requestor is responsible for obtaining a Certificate of Completion from the third-party utility. Notwithstanding the completion of the Interconnection work required of the third-party utility, the main electrical disconnect controlling the electric interfacing of the DGP with the electrical system of the Cooperative shall remain opened and locked.
- O. Subsequent to the Cooperative notifying the Requestor in writing of completion of the Interconnection work undertaken by the Cooperative, and within 10_business days of receipt of notice by the Cooperative of completion of Interconnection work by the Requestor and the third-party utility, if applicable, the Cooperative at its sole and unfettered discretion may inspect the DGP including, but not limited to the Point of Interconnection. Upon satisfaction of the Cooperative, the Requestor shall execute an Agreement for Interconnection and Parallel Operation of Distributed Generation in the form of Attachment D to this policy.
- P. After the execution of the Agreement for Interconnection (Attachment D), the Cooperative shall issue the Requestor, in writing, a formal Authorization to Energize in the form of Attachment E. Absent the Authorization to Energize, the main electrical disconnect controlling the electrical interfacing of the DGP with the electrical system of the Cooperative shall remain open and locked.

- Q. Any remuneration or credit due either party as a direct result of the ongoing operations of the generation shall be as specified in the policies of the Cooperative regarding Interconnection of and Service to Qualifying Facilities under Public Utility Regulatory Policies Act (PURPA) (Board Policy 321) or Net Metering and Cooperative Credit for Excess Member-Generated Electric Energy (Board Policy 308).
- R. If, at any point, changes to the DGP are made by the Requestor, Requestor shall provide detailed information concerning such changes, in writing, to the Cooperative. Any and all changes must be reflected in an amended Distributed Generation Project General Description and Electric Characteristics included in the Application for Distributed Generation Project (Attachment A). Should the change be considered a material modification, a new Application for Distributed Generation Project will be required and all application fees, analysis to that point, and position in the Queue will be forfeited and the Interconnection Request process shall be re-started. Material modifications may include, but are not limited to, any changes in Interconnection configuration and/or technical parameters. The materiality of such changes or modifications shall be determined in the sole and unfettered discretion of the Cooperative.

IV. REQUIREMENTS

- A. Requestor shall carry and keep in force liability insurance issued by a licensed insurance carrier with an A. M. Best rating of B+ or better that provides protection against claims for damages resulting from (i) bodily injury, including wrongful death, and (ii) property damage arising out of the Requestor's ownership and/or operation of the DGP under this policy. Prior to Interconnection of a DGP to the Cooperative's electrical system, the Requestor shall provide a certificate of insurance to the Cooperative reflecting the coverages set forth in this paragraph. At all times thereafter, but not less frequently than annually, or upon demand by the Cooperative, the Requestor shall provide a renewal or replacement certificate of insurance to the Cooperative reflecting such coverages.
- a. EREGF insurance policies must include a coverage limit of not less than \$1,000,000 per occurrence and shall provide for a minimum 30-day notice of cancellation.
 - b. DEGF insurance policies must include a coverage limit of not less than \$1,000,000 per occurrence and shall provide for a minimum 30-day notice of cancellation.
- B. No DGP installation will be permitted that:
- a. reduces reliability to other members or patrons of the Cooperative or causes voltage conditions on the Cooperative's electric system to be outside of the limits of ANSI C84.1 Range A;

- b. is expected to produce objectionable harmonics on the Cooperative's electric system. Any mitigation required to resolve harmonic problems created by Requestor's DGP will be completed and paid for by the Requestor; or
 - c. creates a safety concern or hazard to the public or Cooperative personnel.
- C. The Requestor's DGP shall be subject to the Cooperative's requirements for maintaining voltage standards, the production of reactive power, phasing, and frequency.
- D. The Cooperative (and its agents and employees) shall have free and unencumbered access to the DGP, Interconnection-associated equipment, and the Requestor's premises at all times for any reasonable purpose in connection with the Interconnection or the provisions of this policy.
- E. The Requestor shall not in any manner operate the DGP so as to energize the Cooperative's system during any period of electricity service interruption. The Requestor's equipment must contain a disconnect device to which the Cooperative (and its agents or employees) have access and which the Cooperative (and its agents or employees) can lock in an open position to disconnect, for safety reasons, the Requestor's DGP from the Cooperative's electric delivery system.
- F. Electric generation facilities, including any DGP Interconnected under this policy, may be disconnected by the Cooperative (and its agents or employees) from the Cooperative's electric system whenever, in the sole and unfettered opinion of the Cooperative, such action is required by an emergency, for reasons of personal or public safety, or it is believed, in the sole and unfettered judgement of the Cooperative that the DGP is causing an adverse impact on quality of electricity service. The Cooperative (and its agents or employees) shall attempt to provide reasonable notice to the Requestor prior to disconnection of the DGP, if possible, but the Cooperative is under no obligation to do so.
- G. The Requestor shall pay all costs of the Interconnection including initial and future transmission, distribution, metering, service, and other facilities costs necessary to permit Parallel Operations with the Cooperative.
- H. Any auxiliary or reserve power service required by the Requestor must be arranged in accordance with the terms of the Cooperative's applicable policies and rates as they may be modified from time to time.
- I. In the event of a dispute between the Cooperative and the Requestor, either party shall provide the other party with a written notice of dispute describing in detail the nature of the dispute. If the dispute has not been resolved within two

business days after receipt of the notice, either party may request that the dispute be referred to an impartial mediator selected by the parties, the costs of which will be borne equally by the parties. If neither party requests the dispute be referred to an impartial mediator or if mediation fails to resolve the dispute, then either party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of this policy.

V. INDEMNIFICATION

The Requestor shall indemnify the Cooperative, its directors, officers, representatives, agents, and employees against any and all loss, damage, expense and/or liability to any person, including, but not limited to, Cooperative members, for injury to or death of any person and/or for injury or damage to property, including, without limitation, consequential damages, interest, punitive damages, fees and charges due the Cooperative from the Requestor in accordance with both applicable rate schedules for the provision of electric service and the Cooperative's regulations, attorney's fees, court costs and expenses, whether in whole or in part proximately caused by the construction, ownership, interconnection, operation or maintenance of, or by failure of, any works or facilities used in connection with the operation of the Requestor's DGP. The Requestor will, upon the Cooperative's request, accept tender of defend any suit asserting a claim covered by this obligation to indemnify the Cooperative and/or its directors, officers, agents, or employees.

Adopted: January 22, 2008

Amended: July 27, 2010

Amended: July 23, 2019 (effective November 1, 2019)

Amended: April 25, 2023 (effective June 1, 2023)