

## COBB ELECTRIC MEMBERSHIP CORPORATION

### POLICY NO. 614

- I. SUBJECT: DISTRIBUTED GENERATION POLICY
- II. POLICY

Cobb Electric Membership Corporation (herein after referred to as "Cobb EMC" or the "Cooperative") commits to safely delivering reliable, competitively priced electricity while being accountable to our member-owners through sound governance, management, operating practices and improving quality of life in our local communities. In some cases, Cooperative members may choose to install their own electric power generation equipment. In these cases, Cobb EMC stands ready to work with its members to ensure that their generation equipment is installed in a manner in accordance with this policy. Members will also need to coordinate the installation and approval of their electric power generator with the local code inspection authority to ensure compliance with all applicable codes, standards, regulations, and laws.

This policy outlines the minimum requirements for members, from the Cobb EMC distribution system protection and operations perspective. Such generators can be described by several different names such as distribution generator (DG), independent power producer (IPP), co-generator, or peak shaver. Cobb EMC will refer to all these as Distributed Generation (DG). DG as described in this policy is a source of electric power that is not directly connected to a bulk power transmission system but is connected to the distribution system.

This policy is applicable only to DG facilities defined herein. The interconnection of other generators to Cobb EMC's distribution system will be addressed with each member on a case-by-case basis. This policy is not applicable to generation intended strictly for emergency backups, open transfer peak shaving, or any other stand-alone operations where DG is never tied directly with Cobb EMC's distribution system.

This Distributed Generation Policy establishes the terms and conditions for the application process, interconnection, providing energy metering services, excess energy purchases, and net metering.

#### A. Definitions

The following words and terms shall have the following meanings unless the context clearly indicates otherwise:

1. "Billing Period" means, as to a particular member, the time period between the dates on which the Cooperative normally reads the retail service meter for billing purposes.

2. "Bi-Directional Meter" is a meter capable of measuring (but not necessarily displaying) electricity flow in both directions.
3. "Bi-Directional Metering" means measuring the amount of electricity supplied by the Cooperative and the amount of electricity fed back to the Cooperative by the member's Distributed Generation Facility using a single meter.
4. Lessee" means a member Generator who has a Solar Energy Procurement Agreement (as defined in the Georgia "Solar Power Free-Market Financing Act of 2015") with a solar financing agent.
5. "Member" means a member of Cobb EMC.
6. "Member Generator" means a member who is the lessee, or owner and operator of a Distributed Generation Facility.
7. "Distributed Generation Facility" means a facility owned and operated by a Member Generator for the production of electrical energy that:
  - a. Uses a fuel cell or a renewable energy source
  - b. Has peak generating capacity not more than the rated capacity of the distribution equipment used by the cooperative to serve the member's facility
  - c. Is located on the member's premises
  - d. Operates in parallel with the Cooperative's distribution facilities
  - e. Is connected to the Cooperative's distribution system on either side of the Cooperative's retail service meter; and
  - f. Is intended primarily to offset part or all of the Member Generator's requirements for electricity.
8. "Excess Net Energy" is the positive difference between the electricity generated by the member's Distributed Generation Facility and the electricity consumed by the Member Generator during the Billing Period.
9. "Renewable Energy Sources" means energy supplied from technologies such as a solar photovoltaic system, wind turbine, biomass system, or other technologies approved in the Georgia Green Pricing Accreditation Program.

#### B. Application Process

1. Prospective Member Generator that intends to interconnect with the Cooperative's distribution system must:

- a. Submit a completed Application for Interconnection of Distributed Generation Facility (see Appendix A), including all attachments thereto, accompanied by payment of a \$100.00 application fee to the Cooperative at least thirty (30) days prior to the date the member intends to interconnect the Distributed Generation Facility to the Cooperative's electric distribution facilities;
- b. A representative from Cobb EMC will review the Application and notify the prospective Member Generator within thirty (30) days if the Application is approved or not approved. Any review or acceptance of the Application by the Cooperative shall not impose any liability on the Cooperative and does not indicate that the Member Generator's equipment is adequate to perform its intended function. The Cooperative disclaims any expertise or special knowledge relating to the design or performance of the member's Distributed Generation Facility and does not warrant the efficiency, cost-effectiveness, safety, durability, or reliability of that Distributed Generation Facility.

### C. Requirements for Initial Interconnection

1. A Member Generator may begin operation of his Distributed Generation Facility on an interconnected basis when:
  - a. The Application Process set forth in Section B above has been completed
  - b. The member has executed the Distributed Generation Facility Interconnection Agreement (see Appendix B) with the Cooperative and is in compliance with all requirements set forth therein. The member must also be in compliance with the requirements established by the National Electric Code, National Electric Safety Code, the Institute of Electrical and Electronic Engineers, and Underwriters Laboratories. The Cooperative may adopt additional safety, power quality, and interconnection requirements as it may reasonably deem appropriate.
  - c. The Member Generator has paid to the Cooperative all applicable charges and fees set forth in the Distributed Generation Facility Interconnection Agreement.
  - d. The Member Generator has made all payments required by and has otherwise complied with the conditions for extension or modification of the Cooperative's distribution system as may be determined herein and as set forth in the Cooperative's service rules and regulations.
  - e. The Member Generator has submitted to the Cooperative a copy of the final, signed, jurisdictional approval (Permit) for the member's Distributed Generation Facility from the local government entity with jurisdiction over the member's Distributed Generation Facility (generally the local building and inspection department), or proof of inspection has been made in the form of an inspection sticker at the Member Generator's premise.

D. Metering

The Cooperative will use a single bi-directional meter to measure the electricity generated for each Distributed Generation Facility that interconnects with the company's distribution system on or after July 1, 2015.

E. Energy Purchases

When the electricity generated by the Member Generator's Distributed Generation Facility exceeds the electricity supplied by the Cooperative during the Billing Period, the Member Generator shall receive a bill credit for the Excess Net Energy pursuant to the Cooperative's Distributed Generation Service Schedule, DG-1.

F. Charges for Interconnection And Net Metering

The Member Generator shall be responsible for all costs of installing, operating and maintaining protective equipment and/or electrical facilities required to interconnect with the Cooperative's distribution system. The Member Generator shall be charged for the direct costs incurred by the Cooperative as a result of the interconnection and for providing metering service. Said charges will be determined in accordance with the Cooperative's Distributed Generation Service Schedule, DG-1.

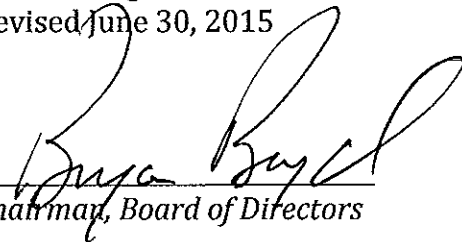
**Generation Facility and Net Energy Metering ----- Appendix A**

**Distributed Generation Facility Interconnection Agreement----- Appendix B**

Adopted: January 22, 2008

Revised August 26, 2014

Revised June 30, 2015

  
\_\_\_\_\_  
Chairman, Board of Directors

## Appendix A

### APPLICATION FOR INTERCONNECTION OF DISTRIBUTED GENERATION FACILITY

#### Cobb Electric Membership Corporation

#### APPLICATION FOR INTERCONNECTION OF DISTRIBUTED GENERATION FACILITY

This application should be completed and returned to the Cooperative Field Services representative at least thirty (30) days prior to the member's proposed interconnection date in order to begin processing the request. Members must not operate their distributed generation facilities in parallel with Cobb EMC's distribution system until the Distributed Generation Facility Interconnection Agreement has been executed by both parties. Unauthorized parallel operation of member's distributed generation facilities could result in injury to persons and/or damage to equipment or property.

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#### A. MEMBER/APPLICANT INFORMATION

Member/Applicant Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Email Address: \_\_\_\_\_

#### B. ELECTRICAL CONTRACTOR

Company: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Email Address: \_\_\_\_\_

Generator Type \_\_\_\_\_

Proposed Installation Date \_\_\_\_\_

#### AGREE AND ACCEPT

Member agrees to provide the Cooperative with any additional information required to complete the interconnection. Member shall operate his equipment within the requirements set forth in the Cooperative's Distributed Generation Facility Interconnection Agreement.

\_\_\_\_\_  
*Member/Applicant*

\_\_\_\_\_  
*Date*

**Cobb Electric Membership Corporation**

**Distributed Generation Policy**

**Appendix B**

**DISTRIBUTED GENERATION FACILITY**

**INTERCONNECTION AGREEMENT**

**Cobb Electric Membership Corporation**

**DISTRIBUTED GENERATION FACILITY INTERCONNECTION AGREEMENT**

This Agreement made \_\_\_\_\_, 20\_\_\_\_ (hereinafter called the "Effective Date"), between Cobb Electric Membership Corporation (hereinafter called "Cooperative"), and

\_\_\_\_\_ located at \_\_\_\_\_ (hereinafter called the "Member Generator"),

**WITNESSETH:**

WHEREAS, the Cooperative is an electric membership corporation providing retail electric service; and

WHEREAS, the Member Generator is a member of the Cooperative; and

WHEREAS, the Member Generator desires to install, own, operate and maintain a Distributed Generation Facility as defined in the Cooperative's Distributed Generation Policy; and

WHEREAS, the Member Generator desires to interconnect with the Cooperative's electric distribution system (hereinafter called "System") of the Cooperative and has complied with the provisions for interconnection contained in the Cooperative's Distributed Generation Policy; and

WHEREAS, the Member Generator desires to operate its generation equipment in parallel with the Cooperative's System.

NOW THEREFORE, it is understood and agreed that the Cooperative shall permit the Member Generator to connect its generation system to the System and to operate its generation equipment in parallel with the System subject to the following terms and conditions:

**1. COST OF INTERCONNECTION AND PROTECTIVE EQUIPMENT:**

The Member Generator shall be responsible for all costs of installing, testing, operating and maintaining protective equipment and/or electrical facilities required to interconnect the Member's generation equipment with the System and for providing metering service.

**2. OPERATING LIMITS:**

Operation of Member Generator-owned parallel generating equipment shall not compromise the quality of electric service to other members on the System. The Member Generator's parallel generating equipment shall meet the following minimum requirements:

**a) Voltage**

The Member Generator shall be capable of operating its generating equipment at a voltage level of plus/minus 10% of nominal system voltage. Utility grade negative sequence/under-voltage relaying shall be used to trip the equipment off the line for negative excursions exceeding 8.25% of nominal for a maximum duration of six electrical cycles. Positive excursions exceeding 10% of nominal voltage shall cause the equipment to trip off line. Voltage regulating equipment shall maintain stable excitation levels with negligible hunting (less than 2% of nominal phase current).

**b) Flicker**

Parallel operation of the generating equipment shall not cause voltage flicker in excess of 2% of nominal line voltage as measured at the primary terminals of the Member Generator's generator interface transformer.

c) Frequency

While operating in parallel with the System, the Member Generator must provide a utility grade precision over/under frequency relay calibrated to trip for frequency excursions exceeding plus/minus 0.25 Hz for greater than 10 electrical cycles on a 60 Hz base.

d) Power Factor

Member Generator-owned generation shall employ automatic means of reactive power regulation while operating in parallel with the System. The Member Generator's generating equipment shall be capable of operation within the range of 0.8 lagging to 0.8 leading power factor as required by the Cooperative.

e) Harmonics

Total current harmonic distortion shall not exceed 5.0%. Total voltage harmonic distortion shall not exceed 5.0%, with a limit of 3.0% on any individual harmonic. Special consideration will be given to regenerative drive systems and invertors reviewed on an individual case-by-case basis.

f) Stability

While operating in parallel with the System, the Member Generator's generating equipment shall maintain a stable output level with no noticeable hunting exhibited. In the event a system instability condition arises due to Member Generator-owned generation, it is the Member Generator's responsibility to take measures to rectify the source of instability.

3. GENERATOR INTERFACE TRANSFORMER:

The generator interface transformer is intended to provide isolation of the Member Generator's generating equipment from the System. The inherent impedance of the transformer will minimize the impact on the System due to faults originating at the Member Generator's generation equipment. This transformer may consist of an existing transformer serving the Member Generator's loads or a dedicated transformer dictated by generator or prevailing system characteristics. The Cooperative determines interface transformer specifications and the determination of ownership of said transformer shall be at the Cooperative's option.

4. GENERATOR PARALLELING BREAKER:

It is required that a generator-paralleling breaker be of draw-out construction, electrically operated, and rated as a five electrical cycle device for fault clearing or tripping.

5. SYNCHRONIZATION:

It is the Member Generator's responsibility to provide proper synchronizing of its parallel generating equipment. The Cooperative assumes no liability for any Member Generator-owned generation; the Member Generator operates its equipment at its own risk. Synchronizing equipment shall be capable of matching frequency within plus/minus 0.05 Hz and plus/minus 10 electrical degrees phase angle prior to paralleling breaker closure. Voltage shall be matched within plus/minus 4%.

6. SAFETY:

a) Operation of Member Generator-owned generation equipment shall not present any



safety hazard to the Cooperative employees or other members connected to the System or the public at large. Under no circumstances shall the Member Generator-owned generation be used or be capable of energizing a dead System circuit. A positive means of disconnecting and locking out the Member Generator-owned generation equipment with visible air-gap shall be provided to insure safety of Cooperative operating personnel during line maintenance. This disconnecting means may be via a lockable air-break disconnect or by a lockable draw out circuit breaker. Islanding of the Member Generator-owned generation (a situation whereby the Member Generator's loads and generation remains connected to the bus) shall be prevented by protective relaying specified by the Cooperative based on individual review of the Member Generator's proposed generating system.

- b) It is not the intent of this document to specify protection of the Member Generator's generator. Protection of the Member Generator's generating equipment is the responsibility of the Member Generator, and the Cooperative assumes no liability for damage or failure of the Member Generator's generation equipment.
- c) Prior to the initial interconnection of the Member Generators' distributed generation facility to the Cooperative's distribution system, the Member Generator will submit to the Cooperative a copy of the signed jurisdictional approval (PERMIT) for Member Generator's Distributed Generation Facility from the local government entity with jurisdiction over the Member Generator's Distributed Generation Facility (generally the local building and inspections department), or proof of inspection has been made in the form of a sticker placed at the Member Generator's premise.

**7. LIMITATION OF LIABILITY AND INDEMNIFICATION:**

Notwithstanding any other provision in this Agreement, the Cooperative's liability to Member Generator shall be limited as set forth in accordance with this section.

For the purposes of this Agreement, a Force Majeure event is any event: (a) that is beyond the reasonable control of the affected Party; and (b) that the affected Party is unable to prevent or provide protection against by exercising reasonable diligence, including the following events or circumstances, but only to the extent that they satisfy the preceding requirements: acts of war, public disorder, legal cease and desist orders, rebellion or insurrection; floods, hurricanes, earthquakes, lightning, storms or other natural calamities; explosions or fires; strikes, work stoppages or labor disputes; embargoes; and sabotage. The affected Party will be entitled to suspend or modify its performance of obligations under this Agreement but will use reasonable efforts to resume its performance as soon as possible.

**ALL PROVISIONS NOTWITHSTANDING, IN NO EVENT SHALL THE COOPERATIVE BE LIABLE TO THE MEMBER GENERATOR FOR ANY INTEREST, LOSS OF ANTICIPATED REVENUE, EARNINGS, PROFITS, OR INCREASED EXPENSE OF OPERATIONS, LOSS BY REASON OF SHUTDOWN OR NON-OPERATION OF MEMBER GENERATOR'S PREMISES OR FACILITIES OR FOR ANY INDIRECT, INCIDENTAL, OR CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES ARISING OUT OF OR RELATED, IN WHOLE OR PART, TO THIS AGREEMENT. The Cooperative shall not be liable in any event for consequential damages.**

The Member Generator shall assume all liability for and shall indemnify the Cooperative and its members, trustees, directors, officers, managers, employees, agents, representatives, affiliates, successors and assigns for and shall hold them harmless from and against any claims, losses, costs, and expenses of any kind or character to the extent

that they result from the Member Generator's design, construction, installation, operation or maintenance of the Facilities or Interconnection Facilities, or to the extent that they result from Member Generator's violation of any provision of this agreement. Such indemnity shall include, but is not limited to, financial responsibility for (a) monetary losses; (b) reasonable costs and expenses of defending an action or claim; (c) damages related to death or injury; (d) damages to property; and (e) damages for the disruption of business.

The Cooperative and Member Generator shall each be responsible for the safe installation, maintenance, repair and condition of their respective lines, wires, switches, or other equipment or property on their respective sides of the point where the electric energy first leaves the wires or facilities owned by the Cooperative and enters the wires or facilities provided by the Member Generator (the "Point of Interconnection"). The Cooperative does not assume any duty of inspecting the Member Generator's lines, wires, switches, or other equipment or property. The Member Generator assumes all responsibility for the electric service supplied hereunder and the facilities used in connection therewith, at or beyond the Point of Interconnection.

**8. TESTING:**

The Member Generator shall verify proper tripping and lockout of the generator system. Under no circumstances shall parallel generating equipment be operated with inoperative or defective protective relays. The Cooperative will perform an initial test upon installation of the Member Generator's equipment, but prior to parallel operation, to confirm proper automatic disconnect operation when the distribution system is de-energized.

**9. ACCESS:**

The Cooperative shall have access at all times to the Member Generator's premises for the purpose of meter reading and performing operations and maintenance activities on the System. The Cooperative reserves the right, but not the obligation, to inspect the Member Generator's Distributed Generation Facility.

**10. COMPLIANCE PROCEDURE:**

The Cooperative reserves the right to automatically or manually disconnect the Member Generator's Distributed Generation Facility with prior notice whenever, at the Cooperative's sole discretion, the Member Generator is deemed by the Cooperative to not be in compliance with the minimum interconnection requirements as specified via this Agreement. The interconnection will remain open until corrective action is taken and suitable testing is completed. The Cooperative reserves the right to disconnect service to the Distributed Generation Facility without notice in accordance with its Service Rules and Regulations policy 309.

**11. INTERCONNECTION AND METERING CHARGES:**

The Cooperative shall install, own and operate metering equipment that it deems necessary to permit an accurate determination of the quantity of energy delivered by the Cooperative to the Member Generator and the quantity of energy generated and delivered by the Member Generator to the Cooperative's distribution system. The Member Generator shall pay the Cooperative for the direct costs incurred by the Cooperative to provide the interconnection of the Member Generator's Distributed Generation Facility to the Cooperative's distribution system and to provide metering service, in accordance with the rates, terms and conditions of the Cooperative's Distributed Generation Rate Schedule DG-1 attached to and made a part of this Agreement.

**12. TERM:**

This Agreement shall become effective on the Effective Date written and shall remain in effect until terminated by either party giving to the other thirty (30) days' written notice; provided, however, the member may not terminate this agreement if the Distributed Generation Facility remains connected in parallel to the System. The Cooperative may also terminate this Agreement by giving thirty (30) days' written notice to the Member Generator upon any breach of this Agreement by the Member Generator or upon failure of the Member Generator's Distributed Generation Facility to generate energy in parallel with the Cooperative's distribution system for six (6) consecutive months. The Distributed Generation Service Schedule DG-1 will remain in effect until changed or discontinued by the Cobb EMC Board of Directors.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement all as of the day and year first above written.

ATTEST:

\_\_\_\_\_

Cobb EMC: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

ATTEST:

\_\_\_\_\_

Member Generator: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_