

**Okefenoke Rural  
Electric Membership Corporation**

**Distributed Generation**

**Member Information Package**

# OKEFENOKE RURAL ELECTRIC MEMBERSHIP CORPORATION

## DISTRIBUTED GENERATION MEMBER INFORMATION PACKAGE

### TABLE OF CONTENTS

Policy No. 421 – Net Metering of Member Owned Renewable  
Distributed Generation Facilities

Policy No. 422 – Interconnection of Distributed Resources to the  
Electric Distribution System

Application for Interconnection of Distributed Generation Facility  
Appendix A

Net Metering Energy Service Rider NMTR-001  
Appendix B

Distributed Generation Facility Interconnection Agreement  
Appendix C

**OKEFENOKE RURAL ELECTRIC MEMBERSHIP  
CORPORATION**

**POLICY NO. 421**

**Net Metering of Member Owned  
Renewable Distributed Generation Facilities**

# okefenoKE RURAL ELECTRIC MEMBERSHIP CORPORATION

## POLICY NO. 421

### Net Metering of Member Owned Renewable Distributed Generation Facilities

#### FOREWORD

OkefenoKE Rural Electric Membership Corporation (herein after referred to as “OREMC” or the “Cooperative”) seeks to provide its members with the best electric service possible, and at the lowest cost consistent with sound economy and good management. In some cases, Cooperative members may become interested in installing their own electric power generation equipment. In these cases, OREMC stands ready to work with its members to ensure that their generation equipment is installed in a proper and safe manner, and in accordance with all applicable codes, standards, regulations, laws and insurance requirements. In most of these cases, members will need to coordinate the installation and approval of their electric power generator with the local code inspection authority.

#### OBJECTIVES

This policy outlines the minimum requirements, from the system protection and operations perspective, for the connection of a member’s generator to OREMC’s distribution system. Such generators can be described by several different names such as distribution generator (DG), independent power producer (IPP), co-generator, or peak shaver. OREMC 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 distributed generation facilities defined in Section A.6 of this policy. The interconnection of other DG to OREMC’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 OREMC’s distribution system.

This Distributed Generation Policy establishes the terms and conditions for the interconnection of distributed generation facilities and for providing net energy metering services.

#### 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. **“Member”** means a member of Okefenoke Rural Electric Membership Corporation.
5. **“Member Generator”** means a member who is the owner and operator of a distributed generation facility.
6. **“Distributed generation facility”** means a facility owned and operated by a member of the Cooperative for the production of electrical energy that:
  - a. Uses a fuel cell or a renewable energy source;
  - b. Has peak generating capacity of not more than 10 kW for a residential application and 100 kW for a non-residential application;
  - 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.
7. **“Electric distribution system”** is the wires, poles, reclosers, breakers, regulators, transformers, and other associated equipment and facilities owned, operated, and maintained by OREMC for the purposes of the timely and reliable delivery of electrical energy to its members.
8. **“Excess net energy”** is the amount of energy received by the electric distribution system from the member generator that exceeds the amount of energy delivered to the member from the electric distribution system during the billing period.
9. **“Net metering”** means measuring the difference, over the billing period, between electricity supplied to a Member Generator from the electric grid and the electricity generated and fed into the electric grid by the Member Generator, using a bi-directional meter or an additional single direction meter.
10. **“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**

A prospective Member Generator that intends to interconnect with the Cooperative’s distribution system must:

- (1) Submit a completed Application for Interconnection of Distributed Generation Facility, including all attachments thereto, accompanied by payment of a distributed generation application fee in the amount as specified in Policy No. 409. The completed application and fee must be submitted at least thirty (30) business days prior to the date the member intends to interconnect the distributed generation facility to the Cooperative’s electric distribution facilities;
- (2) A representative from OREMC will review the Application and notify the prospective member generator within twenty (20) business 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 guarantee the adequacy of the member generator's equipment 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 with the Cooperative and is in compliance with all requirements set forth therein, including all applicable safety, power quality, and interconnection requirements established by the most recent versions of 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.
  - 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 electric 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 local government entity with jurisdiction over the member's distributed generation facility (generally the local building and inspection department).
  - f. The Cooperative has provided the Member Generator with written authorization to begin parallel operation of his distributed generation facility.

### **D. Net Metering**

The Cooperative will use either a single-directional or bi-directional meter depending upon how the distributed generation facility is connected to the distribution system. If the distributed generation facility is connected to the distribution system on the Member Generator's side of the retail service meter, the Cooperative will use a bi-directional meter for net metering. If the distributed generation facility is connected to the distribution system on the Cooperative's side of the retail service meter, the Cooperative will install an additional single directional meter for net metering at the member's expense.

### **E. Obligations to Purchase Excess Net Energy**

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 payment for the excess net energy pursuant to the Cooperative's Net Metering Service, Rider NMTR-001. However, the Cooperative will only be required to purchase such energy from Member Generators on a first-come, first-served basis until the cumulative generating capacity of all

the Member Generators' renewable energy resources equals 0.2 percent of the Cooperative's annual peak demand in the previous year.

**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 cost incurred by the Cooperative as a result of the interconnection and for providing net metering service.

**APPLICABILITY**

This policy applies to all members applying for Net metering Service of Okefenoke Rural Electric Corporation.

**RESPONSIBILITY**

The General Manager or his designee will be responsible for carrying out the provisions of this policy.

Date Adopted: March 23, 2010  
Supersedes: January 31, 2008

Attest: \_\_\_\_\_  
Secretary

Effective Date: April 1, 2010

**OKEFENOKE RURAL ELECTRIC MEMBERSHIP  
CORPORATION**

**POLICY NO. 422**

**Interconnection of Distributed Generation  
Resources to the Electric Distribution System**

# OKEFENOKE RURAL ELECTRIC MEMBERSHIP CORPORATION

## POLICY NO. 422

### Interconnection of Distributed Generation Resources to the Electric Distribution System

#### Purpose

To describe the business terms and conditions and the operational expectations and limitations under which Okefenoke Rural Electric Membership Corporation (herein after referred to as "OREMC" or the "Cooperative") will connect member owned distributed generation to the OREMC electric distribution system while providing the guidance needed to the OREMC staff to provide technical and business support for these interconnections.

#### A. Definitions

Throughout this policy and the associated forms and interconnection process, there is terminology used that is specific to the policy and the associated business practices and processes that warrant a clear, mutually understood definition. To that end the following definitions are provided:

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. "**Distributed Generation**" "**(DG)**" is a small-scale generating facility (e.g. land, equipment, materials, other items associated with a generator site) that is owned and operated by an OREMC member for the purposes of producing electrical energy to offset the member's electrical energy needs which:
  - a) Is located on the OREMC member premises;
  - b) Is connected to, and operated in parallel with OREMC's electric distribution system;
  - c) Is intended to supply a process need within the member's facilities or provide part or all of the member's electrical energy requirements as supplied by OREMC.
3. "**Electric distribution system**" is the wires, poles, reclosers, breakers, regulators, transformers, and other associated equipment and facilities owned, operated, and maintained by OREMC for the purposes of the timely and reliable delivery of electrical energy to its members.
4. "**Force Majeure**" is any event that is beyond the reasonable control of the affected Party, and that the affected Party is unable to prevent or protect against by exercising reasonable due diligence including, but not limited to the following events or circumstances, but only to the extent that they satisfy the requirements: acts of war, public disorder, rebellion or insurrection; floods, hurricanes, earthquakes, lightning, storms or other natural disasters or calamities; explosions or fires; strikes, work stoppages or labor disputes; embargoes; or sabotage.

5. **“Interconnection”** is the facility, equipment and materials that connect two systems such as a non-utility generator to a utility electric system.
6. **“Member”** means a member of Okefenoke Rural Electric Membership Corporation.
7. **“Member Generator”** means a member who is the owner and operator of a distributed generation facility.
8. **“Point of Interconnection”** is the physical point of connection between two systems such as the non-utility generator and an electric utility system.

#### **B. Scope**

This policy applies to all consumer members of Okefenoke Rural Electric Membership Corporation (OREMC) who desire to install, interconnect, own and operate member owned, Distributed Generation on the OREMC electric distribution system. Any consumer member of OREMC may own, install and operate Distributed Generation on their premises as long as they shall abide by the terms and conditions of the Interconnection Agreement executed between OREMC and the respective Member Generator.

This policy addresses the installation of Distributed Generation by OREMC members on their premises with a maximum generation capacity of ten (10) megawatts (MW). This maximum capacity limit applies to Distributed Generation installed at any member class, whether residential, commercial or industrial. This upper limitation of ten (10) MW is due directly to the capacity of the standard equipment and materials OREMC maintains in inventory without special order or handling. Any Member Generator desiring to install Distributed Generation with a capacity greater than 10 MW shall be referred to OREMC’s transmission provider for an application to interconnect directly onto the bulk transmission system.

#### **C. Safety**

Safety to the general public, the OREMC staff, facilities and equipment is the first and foremost consideration with any interconnection. The interconnection of Distributed Generation shall not under any circumstances be allowed to reduce, minimize or impair the safety to the general public, OREMC staff, facilities and equipment. To the extent necessary to ensure safe operation of OREMC’s electric distribution system, the Member Generator’s Distributed Generation installation shall adhere to the most current edition of the National Electric Safety Code (NESC) and to the most current version of OREMC’s safety rules and procedures.

In order to ensure electrical isolation from the OREMC electric distribution system when necessary for routine maintenance of the electric distribution system or during emergency conditions affecting the electric system conditions, a manual, air-gap disconnect switch capable of being tagged open, and pre-approved by OREMC shall be installed by the Member Generator. This manual disconnect switch shall be installed in a physical location which is available and readily accessible to OREMC personnel for operation twenty-four hours per day, seven (7) days per week.

OREMC shall have the option to inspect the final installation of the Distributed Generation and the connection to the OREMC electric distribution system. OREMC may refuse to allow the Member Generator to close the disconnect switch to the OREMC electric distribution system if any defects or problems are found with the interconnection or if any misapplications of equipment or materials are

detected. However, under no circumstances shall this inspection by OREMC be deemed to warrant, validate or otherwise certify the interconnection or the proper installation of the Distributed Generation. That is the sole responsibility of the Member Generator's licensed engineer or the supplier(s) of the Distributed Generation equipment.

**D. Reliability of Operation**

OREMC is required by its member-owners, state regulatory authorities, and prudent engineering practice to operate its electric distribution system in a secure and reliable manner for the benefit of these electric member-owners. As such, all Member Generator applicants are required to be familiar with and shall be compliant with the following standards: the most current edition of the Institute of Electrical and Electronics Engineers (IEEE) standard 1547 and 1547.1, "IEEE 1547 Standard for Interconnecting Distributed Resources with Electric Power Systems" and "IEEE 1547.1 Standard for Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems", the National Electrical Code (NEC), and the Underwriters Laboratory (UL) regulations in UL 1741, as well as local, county and state regulations governing the installation of distributed generation on a member's premise.

The Member Generator shall not be authorized to proceed with energizing the interconnection until such time as OREMC has received approved copies of all local, county and state notices, permits and other instruments conveying approval to proceed with the installation and operation from these local authorities.

**E. Cost**

OREMC shall recover all its costs associated with the engineering, design, construction, installation, metering and interconnection of the Distributed Generation with their electric distribution system. OREMC will not subsidize these interconnection costs from any other member class and will not allocate these costs across their various member classes.

Since each Distributed Generation installation is typically unique in configuration, fuel source, and energy output, it is reasonable to expect the costs associated with the interconnection to be unique. That is, the total cost for the interconnection will be the actual costs incurred for the interconnection. OREMC will provide the Member Generator applicant an estimate of the total cost to interconnect the Distributed Generation following submittal of the completed Application for Interconnection. As part of the Application for Interconnection process the Member Generator shall pay the total amount of the estimated cost up front before OREMC will begin any work on the interconnection. Once the interconnection is completed and all actual costs are received and totaled for the interconnection, the Member Generator shall be responsible for payment of any additional costs in excess of the original estimate. In the event the actual total cost of the interconnection is less than the original cost estimate paid by the Member Generator, OREMC will refund the difference to the Member Generator.

The total cost of the Distributed Generation facility including all equipment and materials, the design, construction, installation, testing and operational verification shall be the sole responsibility of the Member Generator. Additionally, the cost of the interconnection including all cost of labor to install and maintain the equipment necessary to meet the required electric system interconnection configuration, the prescribed equipment and testing of the protective relay scheme, metering equipment and all equipment necessary to meet the applicable safety requirements established within this policy shall be the responsibility of the Member Generator.

All future costs that may be required to meet additional requirements for public safety or system reliability, that may be required as a direct result of new conditions issued from the state, the public service commission or other government authority shall be the sole responsibility of the Member Generator.

Once the interconnection is completed and the project successfully energized and on-line, the monthly meter reading, energy billing and other monthly service costs will be recovered through the existing Rate Schedules which are incorporated herein by reference.

The cost of the interconnection is separate from and in addition to any fees, tariffs or other rates prescribed in other applicable OREMC Rate Schedules. It is not intended for these interconnection costs to supersede or otherwise void existing Rate Schedules, but they are to be applied in addition to these other rates where applicable.

**F. Liability**

With respect to OREMC's provision of electric service to the Member Generator and the services provided by OREMC pursuant to the Interconnection Agreement, OREMC's liability to the Member Generator shall be limited as set forth in OREMC's currently effective tariffs and terms and conditions for electric service.

The Member Generator shall assume all liability for and shall indemnify OREMC and its members, trustees, directors, officers, managers, employees, representatives, affiliates, successors and assigns for and shall hold them harmless from and against any claims, losses, costs, and expenses of any kind to the extent that they result, in whole or in part, from the Member Generator's negligence or wrongful conduct in connection with the design, construction, installation, testing, operation or maintenance of the Distributed Generator facility or Interconnection facilities. Such indemnity shall include, but is not limited to financial responsibility for monetary losses; reasonable costs and expenses defending an action or claim; damages related to death or injury; damages to property or the disruption of business.

The Member Generator shall have current liability insurance appropriate and sufficient to address the potential liability requirements of the Distributed Generation installation and to meet the insurance requirements set forth in the Interconnection Agreement.

**G. Interconnection**

OREMC will provide the option for any of their electric members in good standing with OREMC to interconnect with its electric distribution system to the extent the member meets the terms and conditions set forth in this policy and the Interconnection Agreement. OREMC will work with the Member Generator to determine the capacity requirements and design criteria of the interconnection facilities necessary to meet the proposed capacity requirements of the proposed Distributed Generator. As noted in Section E, "Costs", the Member Generator will be responsible for all costs associated with that interconnection facility.

Since this interconnection will provide for the delivery of electric energy purchased by the Member Generator and will provide an electrical path for the delivery of excess energy produced by the Distributed Generator, OREMC will install or cause to be installed industry standard electrical metering equipment appropriate to the capacity and configuration of the interconnection. OREMC will deploy electric industry standard and readily available metering equipment to measure

and record both the electrical energy delivered by OREMC to the point of interconnection with the Distributed Generation Facility and to measure and record the energy produced in excess of the energy delivered.

**H. Metering Reading and Billing**

To the extent practical OREMC's existing automatic meter reading system will be used to read the meters and record the energy data from the meters installed at each Distributed Generator location. The billing for this account will be calculated and the bill rendered per the billing cycles currently established and maintained in OREMC's existing billing system.

The energy rate charged the Member Generator for the energy delivered by OREMC will be the published base rate currently available for the specific member class plus the then current retail energy rate per the applicable Rate Schedule(s) for the respective member class. Energy produced by the Member Generator in excess of their local load, if any, will be addressed in the Interconnection Agreement.

To the extent the Member Generator produces excess energy in any billing cycle, that is, the energy produced exceeds the energy delivered to the Member Generator via the interconnection with OREMC, the net excess energy will be metered, recorded, calculated and processed as prescribed in the Interconnection Agreement.

**I. Diagrams Required**

The Member Generator shall provide a single-line diagram of their proposed Distributed Generator facilities indicating the planned electrical configuration, interconnection and electrical relationship to the OREMC metering installation. The single-line diagram shall be prepared and stamped by a registered professional engineer working directly with the Member Generator or directly for the supplier of the Distributed Generator.

**APPLICABILITY**

This policy applies to all members and applicants for service of Okefenoke Rural Electric Membership Corporation.

**RESPONSIBILITY**

The General Manager or his designee will be responsible for carrying out the provisions of this policy.

Date Adopted: March 23, 2010  
Supersedes: January 31, 2008

Attest: \_\_\_\_\_  
Secretary

Effective Date: April 1, 2010

**OKEFENOKE RURAL ELECTRIC MEMBERSHIP  
CORPORATION**

**Appendix A**

**APPLICATION FOR  
INTERCONNECTION OF  
DISTRIBUTED GENERATION FACILITY**

# Okefenoke Rural Electric Membership Corporation

## Application for Interconnection of Distributed Generation Facility

This application should be completed and returned to the Cooperative Member Service representative at least thirty (30) business days prior to the customer's proposed interconnection date in order to begin processing the request. **Members must not operate their distributed generation facilities in parallel with the Okefenoke Rural EMC (OREMC) distribution system until they have received written authorization for parallel operation from Okefenoke Rural EMC. Unauthorized parallel operation of customer's distributed generation facilities could result in injury to persons and/or damage to equipment or property and will result in disconnection by OREMC and delayed formal approval by OREMC until such time as another inspection can be scheduled and successfully performed.**

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### SECTION 1 - CONTACT INFORMATION

#### **A. MEMBER / APPLICANT INFORMATION**

Member Name: \_\_\_\_\_

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

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

Phone Number: \_\_\_\_\_ Representative: \_\_\_\_\_

Email Address: \_\_\_\_\_ Fax Number: \_\_\_\_\_

Account Number (OREMC billing account): \_\_\_\_\_

#### **B. INSTALLATION CONTRACTOR**

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

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

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

Phone Number: \_\_\_\_\_ Representative: \_\_\_\_\_

Email Address: \_\_\_\_\_ Fax Number: \_\_\_\_\_

#### **C. PROJECT DESIGN / ENGINEERING**

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

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

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

Phone Number: \_\_\_\_\_ Representative: \_\_\_\_\_

Email Address: \_\_\_\_\_ Fax Number: \_\_\_\_\_

PE License Number: \_\_\_\_\_ State of Registration: \_\_\_\_\_

**SECTION 2 - GENERATING FACILITY INFORMATION**

Generator Type (Check One)      Photovoltaic\_\_\_\_, Wind\_\_\_\_, Fuel Cell\_\_\_\_, Hydro\_\_\_\_,  
Other \_\_\_\_\_

Generator Manufacturer: \_\_\_\_\_

Generator Model Name & Number: \_\_\_\_\_

Generator Power Rating (KW): \_\_\_\_\_

Disconnect Switch Manufacturer / Model Number: \_\_\_\_\_

Disconnect Switch Rating (A): \_\_\_\_\_

**INVERTER DATA** (if applicable)

Manufacturer: \_\_\_\_\_ Model: \_\_\_\_\_

Rated Power Factor (%): \_\_\_\_\_ Rated Voltage (Volts): \_\_\_\_\_ Rated Amperes: \_\_\_\_\_

Inverter Type (ferroresonant, step, pulse-width modulation, etc): \_\_\_\_\_

Type commutation:    forced                    line

Harmonic Distortion: Maximum Single Harmonic (%) \_\_\_\_\_

Maximum Total Harmonic (%) \_\_\_\_\_

*Note: Attach all available calculations, test reports, and oscillographic prints showing inverter output voltage and current waveforms.*

**SECTION 3 - ONE-LINE DIAGRAM AND ADDITIONAL INFORMATION**

*In addition to the items listed above, please attach **a detailed one-line diagram of the proposed facility**, all applicable elementary diagrams, major equipment, (generators, transformers, inverters, circuit breakers, protective relays, etc.) specifications, test reports, etc., and any other applicable drawings or documents necessary for the proper design of the interconnection. Also describe the project's planned operating mode (e.g., combined heat and power, peak shaving, etc.).*

**SECTION 4 - INSTALLATION INFORMATION**

Installation Date: \_\_\_\_\_ Proposed Interconnection Date \_\_\_\_\_

**AGREE AND ACCEPT**

Customer agrees to provide the Cooperative with any additional information required to complete the interconnection. Customer shall operate his equipment within the guidelines set forth by the Cooperative.

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

\_\_\_\_\_  
Date

**OKEFENOKE RURAL ELECTRIC MEMBERSHIP  
CORPORATION**

**APPENDIX B**

**NET METERING ENERGY SERVICE  
RIDER NMTR-001**

**OKEFENOKE RURAL ELECTRIC MEMBERSHIP CORPORATION  
NAHUNTA, GEORGIA**

**Net Metering Rider  
NMTR-001**

**A. PURPOSE**

The purpose of this Rider is to establish the methods and procedures for determining credits, payments, and charges applicable to members of the Cooperative who own and operate a distributed generation facility as defined herein.

**B. 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. **"Member"** means a member of Okefenoke Rural Electric Membership Corporation.
5. **"Member Generator"** means a member who is the owner and operator of a distributed generation facility.
6. **"Distributed generation facility"** means a facility owned and operated by a member of the Cooperative for the production of electrical energy that:
  - a. Uses a fuel cell or a renewable energy source;
  - b. Has peak generating capacity of not more than 10 kW for a residential application and 100 kW for a commercial application;
  - 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.
7. **"Electric distribution system"** is the wires, poles, reclosers, breakers, regulators, transformers, and other associated equipment and facilities owned, operated, and maintained by OREMC for the purposes of the timely and reliable delivery of electrical energy to its members.
8. **"Excess net energy"** is the amount of energy received by the electric distribution system from the member generator that exceeds the amount of energy delivered to the member from the electric distribution system during the billing period.
9. **"Net metering member"** means a Member Generator receiving net metering service.
10. **"Net metering"** means measuring the difference, over the billing period, between electricity supplied to a Member Generator from the electric grid and the electricity generated and fed into the electric grid by the Member Generator, using a bi-directional meter or an additional single direction meter.
11. **"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.

### **C. APPLICABILITY**

This Rider applies to any member of the Cooperative owning and operating a distributed generation facility as defined in the Cooperative's Distributed Generation Policy. The capacity of a distributed generation facilities used by residential members shall not exceed 10 kW and the capacity of a distributed generation facility used by a commercial member shall not exceed 100 kW.

### **D. CONDITIONS OF SERVICE**

The Generator Member must have met all of the conditions of interconnection contained in the Cooperative's Distributed Generation Policy, including submittal of the Application for Interconnection of Distributed Generation Facility and the execution of the Distributed Generation Facility Interconnection Agreement.

### **E. TYPES OF NET METERING**

Net Metering will be accomplished using bi-directional metering for distributed generation facilities interconnected on the Member Generator's side of the retail service meter or single directional metering for distributed generation facilities interconnected with the Cooperative's distribution system on the Cooperative's side of the retail service meter.

## **F. DISPOSITION OF ENERGY**

If the amount of energy delivered from the electric distribution system to the Member Generator during the billing period exceeds the amount of energy received onto the electric distribution systems from the Member Generator during the billing period, then all energy generated by the Member Generator shall be deemed to have been used by the Member Generator.

If the amount of energy received onto the electric distribution system from the Member Generator during the billing period exceeds the amount of energy delivered to the Member Generator from the electric distribution system during the billing period, then such excess net energy shall be purchased by the Cooperative as provided under the Purchase Rate section of this Rider.

## **G. RATES AND CHARGES FOR NET METERING SERVICE**

Each Member Generator shall be charged for electric service under that rate schedule which would otherwise be applicable if the member was not a Member Generator. The costs associated with the interconnection and any special metering configurations are captured and reimbursed to the Cooperative as part of the overall interconnection arrangements addressed in the Interconnection Policy.

## **H. PURCHASE RATE**

The rate used to determine the dollar amount paid for net energy purchased by the Cooperative shall be based upon the Cooperative's avoided average annual cost of purchased power. The purchase rate as of the effective date of this Rider shown below is:

On Peak Months: (Billing Dates between June 16th – October 15th)	\$0.05 per kWh
All other months (Billing Dates between October 16th – June 15th)	\$0.043 per kWh

The above-stated rate may be adjusted annually at the sole discretion of the Cooperative, to reflect the prevailing avoided average cost of purchased power.

The Cooperative will purchase energy from Member Generators on a first-come, first served basis only until the cumulative generating capacity of all the Member Generators' renewable resources equals 0.2 percent of the Cooperative's annual peak demand in the previous year.

## **I. TERM OF SERVICE**

The term of service under this Rider shall be the same as that set forth in the Distributed Generation Facility Interconnection Agreement between the Member Generator and the Cooperative.

Date Adopted: March 23, 2010

Supersedes: January 31, 2008

Attest: \_\_\_\_\_  
Secretary

Effective Date: April 1, 2010

**OKEFENOKE RURAL ELECTRIC MEMBERSHIP  
CORPORATION**

**APPENDIX C**

**DISTRIBUTED GENERATION FACILITY  
INTERCONNECTION AGREEMENT**

(NOT TO BE SUBMITTED UNTIL THE APPLICATION  
FOR INTERCONNECTION IS APPROVED BY OREMC)

**Okefenoke Rural Electric Membership Corporation**

**DISTRIBUTED GENERATION FACILITY INTERCONNECTION AGREEMENT**

This Agreement made \_\_\_\_\_, 20\_\_\_\_, between Okefenoke Rural Electric Membership Corporation (hereinafter called the "Cooperative"), and \_\_\_\_\_ located at \_\_\_\_\_ (hereinafter called the "Member Generator"),

Member Generator Cooperative Account Number: \_\_\_\_\_

Member Generator Cooperative Map Number: \_\_\_\_\_

Distributed Generation Facility Capacity: \_\_\_\_\_ kW or \_\_\_\_\_ kVA

**WITNESSETH:**

WHEREAS, the Cooperative is an electric membership corporation providing retail electric service in the states of Georgia and Florida; and

WHEREAS, the Member Generator is a member in good standing 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 net 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 6% 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 and assumes that 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 a 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) The Member Generator must provide verification that a qualified independent electrical engineer licensed to practice in Georgia or Florida, as applicable, has certified that the required manual disconnect switch has been installed properly; that the distributed generation facility has been installed in accordance with the manufacturer's specifications; and that the installation meets all applicable safety, power quality, and interconnection requirements established by the National Electrical Code, the National Electrical Safety Code and the Institute of Electrical and Electronics Engineers;
- d) In the absence of certification by a registered professional engineer, factory testing of pre-packaged Interconnection Facilities and the protective systems of small units shall be acceptable. In the case of a factory test, the Member Generator must provide a written description and certification by the factory of the testing, the test results, and the qualification of any independent testing laboratory.
- e) The Member Generator must provide verification that the vendor has certified that the distributed generation facility which has been installed is in compliance with the requirements established by Underwriters Laboratories or other national testing laboratories;
- f) 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).

- g) In the case of static inverter-connected renewable fuel generators with an alternating current capacity in excess of 10 kilowatts, the Member Generator must have the inverter settings inspected by the Cooperative. The Cooperative may impose a fee on the Member Generator in the amount specified in Cooperative Policy 409 for such inspection;
- h) In the case of non-static inverter-connected renewable fuel generators, the Member Generator must interconnect according to the Cooperative's interconnection guidelines and the Cooperative must inspect all protective equipment settings. The Cooperative may impose a fee on the Member Generator of in the amount specified in Cooperative Policy 409 for such inspection.

7. LIMITATION OF LIABILITY AND INDEMNIFICATION:

Notwithstanding any other provision in this Agreement, with respect to the Cooperative's provision of electric service to Member Generator and the services provided by the Cooperative pursuant to this Agreement, the Cooperative's liability to Member Generator shall be limited as set forth in accordance with this paragraph.

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. If a Force Majeure event prevents a Party from fulfilling any obligations under this Agreement, such Party will promptly notify the other Party in writing and will keep the other Party informed on a continuing basis as to the scope and duration of the Force Majeure event. The affected Party will specify the circumstances of the Force Majeure event, its expected duration and the steps that the affected Party is taking to mitigate the effect of the event on its performance. 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 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. 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. INSURANCE:

The Member Generator agrees to take out and maintain throughout the term of this Agreement adequate liability insurance and, if applicable, worker's compensation and employer's liability, as required by law, covering all the Member Generator's employees or representatives who perform any obligations of the Member Generator set forth herein.

9. MAINTENANCE AND TESTING:

The Member Generator shall operate and maintain his distributed generation facility in accordance with the operations and maintenance procedures and guidelines prescribed by the manufacturer(s) of the equipment installed. These operation and maintenance functions shall be performed on or ahead of the maintenance schedule provided by the manufacturer(s) of the equipment. All maintenance performed on the distributed generation facility shall be documented in the form of log entries which shall include as a minimum, 1) the description of the function performed, 2) the date due per the manufacturer's schedule, 3) the date the maintenance function was performed, 4) the name of the person, persons or entity (if an outside contractor) performing the maintenance, and 5) a comments column containing any comments associated with the initial condition of the equipment before maintenance was performed. The Member Generator shall make the maintenance logbook available for OREMC review upon request by OREMC with reasonable notice.

The Member Generator shall retain a qualified independent electrical engineer licensed to practice in Georgia or Florida, as applicable, to maintain and annually test system protective relaying for the Member Generator's generating equipment. Upon demand, the Member Generator shall produce records of testing and relay setting sheets for review by the Cooperative.

The Member Generator shall verify proper tripping and lockout of the generator system for all defined faults as determined by the Cooperative during final review of system relay requirements. Failure to maintain records will be grounds for refusal of permission to operate parallel generating equipment. Under no circumstances shall parallel generating equipment be operated with inoperative or defective protective relays. The Cooperative at the expense of the Member Generator will perform testing and maintenance of the inter-tie package.

10. 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. The Cooperative reserves the right, but not the obligation, to inspect the Member Generator's distributed generation facility.

11. COMPLIANCE PROCEDURE:

The Cooperative reserves the right to automatically or manually disconnect the Member Generator's distributed generation facility without 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.

12. INTERCONNECTION AND NET 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 costs incurred by the Cooperative to provide the interconnection of the Member Generator's distributed generation facility to the Cooperative's distribution system and if applicable, the costs for providing net metering service.

13. TERM:

This Agreement shall become effective on the date first above written and shall remain in effect until terminated by either party giving to the other thirty (30) days' written notice; provided, however, 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.

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

Okefenoke Rural EMC

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ATTEST

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

Title: General Manager

Member Generator

\_\_\_\_\_

ATTEST

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

Title: