
Distributed Generation Basic Interconnection Requirements and Conditions Effective April 1, 2006

These rules are intended to outline the requirements for interconnecting a Distributed Generation Facility to the Cooperative's Electric Power System and to operate in parallel and become synchronized with the voltage and frequency maintained by the Cooperative during normal operating conditions.

These rules are included as part of an Interconnecting Agreement Packet which is to be provided to any Member-Consumer of Amicalola Electric Membership Corporation interested in operating a Distributed Generation Facility. The Interconnecting Agreement Packet follows and includes the following topics:

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1.0 Introduction

1.1 Applicability

This document is provided to Cooperative Members who wish to purchase and install equipment capable of generating electricity for the purpose of providing electricity to the Cooperative through an interconnection between the Member's Distributed Generating Facility and the Cooperative's Electric Power System. This document along with all exhibits should be examined, in their entirety, by the Interconnection Applicant to gain complete knowledge of the requirements of distributed generation operation in conjunction with the Cooperative.

The Cooperative reserves the right to modify the rules, exhibits and other standards presented herein as deemed necessary by the Cooperative to protect the assets and integrity of its distribution system.

This rule does not cover general distribution service nor generation installations solely for use as a standby resource without the provisions to operate in parallel with the Cooperative's Electric Power System.

1.2 Definitions

For clarification, the term *Interconnection Applicant* refers to the entity or individual who applies for and signs the "Interconnection Application and Feasibility Study Agreement." Should the application be approved by the Cooperative, the entity or individual who signs the "Agreement for Interconnection and Parallel Operation of Distributed Generation" is then referred to as the *DG Owner/Operator*.

The following words, terms and acronyms shall have the following meanings when used in this document.

- AC: alternating current
- Agent: In reference to *agents of the Cooperative* or *Cooperative agent*; Refers to anyone acting on behalf of the Cooperative including but not limited to Cooperative employees, contractors, consultants or any representative retained to perform services for the Cooperative.
- Agreement for Interconnection and Parallel Operation of Distributed Generation: See "Interconnection Agreement."
- Cooperative: Amicalola Electric Membership Corporation
- DC: direct current
- DG: Distributed Generation; To produce, generate or otherwise create electricity to be supplied in parallel operation with the Cooperative's EPS, not classified as a transmission facility.

- DG Facility: An all-inclusive term used to describe a distributed generation site including the generator, generator power source, all associated switch gear, relays, protection equipment plus all other ancillary equipment.
- DG Owner/Operator: The entity or its authorized representative executing the Agreement for Interconnection and Parallel Operation of Distributed Generation.
- EPS: Electric Power System; The electrical distribution system used and owned by the Cooperative to serve its members. Sometimes referred to as the Cooperative's EPS. The term "Cooperative's Area EPS" indicates the section of the EPS directly impacted by the operation of the DG Facility.
- Feasibility Study: An initial study performed by the Cooperative to determine the EPS impacts, viability, and economic impacts of a proposed operation of a DG Facility in a specific location on the Cooperative EPS
- Good Utility Practice: Any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result of the lowest reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather practices, methods, or acts generally accepted and consistently adhered to in the region.
- IEEE 1547: The Institute of Electrical and Electronics Engineers' Standard for Interconnecting Distributed Resources with Electric Power Systems.
- Interconnection Agreement: The signed agreement between the DG Owner/Operator and the Cooperative outlining contractual conditions of DG Facility operation. The agreement also includes any amendments, supplements and exhibits thereto entered into by the DG Owner/Operator and the Cooperative.
- Interconnection Applicant: The individual(s) or entity applying for authorization to connect a DG Facility to the Cooperative's EPS. May also be referred to as the *Applicant*.
- Isolation Switch: The disconnecting means used to separate the DG Facility from the Cooperative's EPS. This switch may be used by agents of the Cooperative.
- Non-EPS Load: Consumer's load which may be served by the DG Facility after the DG Facility has been disconnected from the Cooperative's EPS.
- Parallel Operation: To physically link a distributed generator to the Cooperative's EPS and allow both entities to operate concurrently.
- PI: Point of Interconnection; The exact point of change of ownership of facilities between the DG Owner/Operator and the Cooperative. This point is usually the metering point or service transformer low voltage connection point. The Point of Interconnection shall be identified in the Interconnection Agreement and/or exhibits thereto.
- System Impacts: Adverse conditions which exist on the EPS caused by the DG and requiring corrective action in the form of system modifications.
- System Study: An engineering study performed by the Cooperative to determine EPS modifications required in order to accommodate a DG Facility without negative impacts to the EPS.

- UPS: uninterruptible power supply

1.3 Concept

An Interconnection Applicant intends to install a DG Facility on the DG side of the PI that will be connected electrically to the Cooperative's EPS and operate in parallel, synchronized with the voltage and frequency maintained by the Cooperative during all operating conditions.

When the Interconnection Application is made, the interconnection of the proposed DG Facility with the Cooperative's EPS must be reviewed for potential impact to the EPS under the process described in Section 2.1, and must meet the technical requirements and operate as outlined in Section 3.0 and in IEEE 1547. In order to meet these requirements, modifications to the Cooperative's EPS may be necessary as determined by the study. After applying for interconnection, the Interconnection Applicant should consult the Cooperative regarding the designing, purchasing and installing of any generation equipment, in order to verify the nominal utilization voltages, frequency, and phase characteristics of the service to be supplied, the capacity available, and the suitability of the proposed equipment for operation at the intended location as the Cooperative assumes no liability for any of the design, purchase or installation of the generation equipment. Furthermore, attempting to operate a generator at other than its nameplate characteristics may result in unsatisfactory performance or, in certain instances, injury to personnel and/or damage to equipment. The Interconnection Applicant will be responsible for ascertaining from the Cooperative the service characteristics of the Cooperative's EPS at the proposed PI. The Cooperative will in no way be responsible for damages sustained as a result of the Interconnection Applicant's failure to ascertain the service characteristics at the proposed PI.

Subject to the requirements contained in these rules, the Cooperative or its agent shall modify the EPS accordingly. Unless otherwise specified, the Cooperative will build and own, as part of the Cooperative's EPS, all facilities necessary to interconnect the Cooperative's EPS with the DG Facility up to and including terminations at the PI. The Interconnection Applicant shall pay all system modification costs as set forth in Section 2.2.

If the Interconnection Application is accepted, the Interconnection Applicant (at execution, then "DG Owner/Operator") and the Cooperative shall enter into an Interconnection Agreement to provide for parallel operation of the DG Facility with the Cooperative's EPS. A form of this agreement is attached as Exhibit A to this document.

Authorization to interconnect will be provided once the DG Owner/Operator has met all terms and conditions of the interconnection process as outlined within this document, including operating the DG Facility in such a manner that does not compromise or conflict with the safety or reliability of the Cooperative's EPS.

This Rule does not cover general distribution service needed to serve the DG Owner/Operator. Please refer to the Cooperative's Service Rules and Regulations for distribution service.

2.0 Process

2.1 Overview

The following is an outline of the general process an Interconnection Applicant must undergo in order to receive authorization to connect a DG Facility to the Cooperative's EPS. This outline is only a basic guide for the Interconnection Applicant and it should be understood that this process may deviate depending on unforeseen or unanticipated factors.

- a. Interconnection Applicant receives and reviews this document including all exhibits to ensure the Applicant understands all fees and requirements associated with operating a DG Facility in conjunction with the Cooperative's EPS.
- b. The Interconnection Applicant returns the Interconnection Application and Feasibility Study Agreement form and the Generating Facility Technical Detail form along with the appropriate fee. (see section 2.2 for fees)
- c. The Cooperative evaluates the Application for completeness and notifies the Interconnection Applicant within 10 business days of receipt that the Application has been received and advises if any information is lacking or missing.
- d. The Cooperative conducts a Feasibility Study of the proposed DG Facility that may include meetings and discussions with the Interconnecting Applicant. At this juncture, the Applicant should make inquiries of information from the Cooperative to help with decisions on DG equipment purchases such as the available fault current at the proposed location, configuration of the EPS, voltage requirements, etc. The Cooperative will make every effort to expedite this part of the Interconnection Application process but the time frame will depend largely on the quality of information received from the Applicant.
- e. If the Feasibility Study reveals issues which make the proposal of a DG Facility at a particular site non-viable, the application process is terminated. Should the Interconnection Applicant wish only to change the DG Facility site location with *all* other DG parameters remaining the same, the application process may continue without additional application fees. Should the Interconnection Applicant wish to change DG Facility site location and/or DG parameters, the Interconnection Applicant must begin the application process over including submitting an additional application fee.
- f. Should the Feasibility Study reveal no foreseeable negative impacts to the Cooperative's EPS, a System Study will be performed by the Cooperative in order to determine EPS modification requirements, if any, and associated costs for such modifications. There will be no initial cost to the Interconnection Applicant for this System Study. Should the DG Facility be ultimately approved, the cost for

this System Study will be included in the Monthly Facilities Charges as set by contract in the Agreement for Interconnection and Parallel Operation of Distributed Generation.

- g. A cost estimate of EPS modifications to accommodate the proposed DG Facility will be prepared by the Cooperative and submitted to the Interconnection Applicant. Once the Interconnection Applicant submits payment for the cost estimate and the Agreement for Interconnection and Parallel Operation of Distributed Generation is executed by the Parties, work by the Cooperative or its Agents shall begin on the Cooperative's EPS in preparation for DG operation.
- h. A sample of the Agreement for Interconnection and Parallel Operation of Distributed Generation is included with this document as Exhibit A for the benefit of familiarization. However, an Applicant-specific agreement will be prepared on behalf of the Interconnection Applicant for execution by the Parties.
- i. A statement of compliance with IEEE 1547 will be submitted to the Cooperative by the entity responsible for the construction, installation and testing of the DG equipment prior to initial connection to the Cooperative's EPS.
- j. Once DG Facilities are complete and Cooperative's EPS modifications have been made, tests of DG operation may be made. Upon satisfactory completion of DG operation tests, the DG Facility will be approved for operation.

All work performed by the Cooperative shall be completed in a just and timely manner. However, in working in conjunction with an Interconnection Applicant, some work and information retrieval will be beyond the control of the Cooperative. Therefore, a time limit has not been placed on aspects of the Interconnection Application process, but every effort will be made to help the Interconnection Applicant achieve DG operation without undo delay.

2.2 Fees

An initial fee of \$500.00 will accompany the completed Interconnection Application Form. This fee will cover services associated with the Feasibility Study in making the determination of the viability of a proposed DG Facility.

Fees associated with the Interconnection Application Form are non-refundable.

The Cooperative assumes no responsibility for any of fees or other assessments associated with DG operation as related to federal, state and local permits, certifications and qualifications.

3.0 Design & Operational Requirements

3.1 Fundamental System Requirements

All electricity flow across the PI shall be in the form of single phase or three phase alternating current occurring at a nominal frequency of 60 Hz and at a standard nominal

voltage class mutually agreed upon between the Cooperative and the Interconnection Applicant.

3.2 IEEE 1547 Compliance

The Cooperative has adopted IEEE Standard 1547 (IEEE 1547) entitled IEEE Standard for Interconnecting Distributed Resources with Electric Power Systems as its basis for interconnecting with DG Facilities. Subsequent revisions to IEEE 1547 shall be considered a revision to the Cooperative's regulations on DG requirements. All aspects of IEEE 1547 apply to the Interconnection Applicant and subsequent DG Owner/Operator unless contractual exceptions are made. Most terminology detailed within the standard is generally and purposely used throughout this Document for continuity. Failure of either party to insist, on any occasion, upon strict performance as outlined in IEEE 1547 shall not constitute a waiver to the obligations, rights, responsibilities or duties imposed therein.

A statement of compliance with IEEE 1547 will be submitted to the Cooperative by the entity responsible for the construction, installation and testing of the DG equipment prior to initial connection to the Cooperative's EPS.

3.3 System Protection

The specifications and requirements listed herein are intended to mitigate possible adverse impacts caused by the DG Facility on the Cooperative's EPS equipment, personnel and on other consumers of the Cooperative and are intended to guide the Interconnection Applicant in the design phase of the DG Facility. Because EPS protection devices are not designed to protect beyond the PI, the Cooperative shall not be responsible for the protection of the DG Facility itself or its internal loads. The Interconnection Applicant shall be responsible to design and install the protection of its system to guard against possible damage resulting from parallel operation with the Cooperative's EPS. The Applicant may request EPS protection information from the Cooperative exclusively for use in evaluating DG Facility protection during parallel operation. Subsequently, the DG Owner/Operator is responsible for the protection of its system during operation of the DG Facility against possible damage resulting from the parallel operation with the Cooperative's EPS. Conversely, the Cooperative reserves the right to request pertinent information from the Interconnection Applicant in order to determine the most appropriate protection device(s) or settings to protect the EPS.

Parallel operation of the DG Facility with the Cooperative's EPS shall be prevented when the EPS is de-energized or out of phase with the DG Facility. However, the DG Facility may operate to serve non-EPS load once Cooperative line personnel have accomplished the necessary switching, locking and tagging of the Cooperative's Area EPS to separate the DG Facility from the Cooperative's Area EPS and to ensure safe working conditions for Cooperative personnel or third parties. This regulation does not address DG Facility operation once disconnected from the Cooperative's area EPS.

The Cooperative shall not be held responsible for damage to DG Facilities or lost revenue due to transient voltage fluctuations. Transient voltage fluctuations on the EPS may be due to, but not limited to, lightning, EPS protection equipment operations or switching operations. Such fluctuations may cause malfunction or protective device operation of DG Facility management equipment.

3.3.1 Equipment

3.3.1.1 Interconnection Interrupting Device

An interconnection interrupting device such as a circuit breaker shall be installed to isolate the DG Facility from the Cooperative's EPS during any abnormal event outlined in IEEE 1547. The interconnection interrupting device must be capable of interrupting the current produced when the DG Facility is connected out of phase with the Cooperative's EPS consistent with IEEE 1547. The interconnection interrupting device shall not have automatic reclosing capability or such capability shall be bypassed and shall not have the ability to be closed and connected to the Cooperative's EPS when the EPS is de-energized.

3.3.1.2 Protective Relay Supply

Where protective relays are required, their control circuits shall be DC powered from a battery/charger system or a UPS. Solid-state relays shall be self-powered or DC powered from a battery/charger system or a UPS. If AC powered relaying is provided, the relay and its method of application must be fail safe, requiring that if the relay fails or if the voltage and/or frequency of its AC power source deviate from the relay's design requirements for power, the relay or a separate fail safe power monitoring relay will immediately trip the generator.

3.3.2 Personnel Protection

An external disconnect switch shall be required at or near the PI (location mutually agreed upon by both parties), which will be accessible to Cooperative personnel and its Agents at all times, to be used as an isolation switch for the purpose of personnel safety when working on or near the Cooperative's EPS connected to the DG Facility. The switch shall be gang-operated, have a visible break when open, be rated to interrupt the maximum generator output and be capable of being locked open, tagged and grounded on the Cooperative side by Cooperative personnel or its Agents. The Cooperative maintains the right to operate the switch during any of the following conditions:

- maintenance, construction or repair of the EPS
- EPS outages whether planned or unplanned
- if a hazard exists which would endanger persons or property
- any other condition requiring the isolation of the DG Facility from the EPS to maintain integrity of the EPS

The Cooperative shall endeavor to provide advanced notice if reasonably possible to the DG Owner/Operator of conditions which will affect the operation of the DG Facility.

The Cooperative reserves the right to permanently label the disconnect switch used by Cooperative personnel or its Agents in an aid to identification. The Cooperative also reserves the right to make drawings and/or take photographs of the disconnect switch and associated generator equipment for the purpose of training of Cooperative personnel and Agents of the Cooperative. Periodically, Cooperative Agents may visit the DG Facility in relation to training and familiarization of equipment.

3.4 Fault Currents

Prior to interconnection, appropriate information as required by the Cooperative will be supplied to the Cooperative or its designated third party consultant in order to determine the fault current contribution of the DG Facility to the EPS. The proposed DG Facility shall have no significant negative impact on the Cooperative's protective devices or the EPS, such impact being determined through information supplied to the Cooperative. The DG Facility, in aggregate with other generation on the area EPS, shall not contribute more than 10% to the distribution circuit's maximum available fault current at the primary voltage level nearest the PI. The DG Facility, in aggregate with other generation on the area EPS, shall not cause any EPS protective device to exceed 90% of its rated short circuit interrupting capability. Should the introduction of a proposed DG Facility cause calculated fault currents to exceed 90% of an EPS protective device's interrupting capability or expect to cause any protective device to not operate as intended, in order for the DG Facility to be interconnected, upgrades to the EPS's protective device scheme shall be made at the Interconnection Applicant's expense before interconnection can occur. If it is determined that a protective device cannot be further upgraded to meet the above requirements or if other EPS protection difficulties arise, which cannot be resolved by prudent engineering practice, as a direct consequence of the proposed DG Facility, the DG Facility shall not be allowed to operate in parallel with the Cooperative's EPS.

3.5 Testing and Monitoring

Testing of DG equipment will be performed in accordance with IEEE 1547. The DG Owner/Operator is required to notify the Cooperative when any testing, as defined in IEEE 1547, is performed. The Cooperative reserves the right to have a representative present during such testing. The Cooperative reserves the right to request and receive written documentation and results of such testing.

Should the DG Facility have the ability to record events related to its operation, such as but not limited to circuit breaker operations, resets, relay targets, voltage and current reports, the Cooperative retains the right to request such reports or printouts in conjunction with investigations of poor power quality or occurrences on the EPS that, in the opinion of the Cooperative, may be related to the operation of the DG Facility.

The Cooperative may install special test equipment at a location mutually agreed upon by the Parties as may be required to monitor the operation of the DG Facility and its controls for evaluating the quality of power produced by the DG Facility.

3.6 Maintenance

The DG Owner/Operator has the full responsibility for the proper periodic maintenance of its generating equipment and its associated control, protective equipment and interrupting devices to the extent of providing, within reason, the best assurance of proper operation of DG equipment in providing protection to the EPS.

The Cooperative will be responsible for the proper maintenance of its equipment in an effort to provide the most reliable interconnection between the DG Facility and the Cooperative's EPS.

3.7 System Changes

The DG Owner/Operator must provide the Cooperative with reasonable advance notice of any proposed changes to be made to the protective relay system, relay settings, operating procedures or equipment that affect the power quality or any aspect of interconnection operation. The Cooperative will determine if such proposed changes require re-acceptance of the interconnection per the requirements of this regulation. Furthermore, should the Cooperative implement changes to its EPS to which the DG Facility is connected, the DG Owner/Operator shall be responsible, at its own expense, for identifying and incorporating any and all necessary changes to its protection equipment.

4.0 Responsibility of Costs

4.1 Study Costs

The Interconnection Applicant shall be responsible for the incurred costs of the Feasibility Study by the Cooperative as set forth in section 2.2 solely to determine the requirements of interconnecting a DG Facility with the Cooperative's EPS.

4.2 Interconnection Costs

The Interconnection Applicant shall be responsible for all costs associated with the installation and construction of the DG Facility and associated interconnection equipment on the Interconnection Applicant's side of the PI.

The Interconnection Applicant shall be responsible for all costs associated with equipment and labor required by the Cooperative to install for the sole purpose of creating an interconnection between the DG Facility and the Cooperative's EPS.

Facilities installed by the Cooperative for the explicit use of DG operation by the DG Owner/Operator may be applied as a Monthly Facility Charge as defined in the Agreement for Interconnection and Parallel Operation of Distributed Generation. The Monthly Facility Charges include but may not be limited to the transformer and metering associated with the DG Facility. These costs are variable depending on the location and size of the DG Facility.

4.3 System Modification Costs

A System Study will be performed after the process of the Feasibility Study. The System Study will determine what system modifications are required to the Cooperative's EPS in order to facilitate the operation of a DG Facility without negative impacts to the EPS or other power quality issues imposed on consumers being served from the Cooperative's Area EPS. The cost of these required modifications to the Cooperative's Area EPS shall be the responsibility of the Interconnection Applicant. No estimate of system costs can be made until a full System Study is performed. Labor and materials paid for by the Interconnection Applicant for the purpose of system modifications to accommodate the Interconnection Applicant's proposed DG Facility shall remain the property of the Cooperative unless other specific written contractual arrangements are made.

4.4 Separation of Costs

Should the Cooperative combine the installation of system modifications with additions to the Cooperative's EPS to serve other consumers, the Cooperative shall not include the costs of such separate or incremental facilities in the amounts billed to the Interconnection Applicant for system modifications required pursuant to the Interconnection Agreement. The Interconnection Applicant shall only pay for that portion of the interconnection costs resulting solely from the system modifications required to allow for safe, reliable parallel operation of the DG Facility with the Cooperative's EPS.

4.5 Payment Procedure

Feasibility Study fees and system modification costs must be paid in full prior to the execution of the Interconnection Agreement.

Costs solely associated with the interconnection of the DG Facility to the Cooperative's EPS will be charged on a monthly basis per the Monthly Facility Charges as set by contract in the Interconnection Agreement and exhibits thereto.

Feasibility Study fees and system modification costs paid by the Interconnection Applicant pursuant to this document and all exhibits are non-refundable.

5.0 Metering

The Cooperative shall furnish, read and maintain all revenue metering equipment.

It shall be the responsibility of the Interconnection Applicant to provide for a suitable location for the meter installation with an effort to minimize or negate the effects of metering losses between the metering point and the PI.

6.0 Permitting

The Interconnection Applicant is solely responsible for all federal, state and local permits, certifications and qualifications associated with the operation of a DG Facility. It is also the responsibility of the Interconnection Applicant to determine if the DG Facilities require an Air Quality Permit or other environmental qualifications from the appropriate governing agency.

7.0 Amendments and Revisions

The Cooperative reserves the right to add to, change or further define any aspect of this document due to the number, size or technological advancement of DG Facility equipment. The Cooperative also reserves the right to modify any portion of this regulation in order to mitigate any unforeseen negative impacts to other Cooperative consumers which arise from DG Facility operation. Proposed DG Facilities of significant size may require additional consideration to controls, settings or specifications as determined by the Cooperative, its Agent(s) and/or Good Utility Practice.

Subsequent revisions to IEEE 1547 shall be considered a revision to the Cooperative's regulations on DG requirements.

Exhibit A

AGREEMENT FOR INTERCONNECTION AND PARALLEL OPERATION OF DISTRIBUTED GENERATION (DG)

This Interconnection Agreement ("Agreement") is made and entered into this ____ day of _____, 200_, by Amicalola Electric Membership Corporation, ("Cooperative"), a corporation organized under the laws of the state of Georgia, and _____ ("DG Owner/Operator"), each hereinafter sometimes referred to individually as "Party" or both referred to collectively as the "Parties". In consideration of the mutual covenants set forth herein, the Parties agree as follows:

1. **Scope of Agreement** – This Agreement is applicable to conditions under which the Cooperative and the DG Owner/Operator agree that one generating facility (described in EXHIBIT A) owned by the DG Owner/Operator of _____ kW or less, to be interconnected at a nominal _____ Volts ("Facilities"), may be interconnected to the Cooperative's electric power distribution system ("System").
2. **Establishment of Point of Interconnection** – 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 DG Owner/Operator is the "Point of Interconnection." Cooperative and DG Owner/Operator agree to interconnect the Facilities at the Point of Interconnection in accordance with the Cooperative's rules, regulations, by-laws, rates, and tariffs, as well as applicable code requirements, and IEEE standards, (in entirety, the "Rules") which are incorporated herein by reference. The interconnection equipment installed by the DG Owner/Operator ("Interconnection Facilities") shall be in accordance with the "Rules" as well.
3. **Responsibilities of Cooperative and DG Owner/Operator for Installation, Operation and Maintenance of Facilities** – DG Owner/Operator will, at its own cost and expense, install, operate, maintain, repair, and inspect, and shall be fully responsible for, its Facilities and Interconnection Facilities. DG Owner/Operator shall conduct operations of its Facilities and Interconnection Facilities in compliance with all aspects of the "Rules" and in accordance with industry standards and prudent engineering practice, and indemnify

and hold harmless the Cooperative for any non-compliance of the same in accordance with Section 6 of the Agreement. The Cooperative shall conduct operations of its electric distribution facilities in compliance with the "Rules". Unless otherwise specified, the cost of facilities installed by the Cooperative in order to fulfill the purposes of this Agreement, shall be recovered from the DG Owner/Operator on a monthly carrying cost basis, further defined as the actual investment by the Cooperative on behalf of the DG Owner/Operator times a carrying cost factor. Maintenance of Facilities and Interconnection Facilities shall be performed in accordance with the applicable manufacturers' recommended maintenance schedule. The DG Owner/Operator agrees to cause its Facilities and Interconnection Facilities to be constructed in accordance with the "Rules" and specifications equal to or better than those provided by the National Electrical Safety Code and the National Electrical Code, both codes approved by the American National Standards Institute and the Institute of Electrical and Electronic Engineers, Inc., in effect at the time of construction, and shall indemnify and hold harmless the Cooperative for any non-compliance of the same in accordance with Section 6 of the Agreement.

The DG Owner/Operator covenants and agrees to design, install, maintain, and operate its Facilities and Interconnection Facilities so as to reasonably minimize the likelihood of a malfunction or other disturbance, damaging or otherwise affecting or impairing the System. DG Owner/Operator shall comply with all applicable laws, regulations, zoning codes, building codes, safety rules and environmental restrictions applicable to the design, installation, operation and maintenance of its Facilities and Interconnection Facilities.

Cooperative will notify DG Owner/Operator if there is evidence that the Facilities' or Interconnection Facilities' operation causes disruption or deterioration of service, power quality issues or other interference to other customers served from the System, or if the Facilities' or Interconnection Facilities' operation causes damage or deterioration to the System. DG Owner/Operator will notify the Cooperative of any emergency or hazardous condition or occurrence with the DG Owner/Operator's Facilities or Interconnection Facilities, which could affect safe operation of the System. The DG Owner/Operator shall indemnify the Cooperative and its members as outlined in Section 6. for improper or faulty Facility operation.

4. **Operator in Charge** – The DG Owner/Operator shall identify an individual (by name or title) who will serve as "Operator in Charge" of the Facilities and the DG Owner/Operator portion of the Interconnection Facilities. This individual must be familiar with this Agreement as well as provisions of the "Rules" and any other agreements or regulations that may apply.

5. **Energy Sales to Cooperative** – The DG Owner/Operator may sell excess energy under this Agreement to the Cooperative. All sales to the Cooperative will be in accordance with Net Energy Metering Rider NEM-15 and subsequent revisions thereof as may be adopted by the Cooperative.

6. **Limitation of Liability and Indemnification** - Notwithstanding any other provision in this Agreement, with respect to the Cooperative's provision of electric service to DG Owner/Operator and the services provided by the Cooperative pursuant to this Agreement, the Cooperative's liability to DG Owner/Operator shall be limited as set forth in the "Rules", which are incorporated herein by reference.

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.

The DG Owner/Operator 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 DG Owner/Operator'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 DG Owner/Operator 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 of Interconnection. The Cooperative does not assume any duty of inspecting the DG Owner/Operator's lines, wires, switches, or other equipment or property. DG Owner/Operator assumes all responsibility for the electric service supplied hereunder and the facilities used in connection therewith, at or beyond the Point of Interconnection.

7. **Testing and Testing Records** – The DG Owner/Operator shall provide to the Cooperative all records of testing. Testing of protection systems for intermediate and large units shall be limited to records of compliance with standard acceptance procedures and by industry standards and practices. These records shall include testing at the start of commercial operation and periodic testing thereafter. 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 DG Owner/Operator shall provide a written description and certification by the factory of the test, the test results, and the qualification of any independent testing laboratory. In addition, the settings of the equipment being installed are to be approved by the Cooperative prior to DG operation.
8. **Right of Access, Equipment Installation, Removal & Inspection** – The Cooperative may send employees, agents or contractors to the premises of the DG Owner/Operator at any time whether before, during or after the time the Facilities first produce energy to inspect the Facilities and Interconnection Facilities, and observe the Facility's installation, commissioning (including any testing), startup, operation, and maintenance.

Cooperative shall have access to DG Owner/Operator's premises at any time and for any reasonable purpose in connection with the execution of this Agreement, the "Rules", or to provide service to its customers.

9. **Metering** – The Cooperative shall purchase, own, install, maintain and read such metering equipment as may be necessary to record the electrical output of the Facilities in accordance with Section 5. All costs associated therewith shall be borne by the DG Owner/Operator. Meter and current transformers used by the Cooperative to measure energy sales by the DG Owner/Operator to the Cooperative shall be separate and independent of any metering used for energy sales by the Cooperative to the DG Owner/Operator for backup and standby power.

10. **Insurance** – DG Owner/Operator agrees to maintain throughout the period of this Agreement adequate liability insurance and, if applicable, worker's compensation and employer's liability, as required by law, covering all the DG Owner/Operator's employees or representatives who perform any obligations of the DG Owner/Operator set forth herein. The Cooperative shall be named as an Additional Insured on all the DG Owner/Operator's policies of insurance.
11. **Effective Term and Termination Rights** – This Agreement becomes effective when executed by both Parties and shall continue in effect until terminated. This Agreement may be terminated as follows: (a) DG Owner/Operator may terminate this Agreement at any time by giving the Cooperative at least sixty (60) days' written notice; (b) Cooperative may terminate upon failure by the DG Owner/Operator to generate energy from the Facilities and deliver such energy to the Cooperative within twelve (12) months after completion of the interconnection; (c) either Party may terminate by giving the other Party at least thirty (30) days prior written notice that the other Party is in default of any of the terms and conditions of the Agreement or the "Rules" or any rate schedule, tariff, regulation, contract, or policy of the Cooperative, so long as the notice specifies the basis for termination and there is opportunity to cure the default and said default is not cured within the specified thirty (30) days; (d) Cooperative may terminate by giving DG Owner/Operator at least sixty (60) days notice in the event that there is a material change in an applicable law, or any requirement of the Cooperative's wholesale electric suppliers or of any transmission utility, independent system operator or regional transmission organization having responsibility for the operation of any part of the System.
12. **Disconnection of Facilities** – DG Owner/Operator shall disconnect Facilities from the System upon the effective date of any termination resulting from and required by actions under Section 11.

Cooperative shall have the right to disconnect or cause the DG Owner/Operator to disconnect the Facilities from the System and suspend service in cases where continuance of service to DG Owner/Operator will endanger persons or property. During a forced outage of the System serving DG Owner/Operator, Cooperative shall have the right to suspend service, and disconnect or cause the DG Owner/Operator to disconnect the Facilities from the System to effect repairs on the System. When possible, the Cooperative shall take reasonable efforts to provide the DG Owner/Operator with prior notice of a forced outage.

13. **Compliance with Laws, Rules and Tariffs** – Both the Cooperative and the DG Owner/Operator shall be responsible for complying with all applicable Federal, State and Local laws, environmental regulations and the “Rules”. The interconnection and services provided under this Agreement shall at all times be subject to the terms and conditions set forth in the “Rules”. The Cooperative shall have the right to publish changes in any of the “Rules” at any time and the DG Owner/Operator shall retain the right to accept the changes or terminate the Agreement based on non-acceptance of the changes. The Cooperative may change the “Rules” without notification if the said changes do not impact the Agreement in force.
14. **Applicable Tax and Carbon Credits** – The Parties agree that any and all tax and carbon credits that may apply under applicable Federal, State, and local laws for operation and ownership of generation facilities of the type anticipated under this agreement shall be retained by the DG Owner/Operator unless the credits are specifically applicable to utilities and/or utility operations only.
15. **Severability** – If any portion or provision of this Agreement is held or adjudged for any reason to be invalid or illegal or unenforceable by any court of competent jurisdiction, such portion shall be deemed separate and independent and the remainder of this Agreement shall remain in full force and effect.
16. **Amendment** – This Agreement may be amended only upon mutual agreement of the Parties, which amendment will not be effective until reduced to writing and executed by the Parties.
17. **Entirety of Agreement and Prior Agreements Superseded** – This Agreement, including the “Rules” and all attached Exhibits, which are expressly made a part hereof for all purposes, constitutes the entire agreement and understanding between the Parties with regard to the interconnection of the facilities of the Parties at the Points of Interconnection expressly provided for in this Agreement. The Parties are not bound by or liable for any statement, representation, promise, inducement, understanding, or undertaking of any kind or nature (whether written or oral) with regard to the subject matter hereof not set forth or provided for herein or in the DG Owner/Operator application, or other written information provided by the DG Owner/Operator in compliance with the “Rules”. It is expressly acknowledged that the Parties may have other agreements between the Parties covering other services not expressly provided for herein, which agreements are unaffected by this Agreement.
18. **Assignment** – At any time during the term of this Agreement, the DG Owner/Operator may assign this Agreement to a corporation, an

entity with limited liability or an individual (the "Assignee") to whom the DG Owner/Operator transfers ownership of the Facilities; provided that the DG Owner/Operator obtains the written consent of the Cooperative in advance of the assignment. The Cooperative's consent will be based on a determination that the Assignee is financially and technically capable to assume ownership and/or operation of the Facilities. The company or individual to which this Agreement is assigned will be responsible for the proper operation and maintenance of the Facilities, and must agree in writing to be subject to all provisions of this Agreement.

19. **Notices** – Notices given under this Agreement are deemed to have been duly delivered if hand delivered or sent by United States certified mail, return receipt requested, postage prepaid, to:

If to Cooperative:

Amicalola Electric Membership Corporation
544 Hwy 515 S
Jasper Ga.30143

If to DG Owner/Operator:

The above-listed names, titles, and addresses of either Party may be changed by written notification to the other Party.

20. **Invoicing and Payment** – Invoicing and payment terms for services associated with this Agreement shall be consistent with applicable "Rules".
21. **Limitations (No Third-Party Beneficiaries, Waiver, etc.)** – This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, except as set out in Section 6. This Agreement may not be assigned by the DG Owner/Operator without the prior written consent of the Cooperative as specified in Section 18. The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered to waive the obligations, rights, or duties imposed upon the Parties.
22. **Headings** – The descriptive headings of the various articles and sections of this Agreement have been inserted for convenience of reference only and are to be afforded no significance in the interpretation or construction of this Agreement.

23. **Multiple Counterparts** – This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument

IN WITNESS WHEREOF, the Parties have caused this Agreement to be signed by their respective duly authorized representatives.

Amicalola Electric
Membership Corporation

BY: _____	BY: _____
TITLE: _____	TITLE: _____
ATTEST: _____	ATTEST: _____
DATE: _____	DATE: _____
NOTARY: _____	NOTARY: _____

EXHIBIT A.2

FACILITIES SCHEDULE

Name: _____	Facilities location: Cooperative map location number _____
Delivery voltage:	480 V. (nominal line to line voltage)
Meter type:	form 9S, class 20, range 120-480 V., recording capable
Meter location:	The meter shall be located as close to the Cooperative's owned transformer as practical allowing for the shortest possible voltage and current sensing conductors thereby eliminating meter loss adjustments due to metering location.
Point of Interconnection:	The Point of Interconnection shall be the 480 V. terminals of the Cooperative's owned transformer. This point shall also be the delineation of facility ownership between the Cooperative and the DG Owner/Operator.
Normal Operation of Interconnection:	Refer to Cooperative Interconnection Packet and IEEE Standard 1547. No exceptions noted.
One line diagram attached (check one): / _____ Yes / _____X_____ No	
Facilities to be furnished by Cooperative:	<ul style="list-style-type: none"> a) System disconnect and overcurrent protection devices b) System voltage rated conductors capable of supporting anticipated facility loads and energy sales c) System to DG voltage rated transformer capable of supporting anticipated facility loads and energy sales d) Transformer and System over-voltage protection equipment e) Meter, current transformers and ancillary equipment able to provide an accurate measurement of energy to be sold by the DG Owner/Operator to the Cooperative f) Meter, current transformers and ancillary equipment able to provide an accurate measurement of energy to be sold by the Cooperative to the DG Owner/Operator g) Redundant facility items, including transformer, in the event an existing facility material item failed or became damaged
Monthly Facilities Charges billed to DG Owner/Operator:	<p>\$ _____ estimated per Month</p> <p>Est. Total Investment Monthly Carrying Cost Factor %</p>

EXHIBIT A.2 Continued

Control area interchange point (check one): / _____ Yes / <input checked="" type="checkbox"/> No	
Supplemental terms and conditions attached (check one): / _____ Yes / _____ No	
Cooperative Rules for DG interconnection attached (check one): / <input checked="" type="checkbox"/> Yes / _____ No	
_____ Electric Membership Corporation	
BY:	BY:
TITLE:	TITLE:
ATTEST:	ATTEST:
DATE:	DATE:
NOTARY:	NOTARY:

EXHIBIT A.3

ENERGY SALES AGREEMENT

Transaction Number: _____	Date: _____, 200_. This Sales Agreement is subject to Interconnection Agreement between _____ and Amicalola Electric Membership Corporation (_____) dated _____, 200_.
SELLER:	
BUYER: Amicalola Electric Membership Corporation ("_____")	
Supply Source:	_____ will have the right to deliver Energy from its generator located at _____ Map No. _____ to the Delivery/Receipt Point (defined below).
Period of Delivery and Receipt:	January 1, 200_ at 00:00 EPT through December 31, 200_ at 23:59 EPT.
Commodity and Contract Quantity:	Electrical output as metered in accordance with Paragraph 9 of the Interconnection Agreement. The Contract Quantity is _____ MW.
Contract Price:	Jan 200_-Dec 200_ \$ _____ / MWh
Excess Sales:	
Delivery/Receipt Point: At the Point of Interconnection.	
Seller Authorization:	Buyer Authorization:
BY:	BY:
TITLE:	TITLE:

ATTEST:

ATTEST:

DATE:

DATE:

NOTARY:

NOTARY:

Exhibit B

Interconnection Application and Feasibility Study Agreement

This Agreement is entered into by and between the Interconnection Applicant listed below and Amicalola Electric Membership Corporation (Cooperative), for the purpose of setting forth the terms, conditions and costs for conducting a Feasibility Study in the determination of the viability of an interconnection for the purpose of distributed generation.

The Interconnection Applicant agrees to provide, in a timely and complete manner, all information and technical data necessary, as outlined in the Cooperative Interconnection Packet, for the Cooperative to conduct a Feasibility Study.

If the Feasibility Study reveals issues which make the proposal of a DG Facility at a particular site non-viable, the application process is terminated. Should the Interconnection Applicant wish only to change the DG Facility site location with *all* other DG parameters remaining the same, the application process may continue without additional application fees. Should the Interconnection Applicant wish to change DG Facility site location and/or DG parameters, the Interconnection Applicant must begin the application process over including submitting an additional application fee.

Should the Feasibility Study reveal no foreseeable negative impacts to the Cooperative's EPS, a System Study will be performed by the Cooperative in order to determine EPS modification requirements, if any, and associated costs for such modifications. There will be no initial cost to the Interconnection Applicant for this System Study. Should the DG Facility be ultimately approved, the cost for this System Study will be included in the Monthly Facilities Charges as set by contract in the Agreement for Interconnection and Parallel Operation of Distributed Generation. The Interconnection Applicant should be aware that once the Cooperative begins the System Study, depending on circumstances, conditions or the introduction of new technology, additional information may be required beyond the scope of information previously obtained on Exhibit C of this Interconnection Packet.

It shall be mutually agreed upon by both Parties that information gathered by either Party for the purpose of the execution of this Agreement will be held in confidence, used exclusively for the purpose intended by this Agreement and shall not be shared with any third party entity not directly involved in the execution of Agreement

A non-refundable Feasibility Study Fee of \$500.00 is due upon receipt of this signed Agreement prior to the execution of the Feasibility Study.

Nothing in this Agreement shall be interpreted to give the Interconnection Applicant immediate rights to wheel over or interconnect with the Cooperative's EPS.

The Interconnection Applicant and the Cooperative shall each indemnify, defend and hold the other, its directors, officers, employees and agents (including, but not limited to, affiliates and contractors and their employees), harmless from and against all liabilities, damages, losses, penalties, claims, demands, suits and proceedings of any nature whatsoever for personal injury (including death) or property damages to unaffiliated third parties that arise out of, or are in any manner connected with, the performance of this Agreement by that party, except to the extent that such injury or damages to unaffiliated third parties may be attributable to the negligence or willful misconduct of the party seeking indemnification.

Notwithstanding the foregoing, the Interconnection Applicant hereby waives recourse against the Cooperative and its affiliates for, and releases the Cooperative and its affiliates from, any and all liabilities arising from or attributable to incomplete, inaccurate, or otherwise faulty information supplied to the Cooperative by the Interconnection Applicant.

If either party materially breaches any of its covenants hereunder, the other party may terminate this Agreement by serving notice of same on the other party of this Agreement.

All amendments to this Agreement shall be in written form executed by both parties.

Because of continuous changes to the Cooperative's EPS, this signed Agreement may be held valid for a period not to exceed one (1) year.

This Agreement may be terminated under the following conditions:

- 1) The Parties agree in writing to terminate the Agreement.
- 2) The Interconnection Applicant may terminate this Agreement at any time by providing written notice to Cooperative.
- 3) The Cooperative may terminate this Agreement if the Interconnection Applicant either:
 - a) has not paid the fee.
 - b) has not responded to requests for further information in accordance with the Interconnection Packet.

Please provide the following contact information (please print or type contact information):

Interconnection Applicant: _____
(company or individual name)

Contact Person: _____
(if different from Applicant name)

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (day): _____ (night): _____

Cell/Mobile Number: _____ Fax Number: _____

Email Address: _____

Please indicate your acceptance of this Agreement by signing below.

Interconnection Applicant or Authorized Agent

Exhibit C

Generating Facility Information

Please print or type all information.

Interconnection Applicant: _____
(company or individual name)

Contact Person: _____
(if different from Applicant name)

Proposed Generation
Facility location (be specific): _____

Do you have an existing account with _____ E.M.C.? If so, provide account number.

Type of Generating Unit: Synchronous _____ Induction _____ Inverter _____
Other (specify) _____

Manufacturer: _____ Model: _____

Manufacturer or Manufacturer Agents Telephone Number: _____

Nameplate Rating: _____ (kW); _____ (kVAr); _____ (volts)

Single Phase: _____ or Three Phase: _____

Generator Unit Power Factor Rating: _____

Number of Generating Units in Facility: _____

Prime Mover: Fuel Cell _____ Reciprocating Engine _____

Gas Turbine _____ Steam Turbine _____

Micro Turbine _____ Photovoltaic _____

Other (specify) _____

Energy Source: Solar _____ Wind _____

Hydro _____ Diesel _____

Natural Gas _____ Fuel Oil _____

Other (specify) _____

Maximum Fault Current Contribution: for Three Phase Fault: _____

for Line to Ground Fault: _____

Will the interconnecting circuit breaker and protective relays be supplied by the same company or Manufacturer that supplies the generating unit? _____

If not, please supply the name of the Manufacturer or Manufacturer Agent and a telephone number. _____

Estimated Installed Date: _____

Estimated In-Service Date: _____

| 09/08

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