

**Snapping Shoals EMC
Distributed Generation Basic Interconnection Requirements and
Conditions
Effective January 12, 2016**

GENERAL:

This document provides standards, rules, specifications, testing procedures, and requirements for interconnecting a Distributed Resources ('DR') to Snapping Shoals EMC's Electric Power System ('EPS').

This document includes an Interconnecting Agreement which is to be provided to any Member-Consumer ('Member') of Snapping Shoals EMC interested in interconnecting a DR Facility to the EPS.

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1. Introduction

1.1 Scope

This document provides standards, rules, specifications, testing procedures, and requirements for interconnecting the DR to the EPS. This document is intended to meet all Federal, State, and Local laws. Furthermore, this document is intended to fulfill all safety and engineering requirements for the proper and safe operation of DR's on the EPS as stated within Federal, State, Local laws and rules common to the electric power industry and those of Snapping Shoals EMC. Any alterations, changes, additions, and deletions of laws, rules, standards, departments, personnel, and affiliations may alter this document and its meaning from time-to-time and should be expected. Members should contact Snapping Shoals EMC personnel for clarification and adjustments prior to implementing any interconnection with the EPS. Snapping Shoals EMC reserves the right to alter the standards, rules, specifications, testing procedures, and requirements for interconnecting the DR to the EPS as deemed necessary by Snapping Shoals EMC.

1.2 Purpose

This document provides a uniform standard for interconnecting DR's to the EPS. It provides requirements relative to the performance, operation, testing, safety considerations, and maintenance of the interconnection.

The requirements shall be met at the demarcation point or point of common coupling ('DP' or 'PCC') although the devices used to meet these requirements may be located elsewhere. This policy applies to interconnection based on the aggregate rating of all DR units within the local EPS connection point or DP which ever is the limiting factor. All hardware, software, and interconnecting units must meet this policy's requirements if they affect the EPS in the same area regardless of the location of any individual component.

The stated standards, rules, specifications, testing procedures, and requirements apply for interconnecting any DR, including, for example, synchronous machines, induction machines, or power inverters/converters used to convert various voltages or current forms of power to match that of the EPS including, for example, solar cells, wind generated power, and biomass, and these standards, rules, specifications, testing procedures, and requirements should suffice for most installations.

1.3 Limitations

The criteria and requirements in this policy are applicable to all DR technologies, without limitation. Furthermore the criteria and policy is designed to ensure proper compatibility between DR and SSEMC's distribution system. Capacity limitations may be applicable and will vary by location. The distribution system generally utilizes 14.4/24.9kV grounded wye voltages to secondary service voltages of 277/480 volt grounded wye, 120/208 volt grounded wye, or 120/240 volt single phase. Voltage selection will depend on the aggregate load and location, and shall be considered as part of the overall design of the DR system. Members wishing to connect to the EPS should consult SSEMC's engineering department for approval of the voltage interconnect prior to connection. Secondary voltages listed above will require an approved transformer as part of the overall design.

The intent of this policy is to cover the installation of the DR on medium voltage radial primary and secondary voltage on an electric distribution system. Installation of DR on primary and secondary network distribution systems may be considered on a case-by-case basis with strong emphasis given to safety and control issues. The interconnected DR, upon meeting requirements herein and with approval, must be capable of operating in parallel and becoming synchronized with the voltage and frequency maintained by Snapping Shoals EMC during normal operating conditions.

This policy is written for 60 Hz sinusoidal sources that are compatible with SSEMC's three-phase electric distribution system. Voltage and current harmonics will be considered for all applications and may become a limiting factor.

For purposes of this policy, the stated standards, rules, specifications, testing procedures, and requirements do not:

- A prescribe operating requirements for DR.
- B define a particular protection scheme for DR.
- C prescribe a particular metering scheme for DR.
- D does not address planning, design, operation, or maintenance for a DR unit or group of DR units.
- E does not apply to automatic transfer schemes except where noted.

Furthermore, this policy for accommodating distributed generation interconnection shall, in no way, be construed to impede upon or alter the intent or meaning of other policies defined under the 2005 Energy Policy Act ('the Act') including, for example Net Metering as adopted by the Cooperative.

1.4 References

The following standards are to be used in conjunction with this policy. Many of the stated standards, rules, specifications, testing procedures, and requirements are derived from the following standards. When a stated version of the following standards is superseded by an approved revision, then the revision shall apply both to this policy and the standard referred to herein. The applicability of any portion, section, or the use of the whole standard is not referenced herein but shall be determined on a case-by-case basis as to applicability.

ANSI C84.1-1995, Electric Power Systems and Equipment—Voltage Ratings (60 Hz).¹

IEEE Std C37.90.1TM-2002, IEEE Standard Surge Withstand Capability (SWC) Tests for Relays and Relay Systems Associated with Electric Power Apparatus.^{2, 3}

IEEE Std C37.90.2TM-1995, IEEE Standard Withstand Capability of Relay Systems to Radiated Electromagnetic Interference from Transceivers.

IEEE Std C62.41.2TM-2002, IEEE Recommended Practice on Characterization of Surges in Low Voltage (1000 V and less) AC Power Circuits.

IEEE Std C62.45TM-2002, IEEE Recommended Practice on Surge Testing for Equipment Connected to Low-Voltage (1000V and Less) AC Power Circuits.

IEEE Std 1547-2003, IEEE Standard for Interconnecting Distributed Resources with Electric Power Systems.

NEMA MG 1-1998, Motors and Generators, Revision 2.5⁴

1.5 Applicability

This document is provided to Snapping Shoals EMC ('The 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 ('Interconnecting Applicant'). This document along with all exhibits should be examined, in their entirety, by the Interconnecting Applicant, to gain complete knowledge of the requirements of distributed generation operation in conjunction with the Cooperative.

¹ ANSI publications are available from the Sales Department, American National Standards Institute, 25 West 43rd Street, 4th Floor, New York, NY 10036, USA (<http://www.ansi.org/>).

² The IEEE standards or products referred to in Clause 2 are trademarks owned by the Institute of Electrical and Electronics Engineers, Incorporated.

³ IEEE publications are available from the Institute of Electrical and Electronics Engineers, 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331, USA (<http://standards.ieee.org/>).

⁴ NEMA publications are available from Global Engineering Documents, 15 Inverness Way East, Englewood, Colorado 80112, USA (<http://global.ihs.com/>).

The Cooperative reserves the right to modify the standards, rules, specifications, testing procedures, and requirements along with any exhibits and other information 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.

1.6 Definitions

For clarification, the term *Interconnecting 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 full-time Cooperative employees, contractors, consultants or any representative retained to perform services for the Cooperative. Contractors, consultants, and representatives other than full-time employees must have a valid written contract to be considered an Agent of the Cooperative. Furthermore, employees, contractors, consultants, and representatives must be acting within the scope of the job or contract to be considered an Agent of the Cooperative. The Interconnecting Applicant is encouraged to verify employment or representation of such agents. Part-time employees should not be considered as an Agent when acting in the scope of DG discussions.
- Agreement for Interconnection and Parallel Operation of Distributed Generation: See "Interconnection Agreement."
- Cease to energize: Cessation of energy outflow capability.
- Cooperative: Snapping Shoals Electric Membership Corporation or Snapping Shoals Energy Management Corporation acting under contract and on-behalf of the Snapping Shoals Electric Membership Corporation.
- DC: direct current.
- Demarcation Point ('DP'): The Demarcation Point, Point of Interconnection ('PI') or Point of Common Coupling ('PCC') reference the exact point of change of ownership of facilities between the DG Owner/Operator and the Cooperative. This point is usually the metering point, disconnect switch, or service transformer low voltage connection point. The Demarcation Point of Interconnection shall be identified in the Interconnection Agreement and/or exhibits thereto.
- Design test: Test of one or more devices made to a certain design to show that the design meets certain specifications.
- Distributed Generation ('DG'): To produce, generate or otherwise create electricity to be supplied in parallel operation with the Cooperative's EPS, not classified as a transmission facility through a DP or PCC. Distributed Generation may be referred to as distributed resources ('DR').
- 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.
- Electric Power System ('EPS'): The electrical distribution system used and owned by the Cooperative to serve its members. Sometimes referred to as the

Cooperative's EPS. The term "Area EPS" indicates the section of the EPS directly impacted by the operation of the DG Facility.

- Electric power system operator ('EPS Operator'): the entity responsible for designing, building, operating, and maintaining the EPS. Typically the Cooperative is the EPS Operator for the electric distribution system. In some cases the Cooperative may be located in an area assigned to another entity such as the Georgia Power Company ('GPC') or a municipal owned utility system. In cases involving high-voltage power transmission systems, the Cooperative is not the EPS Operator.

- Energy Management Company: A subsidiary or joint-venture wherein resources typically belonging to the Cooperative are in-fact employed or owned by the Energy Management Company and utilized on behalf of the Cooperative under a valid contract.

- 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: The result of the process of adding a DR unit to the EPS.

- 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*.

- Interconnecting equipment: Devices, individual or multiple, used to interconnect the DG to the EPS. Interconnecting equipment may include, but not exclusively, switches, breakers, wire, regulators, meters, and transformers.

- Interconnection system: The collection of interconnecting equipment designed and operated to interconnect a DG to the EPS. The interconnection system may include Auto-Transfer Systems ('ATS') designed to act based on certain expected events for transferring between an islanding system and parallel system.

- Inverter: A machine, device, or system that changes DC to AC power.

- Island: An island is a system of DG operating to supply power to the member/consumer but not operating in synchronized parallel to the EPS. The Island system shall be isolated with a gap capable of withstanding a reasonable maximum expected voltage including voltages induced on the EPS from outside sources.

- Island, Intentional: A planned island event.

- Island, unintentional: An unplanned island event.

- 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.

- Local Electric Power System (Local EPS): The Member/Consumer owned power distribution system. The local EPS may be radially fed, loop fed, or contain any number of auto-transfer systems in a network.

- 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.
- Non-Islanding: Intent to prevent the continued existence of an island condition.
- Parallel Operation: To physically link a distributed generator to the Cooperative's EPS and allow both entities to operate concurrently in a synchronous fashion.
- Simulated utility: An assembly of devices used to simulate the voltage, frequency, current, or switching mechanisms found on an EPS.
- 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.
- Total Demand Distortion ('TDD'): The total root-sum-square harmonic current distortion, displayed in a percent, of the maximum demand load current. Typically a 15-minute, 30-minute, or 1-hour demand measure.
- Total rated-current distortion ('TRD'): The total root-sum-square of the current harmonics created by the DR unit operating into a linear balanced load divided by the greater of the test load current demand (' I_L ') or the rated current capacity of the DR unit (' I_{rated} ').
- UPS: uninterruptible power supply

1.7 Concept

An Interconnection Applicant intends to install a DG Facility on the local EPS or DG side of the Member/Consumer's DP 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.

2. Process

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 this Sections 2.0 through 2.2, 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. The Cooperative assumes no liability, at no time, for any of the design, purchase, or installation of the generation equipment. Engineering consulting from an independent source may be desired and is recommended. 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 DP. 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 DP.

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 DP. 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 and meets all the rules and regulations set forth by Federal, State, and local government entities and the requirements of at least IEEE 1547.

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.

2.1 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. Upon request, the 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 and Parallel Operation of Distributed Generation Agreement, Facilities Schedule, 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.) The Energy Sales Agreement must be returned prior to start up and testing.
- c. The Cooperative evaluates the Application for completeness and notifies the Interconnection Applicant within 30 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. The Cooperative may utilize consulting agents to assist with the Feasibility Study. 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 reasonably change the DG Facility site location with *all* other DG parameters remaining the same, the application process may continue without additional application fees upon successful completion of additional work on the Feasibility Study. Should the Interconnection Applicant wish to change DG parameters or substantially change the DG Facility site, the Interconnection Applicant must begin the application process over including submitting an additional application fee. ***The Feasibility Study will only study the impact on the Cooperative’s EPS by the DG. The Cooperative accepts no responsibility to ensure equipment and operation is suitable for the Cooperative’s EPS or that it meets all IEEE, UL, Federal, State, and local requirements.***
- 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 ultimately win approval, the actual 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. The cost estimate shall be based on the most current, known, cost for similar construction requirements. Once the Interconnection Applicant submits payment in the amount of 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. Final cost for EPS modifications shall be set at actual cost, with both parties agreeing to modify the final cost and payment or refund thereof, prior to energizing the DG facility.
- 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.

Both parties
initial here to
acknowledge

All work performed by the Cooperative shall be completed in a just and timely manner with no warranty, implied or express, including no warranty as to workmanship, no warranty implied for merchantability, and no warranty implied of fitness for a particular use.

Furthermore, 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 application fee of \$100.00 will accompany the completed Interconnection Application Form. This fee will cover services associated with determining the scope and fee for a Feasibility Study.

The application Feasibility Study fees 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. Design & Operational Requirements

3.1 Fundamental System Requirements

All electricity flow across the DP 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. The Cooperative requires adherence to interconnection standards adopted in the state law. In addition, the Cooperative requires adherence to all federal and local requirements. Furthermore, the Cooperative strictly enforces adherence to the National Electric Code, the National Electric Safety Code, the IEEE standards, ANSI standards, and Underwriters Laboratories recommendations and requirements. Any clarifications concerning these standards will be handled on a case-by-case basis, upon request of the Interconnecting 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 DP, 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, including the Interconnection Applicant hiring its own experts and consultants to verify proper equipment use and installation. 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 follows standards for power restoration which will include proper grounding of EPS facilities when necessary. The Cooperative assumes no responsibility to contact the DG operator during ordinary or extraordinary maintenance periods. The Cooperative reserves the right to disconnect any DG Facility in any case including, for example, maintenance, payment of fees or usage on the system, or during storm restoration hours.

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. The interconnection interrupting device shall be properly rated to match both the DG Facility and the conditions existing on the EPS.

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 and its Agents shall have the right to lock external disconnect with an approved locking device. 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.

The DG Operator agrees to submit, upon request from the Cooperative, any records regarding operation and maintenance of 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. 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 or in the Interconnection rate or tariff as approved by the SSEMC Board of Directors. 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 up front or by an approved contract 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. 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.

The DG Operator is responsible for cost above and beyond the standard cost to meter a similar single phase or three phase load of the same size. Cost passed to the DG Operator shall include any cost for metering, as allowed by and applied in the Cooperatives rate policy and any other associated metering policies.

6. 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. 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 _____, 20__, by The Snapping Shoals 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 480 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, unless otherwise specified in EXHIBIT A.2. 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", or as further described and mutually agreed to in the applicable Facilities Schedule attached hereto as EXHIBIT A.2. 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. The applicable investment and carrying cost factors shall be specified on Exhibit A. 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 the Energy Sales Agreement, attached as EXHIBIT A.3.

The Parties anticipate a renewal of the Energy Sales Agreement for additional twelve (12) month terms beyond the initial twelve (12) month term upon such provisions as may be mutually agreed upon by

the Parties in writing as follows: within sixty (60) days of the end of the initial twelve (12) month term and at the end of any successive twelve (12) month term, the terms and conditions of the Energy Sales Agreement may be revised for the succeeding twelve (12) month term by the Cooperative. Should the DG Owner/Operator reject the proposed terms and conditions of the revised Energy Sales Agreement, the Parties shall work in good faith to negotiate terms and conditions mutually acceptable to the Parties. In the event the Parties should be unable to reach a revised Energy Sales Agreement within thirty (30) days after the end of the respective twelve (12) month term, or upon such extended period as mutually agreed upon in writing by the Parties, the Parties may agree to terminate the Agreement as provided for in Section 11 hereof.

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, lighting, 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 beyond the standard and current metering expense for a similar customer taking service but not operating as a DG and 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 take out and maintain throughout the period of this Agreement insurance of the following minimum types and amounts:

- a. Worker's Compensation and employer's liability insurance, as required by law, covering all employees who perform any obligations of the DG Owner/Operator.
- b. Public Liability insurance covering all operations under the Agreement that has limits for bodily injury or death of not less than \$1 million per each occurrence, limits for property damage of not less than \$1 million per each occurrence, and \$1 million aggregate for accidents during the policy period. This required insurance may be in a policy or policies of insurance, primary and excess including the umbrella or catastrophe form.

The Cooperative shall be named as an Additional Insured on all policies of insurance required in Section 10.a and Section 10.b.

A current certification of the policy with the Cooperative being named must be on file with the Cooperative at all times. The policies of insurance shall be in such form and issued by such insurer as shall be satisfactory to the Cooperative. The DG Owner/Operator shall furnish the Cooperative a certificate evidencing compliance with the foregoing requirements within the first 30 days of each twelve (12) month term, and shall provide not less than 30 days prior written notice to the Cooperative of any cancellation or material change in the 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.

Termination of the Agreement by the DG Owner/Operator or by the Cooperative, if the Cooperative is terminating due to breach of performance by the DG Owner/Operator, will require full payment of the facilities charge by the DG Owner/Operator due on the termination date.

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. **Applicable Transmission and Generation Credits** – The Parties agree that any and all transmission, capacity, energy, and green power credits or rebates, if green power or renewable power mandates by Federal and State Authorities are in place, shall be retained by Snapping Shoals EMC.
16. **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.
17. **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.
18. **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.

19. **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.
20. **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:

VP of Engineering or Designee

P. O. Box 509

Covington, Georgia 30015

Fax: 770- 385-2814

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.

21. **Invoicing and Payment** – Invoicing and payment terms for services associated with this Agreement shall be consistent with applicable “Rules”.
22. **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.
23. **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.
24. **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.

**The Snapping Shoals Electric
Membership Corporation**

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

FACILITIES SCHEDULE

Name: _____	Facilities location: Cooperative map location number _____
Address: _____	
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	\$ _____ estimated per Month
Charges billed to DG Owner/Operator:	Est. Total Investment _____ Monthly Carrying Cost Factor <u>1.5%</u>
Control area interchange point (check one): _____ Yes _____ No	
Supplemental terms and conditions attached (check one): _____ Yes _____ No	
Cooperative Rules for DG interconnection attached (check one): _____ Yes _____ No	

The Snapping Shoals Electric Membership Corporation	
BY:	BY:
TITLE:	TITLE:
ATTEST:	ATTEST:
DATE:	DATE:
NOTARY:	NOTARY:

ENERGY SALES AGREEMENT

Transaction Number: _____	Date: _____, 20__. This Sales Agreement is subject to Interconnection Agreement between _____ and Snapping Shoals Electric Membership Corporation (SSEM) dated _____, 20__.
SELLER:	
BUYER: The Snapping Shoals Electric Membership Corporation ('SSEM')	
Supply Source:	_____ will have the right to deliver Energy from its generator located at SSEMC Property No. _____ to the Delivery/Receipt Point (defined below).
Period of Delivery and Receipt:	January 1, 20__ at 00:00 EPT through December 31, 20__ 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 20 __ -Dec 20__ \$ _____ / MWh
Excess Sales:	For quantities of Energy delivered in each and every hour in excess of the Contract Quantity, SSEMC will pay to the seller the lesser of 1.) the Average System Monthly Energy Price (as defined below) times the quantities of Energy in Excess of the Contract Quantity or 2.) the Contract Price.
Average System Monthly Energy Price:	"Average System Monthly Energy Price" shall mean the total variable cost of all energy purchases by SSEMC during the month of use from all suppliers excluding the seller, divided by the total MWh purchased in the month of use from all suppliers excluding the seller.
Delivery Point :	At the Point of Interconnection.
Seller Authorization:	Buyer Authorization:
BY:	BY:
TITLE:	TITLE:
ATTEST:	ATTEST:
DATE:	DATE:
NOTARY:	NOTARY:

Interconnection Application and Feasibility Study Agreement

This Agreement is entered into by and between the Interconnection Applicant listed below and The Snapping Shoals 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 \$_____ 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

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 Snapping Shoals 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: _____