# SMALL GENERATOR INTERCONNECTION PROCEDURES (SGIP)

(For Generating Facilities No Larger Than 20 MW)

# Section 1. Application

# 1.1 Applicability

- 1.1.1 A request to interconnect a certified Small Generating Facility (See Attachments 3 and 4 for description of certification criteria) no larger than 2 MW shall be evaluated under the section 2 Fast Track Process. A request to interconnect a certified inverter-based Small Generating Facility no larger than 10 kW shall be evaluated under the Attachment 5 10 kW Inverter Process. A request to interconnect a Small Generating Facility larger than 2 MW but no larger than 20 MW or a Small Generating Facility that does not pass the Fast Track Process or the 10 kW Inverter Process, shall be evaluated under the section 3 Study Process.
- 1.1.2 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of these procedures.
- 1.1.3 Neither these procedures nor the requirements included hereunder apply to Small Generating Facilities interconnected or approved for interconnection prior to 60 Business Days after the effective date of these procedures.
- 1.1.4 Prior to submitting its Interconnection Request (Attachment 2), the Interconnection Customer may ask the Distribution Provider's interconnection contact employee or office whether the proposed interconnection is subject to these procedures. The Distribution Provider shall respond within 15 Business Days.
- 1.1.5 Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. The Federal Energy Regulatory Commission expects all Distribution Providers, market participants, and Interconnection Customers interconnected with electric systems to comply with the recommendations offered by the Presidents Critical Infrastructure Protection Board and best practice recommendations from the electric reliability authority. AO public utilities are expected to meet basic standards for electric system infrastructure and operational security, including physical, operational, and cyber-security practices.
- 1.1.6 References in these procedures to interconnection agreement are to the Small Generator Interconnection Agreement (SGIA)

### 1.2 Pre-Application

The Distribution Provider shall designate an employee or office from which information on the application process and on an Affected System can be obtained through informal requests from the Interconnection Customer presenting a proposed project for a specific site. The name, telephone number, and e-mail address of such contact employee or office shall be made available on the Distribution Provider's Internet web site. Electric system information

provided to the Interconnection Customer should include relevant system studies, interconnection studies, and other materials useful to an understanding of an interconnection at a particular point on the Distribution Provider's Distribution System, to the extent such provision does not violate confidentiality provisions of prior agreements or critical infrastructure requirements. The Distribution Provider shall comply with reasonable requests for such information.

# 1.3 Interconnection Request

The Interconnection Customer shall submit its Interconnection Request to the Distribution Provider, together with the processing fee or deposit specified in the Interconnection Request. The Interconnection Request shall be date- and timestamped upon receipt. The original date-and time-stamp applied to the Interconnection Request at the time of its original submission shall be accepted as the qualifying date- and time-stamp for the purposes of any timetable in these procedures. The Interconnection Customer shall be notified of receipt by the Distribution Provider within three Business Days of receiving the Interconnection Request. The Distribution Provider shall notify the Interconnection Customer within ten Business Days of the receipt of the Interconnection Request as to whether the Interconnection Request is complete or incomplete. If the Interconnection Request is incomplete, the Distribution Provider shall provide along with the notice that the Interconnection Request is incomplete, a written list detailing all information that must be provided to complete the Interconnection Request. The Interconnection Customer will have ten Business Days after receipt of the notice to submit the listed information or to request an extension of time to provide such information. If the Interconnection Customer does not provide the listed information or a request for an extension of time within the deadline, the Interconnection Request will be deemed withdrawn. An Interconnection Request will be deemed complete upon submission of the listed information to the Distribution Provider.

### 1.4 Modification of the Interconnection Request

Any modification to machine data or equipment configuration or to the interconnection site of the Small Generating Facility not agreed to in writing by the Distribution Provider and the Interconnection Customer may be deemed a withdrawal of the Interconnection Request and may require submission of a new Interconnection Request, unless proper notification of each Party by the other and a reasonable time to cure the problems created by the changes are undertaken.

#### 1.5 Site Control

Documentation of site control must be submitted with the Interconnection Request. Site control may be demonstrated through:

- 1.5.1 Ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the Small Generating Facility;
- 1.5.2 An option to purchase or acquire a leasehold site for such purpose; or
- 1.5.3 An exclusivity or other business relationship between the Interconnection Customer and the entity having the right to sell, lease, or grant the

Interconnection Customer the right to possess or occupy a site for such purpose.

#### 1.6 Queue Position

#### 1.6.1 General

The Distribution Provider shall assign a Queue Position based upon the dateand time-stamp of the Interconnection Request. The Queue Position of each Interconnection Request will be used to determine the cost responsibility for the Upgrades necessary to accommodate the interconnection. The Distribution Provider shall maintain a single queue per geographic region. At the Distribution Provider's option, Interconnection Requests may be studied serially or in clusters for the purpose of the system impact study.

# 1.6.2 Clustering.

At Distribution Provider's option, Interconnection Requests may be studied serially or in clusters for the purpose of the Interconnection System Impact Study.

Clustering shall be implemented on the basis of Queue Position. If Distribution Provider elects to study Interconnection Requests using Clustering, all Interconnection Requests received within a period not to exceed one hundred and eighty (180) Calendar Days, hereinafter referred to as the "Queue Cluster Window" shall be studied together. The deadline for completing all Interconnection System Impact Studies for which an Interconnection System Impact Study Agreement has been executed during a Queue Cluster Window shall be in accordance with Section 3.4, for all Interconnection Requests assigned to the same Queue Cluster Window. Distribution Provider may study an Interconnection Request separately to the extent warranted by Good Utility Practice based upon the electrical remoteness of the proposed Large Generating Facility.

Clustering Interconnection System Impact Studies shall be conducted in such a manner to ensure the efficient implementation of the applicable regional transmission expansion plan in light of the Distribution System's and Transmission System's capabilities at the time of each study.

The Queue Cluster Window shall have a fixed time interval based on fixed annual opening and closing dates. Any changes to the established Queue Cluster Window interval and opening or closing dates shall be announced with a posting on Distribution Provider's website beginning at least one hundred and eighty (180) Calendar Days in advance of the change and continuing thereafter through the end date of the first Queue Cluster Window that is to be modified.

1.7 Interconnection Requests Submitted Prior to the Effective Date of the SGIP Nothing in this SGIP affects an Interconnection Customer's Queue Position assigned before the effective date of this SGIP. The Parties agree to complete work on any interconnection study agreement executed prior the effective date of

this SGIP in accordance with the terms and conditions of that interconnection study agreement. Any new studies or other additional work will be completed pursuant to this SGIP.

### 1.8 The Interconnection Studies.

The Interconnection Studies consist of short circuit/fault duty, steady state (thermal and voltage) and stability analyses. The studies would identify Interconnection Facilities, Distribution Upgrades, and any required transmission upgrades, including Reliability Network Upgrades and Delivery Network Upgrades as defined in Appendix A to the CAISO Tariff, when applicable. When requested, the Deliverability Assessment performed by the CAISO would identify any necessary Delivery Network Upgrades on the transmission system to allow full output of the proposed Small Generating Facility. The Distribution Provider may study the Distribution System under non-peak load conditions as well as peak conditions. However, upon request by the Interconnection Customer, the Distribution Provider must explain in writing to the Interconnection Customer why the study of non-peak load conditions is required for reliability purposes.

# 1.9 Deliverability Assessment.

# 1.9.1 Distribution System Deliverability.

Deliverability from the Point of Interconnection to the point where the Distribution Provider's Distribution System interconnects to the CAISO Controlled Grid (as defined in Appendix A to the CAISO Tariff) will be assessed pursuant to an Application for Distribution Service in accordance with Section 15.3 of the Tariff. An Interconnection Customer should, but is not required to, submit an Application for Distribution Service at the same time it seeks Interconnection Service.

# 1.9.2 CAISO Controlled Grid Deliverability.

If requested by the Interconnection Customer in writing to the Distribution Provider, at least ten (10) Business Days following the Scoping Meeting, the Distribution Provider shall submit the project to the CAISO for inclusion in the CAISO deliverability study process whereby, the CAISO will perform pursuant to Section 6.5.2 of the CAISO Generation Interconnection Procedures (GIP) tariff (Appendix Y to the CAISO Tariff) an On-Peak Deliverability Assessment and an Off-Peak Deliverability Assessment (as these terms are defined in Appendix A to the CAISO Tariff) which shall determine the Interconnection Customer's Small Generating Facility's ability to deliver its energy to the CAISO Controlled Grid and identify Delivery Network Upgrades (as defined in Appendix A to the CAISO Tariff) required to provide the Generation Facility with Full Capacity Deliverability Status (as defined in Appendix A to the CAISO Tariff).

Interconnection Requests can only be considered for Deliverability
Assessment as a part of the CASIO's annual cluster studies which begin

with Phase I in June of each year. Interconnection Requests submitted by the Distribution Provider to the CAISO for Deliverability Assessment are subject to the cluster study and financial security requirements covered in the CASIO GIP Tariff, Sections 6, 7 and 9.

Should the results of the CAISO Phase I Deliverability Assessment indicate there are no Delivery Network Upgrades associated with the project, the project may qualify for the Accelerated Phase II Interconnection Process outlined in Section 7.6 of the CASIO GIP Tariff, and require no further Deliverability Assessment beyond Phase I.

The Interconnection Customer shall reimburse the Distribution Provider for the actual cost attributable to such Interconnection Customer of the Deliverability Assessment studies that the CAISO performs.

- **1.9.3 Delivery Network Upgrades.** Unless the Distribution Provider elects to fund the capital for Delivery Network Upgrades, they shall be solely funded by the Interconnection Customer pursuant to CAISO GIP Section 12.3.1.
- **1.9.4** Repayment of Amounts Advanced for Delivery Network Upgrades. The Interconnection Customer shall be entitled to a repayment for the cost of Delivery Network Upgrades in accordance with CAISO GIP Section 12.3.2.

#### Section 2. Fast Track Process

# 2.1 Applicability

The Fast Track Process is available to an Interconnection Customer proposing to interconnect its Small Generating Facility with the Distribution Provider's Distribution System if the Small Generating Facility is no larger than 2 MW and if the Interconnection Customer's proposed Small Generating Facility meets the codes, standards, and certification requirements of Attachments 3 and 4 of these procedures, or the Distribution Provider has reviewed the design or tested the proposed Small Generating Facility and is satisfied that it is safe to operate.

#### 2.2 Initial Review

Within 15 Business Days after the Distribution Provider notifies the Interconnection Customer it has received a complete Interconnection Request, the Distribution Provider shall perform an initial review using the screens set forth below, shall notify the Interconnection Customer of the results, and include with the notification copies of the analysis and data underlying the Distribution Provider's determinations under the screens.

#### 2.2.1 Screens

2.2.1.1 The proposed Small Generating Facility's Point of Interconnection must be on a portion of the Distribution Provider's Distribution System that is subject to the Tariff.

- 2.2.1.2 For interconnection of a proposed Small Generating Facility to a radial distribution circuit, the aggregated generation, including the proposed Small Generating Facility, on the circuit shall not exceed 15 % of the line section annual peak load as most recently measured at the substation. A line section is that portion of a Distribution Provider's electric system connected to a customer bounded by automatic sectionalizing devices or the end of the distribution line.
- 2.2.1.3 For interconnection of a proposed Small Generating Facility to the load side of spot network protectors, the proposed Small Generating Facility must utilize an inverter-based equipment package and, together with the aggregated other inverter-based generation, shall not exceed the smaller of 5 % of a spot network's maximum load or 50 kW/.
- 2.2.1.4 The proposed Small Generating Facility, in aggregation with other generation on the distribution circuit, shall not contribute more than 10% to the distribution circuit's maximum fault current at the point on the high voltage (primary) level nearest the proposed point of change of ownership.

- 2.2.1.5.The proposed Small Generating Facility, in aggregate with other generation on the distribution circuit, shall not cause any distribution protective devices and equipment (including, but not limited to, substation breakers, fuse cutouts, and line reclosers), or Interconnection Customer equipment on the system to exceed 87.5 % of the short circuit interrupting capability; nor shall the interconnection proposed for a circuit that already exceeds 87.5 % of the short circuit interrupting capability.
- 2.2.1.6 Using the table below, determine the type of interconnection to a primary distribution line. This screen includes a review of the type of electrical service provided to the Interconnecting Customer, including line configuration and the transformer connection to limit the potential for creating over-voltages on the Distribution Provider's electric power system due to a loss of ground during the operating time of any anti-islanding function.

Primary Distribution Line Type	Type of Interconnection to Primary Distribution Line	Result/Criteria
Three-phase, three wire	3-phase or single phase, phase-to-phase	Pass screen
Three-phase, four wire	Effectively-grounded 3 phase or Single-phase, line-to-neutral	Pass screen

<sup>&</sup>lt;sup>1</sup>A spot Network is a type of distribution system found within modem commercial buildings to provide high reliability of service to a single customer. (Standard Handbook for Electrical Engineers, 11th edition, Donald Fink, McGraw Hill Book Company)

- 2.2.1.7 If the proposed Small Generating Facility is to be interconnected on single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the proposed Small Generating Facility, shall not exceed 20 kW.
- 2.2.1.8 If the proposed Small Generating Facility is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, its addition shall not create an imbalance between the two sides of the 240 volt service of more than 20 % of the nameplate rating of the service transformer.
- 2.2.1.9 The Small Generating Facility, in aggregate with other generation interconnected to the distribution side of a substation transformer feeding the circuit where the Small Generating Facility proposes to interconnect shall not exceed 10 MW in an area where there are known, or posted, transient stability limitations to generating units located in the general electrical vicinity (e.g., three or four distribution busses from the point of interconnection).
- 2.2.1.10 No construction of facilities by the Distribution Provider on its own system shall be required to accommodate the Small Generating Facility.
- 2.2.2 If the proposed interconnection passes the screens, the Interconnection Request shall be approved and the Distribution Provider will provide the Interconnection Customer an executable interconnection agreement within five Business Days after the determination.
- 2.2.3 If the proposed interconnection fails the screens, but the Distribution Provider determines that the Small Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards, the Distribution Provider shall provide the Interconnection Customer an executable interconnection agreement within five Business Days after the determination.
- 2.2.4 If the proposed interconnection fails the screens, but the Distribution Provider does not or cannot determine from the initial review that the Small Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards unless the Interconnection Customer is willing to consider minor modifications or further study, the Distribution Provider shall provide the Interconnection Customer with the opportunity to attend a customer options meeting.

### 2.3 Customer Options Meeting

If the Distribution Provider determines the Interconnection Request cannot be approved without minor modifications at minimal cost; or a supplemental study or other additional studies or actions; or at significant cost to address safety, reliability, or power quality problems, within the five Business Day period after the determination, the Distribution Provider shall notify the Interconnection Customer and provide copies of all data and analyses underlying its conclusion. Within ten

Business Days of the Distribution Provider's determination, the Distribution Provider shall offer to convene a customer options meeting with the Distribution Provider to review possible Interconnection Customer facility modifications or the screen analysis and related results, to determine what further steps are needed to permit the Small Generating Facility to be connected safely and reliably. At the time of notification of the Distribution Provider's determination, or at the customer options meeting, the Distribution Provider shall:

- 2.3.1 Offer to perform facility modifications or minor modifications to the Distribution Provider's electric <u>system (e.g.,</u> changing meters, fuses, relay settings) and provide a non-binding good faith estimate of the limited cost to make such modifications to the Distribution Provider's electric system; or
- 2.3.2 Offer to perform a supplemental review if the Distribution Provider concludes that the supplemental review might determine that the Small Generating Facility could continue to qualify for interconnection pursuant to the Fast Track Process, and provide a non-binding good faith estimate of the costs of such review, or
- **2.3.3** Obtain the Interconnection Customer's agreement to continue evaluating the Interconnection Request under the section 3 Study Process.

# 2.4 Supplemental Review

If the Interconnection Customer agrees to a supplemental review, the Interconnection Customer shall agree in writing within 15 Business Days of the offer, and submit a deposit for the estimated costs. The Interconnection Customer shall be responsible for the Distribution Provider's actual costs for conducting the supplemental review. The Interconnection Customer must pay any review costs that exceed the deposit within 20 Business Days of receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced costs, the Distribution Provider will return such excess within 20 Business Days of the invoice without interest.

- **2.4.1** Within ten Business Days following receipt of the deposit for a supplemental review, the Distribution Provider will determine if the Small Generating Facility can be interconnected safely and reliably.
  - 2.4.1.1 If so, the Distribution Provider shall forward an executable an interconnection agreement to the Interconnection Customer within five Business Days.
  - 2.4.1.2 If so, and Interconnection Customer facility modifications are required to allow the Small Generating Facility to be interconnected consistent with safety, reliability, and power quality standards under these procedures, the Distribution Provider shall forward an executable interconnection agreement to the Interconnection Customer within five Business Days after confirmation that the Interconnection Customer has agreed to make the necessary changes at the Interconnection Customer's

cost.

- 2.4.1.3 If so, and minor modifications to the Distribution Providers electric system are required to allow the Small Generating Facility to be interconnected consistent with safety, reliability, and power quality standards under the Fast Track Process, the Distribution Provider shall forward an executable interconnection agreement to the Interconnection Customer within ten Business Days that requires the Interconnection Customer to pay the costs of such system modifications prior to interconnection.
- 2.4.1.4 If not, the Interconnection Request will continue to be evaluated under the section 3 Study Process.

# Section 3. Study Process

# 3.1 Applicability

The Study Process shall be used by an Interconnection Customer proposing to interconnect its Small Generating Facility with the Distribution Providers Distribution System if the Small Generating Facility (1) is larger than 2 MW but no larger than 20 MW, (2) is not certified, or (3) is certified but did not pass the Fast Track Process or the 10 kW Inverter Process.

# 3.2 Scoping Meeting

- 3.2.1 A scoping meeting will be held within ten Business Days after the Interconnection Request is deemed complete, or as otherwise mutually agreed to by the Parties. The Distribution Provider and the Interconnection Customer will bring to the meeting personnel, including system engineers and other resources as may be reasonably required to accomplish the purpose of the meeting.
- 3.2.2 The purpose of the scoping meeting is to discuss the Interconnection Request and review existing studies relevant to the Interconnection Request. The Parties shall further discuss whether the Distribution Provider should perform a feasibility study or proceed directly to a system impact study, or a facilities study, or an interconnection agreement. If the Parties agree that a feasibility study should be performed, the Distribution Provider shall provide the Interconnection Customer, as soon as possible, but not later than five Business Days after the scoping meeting, a feasibility study agreement (Attachment 6) including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study.
- 3.2.3 The scoping meeting may be omitted by mutual agreement. In order to remain in consideration for interconnection, an Interconnection Customer who has requested a feasibility study must return the executed feasibility study agreement within 15 Business Days. If the Parties agree not to perform a feasibility study, the Distribution Provider shall provide the Interconnection Customer, no later than five Business Days after the

scoping meeting, a system impact study agreement (Attachment 7) including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study.

# 3.3 Feasibility Study

- **3.3.1** The feasibility study shall identify any potential adverse system impacts that would result from the interconnection of the Small Generating Facility.
- **3.3.2** A deposit of the lesser of 50 percent of the good faith estimated feasibility study costs or earnest money of \$1,000 may be required from the Interconnection Customer.
- **3.3.3** The scope of and cost responsibilities for the feasibility study are described in the attached feasibility study agreement.
- 3.3.4 If the feasibility study shows no potential for adverse system impacts, the Distribution Provider shall send the Interconnection Customer a facilities study agreement, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study. If no additional facilities are required, the Distribution Provider shall send the Interconnection Customer an executable interconnection agreement within five Business Days.
- **3.3.5** If the feasibility study shows the potential for adverse system impacts, the review process shall proceed to the appropriate system impact study(s).

# 3.4 System Impact Study

- 3.4.1 A system impact study shall identify and detail the electric system impacts that would result if the proposed Small Generating Facility were interconnected without project modifications or electric system modifications, focusing on the adverse system impacts identified in the feasibility study, or to study potential impacts, including but not limited to those identified in the scoping meeting. A system impact study shall evaluate the impact of the proposed interconnection on the reliability of the electric system.
- 3.4.2 If no transmission system impact study is required, but potential electric power Distribution System adverse system impacts are identified in the scoping meeting or shown in the feasibility study, a distribution system impact study must be performed. The Distribution Provider shall send the Interconnection Customer a distribution system impact study agreement within 15 Business Days of transmittal of the feasibility study report, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study, or following the scoping meeting if no feasibility study is to be performed.
- 3.4.3 In instances where the feasibility study or the distribution system impact

study shows potential for transmission system adverse system impacts, within five Business Days following transmittal of the feasibility study report, the Distribution Provider shall send the Interconnection Customer a transmission system impact study agreement, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study, if such a study is required.

- 3.4.4 If a transmission system impact study is not required, but electric power Distribution System adverse system impacts are shown by the feasibility study to be possible and no distribution system impact study has been conducted, the Distribution Provider shall send the Interconnection Customer a distribution system impact study agreement.
- 3.4.5 If the feasibility study shows no potential for distribution system or Distribution System adverse system impacts, the Distribution Provider shall send the Interconnection Customer either a facilities study agreement (Attachment 8), including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study, or an executable interconnection agreement, as applicable.
- 3.4.6 In order to remain under consideration for interconnection, the Interconnection Customer must return executed system impact study agreements, if applicable, within 30 Business Days.
- **3.4.7** A deposit of the good faith estimated costs for each system impact study may be required from the Interconnection Customer.
- **3.4.8** The scope of and cost responsibilities for a system impact study are described in the attached system impact study agreement.
- 3.4.9 Where transmission systems and Distribution Systems have separate owners, such as is the case with transmission-dependent utilities (\*MAN) whether investor-owned or not the Interconnection Customer may apply to the nearest Transmission Provider (Transmission Owner, Regional Transmission Operator, or Independent Transmission Provider) providing transmission service to the TDU to request project coordination. Affected Systems shall participate in the study and provide all information necessary to prepare the study.

#### 3.5 Facilities Study

3.5.1 Once the required system impact study(s) is completed, a system impact study report shall be prepared and transmitted to the Interconnection Customer along with a facilities study agreement within five Business Days, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the facilities study. In the case where one or both impact studies are determined to be unnecessary, a notice of the fact shall be transmitted to the Interconnection Customer within the same timeframe.

- 3.5.2 In order to remain under consideration for interconnection, or, as appropriate, in the Distribution Provider's interconnection queue, the Interconnection Customer must return the executed facilities study agreement or a request for an extension of time within 30 Business Days.
- **3.5.3** The facilities study shall specify and estimate the cost of the equipment, engineering, procurement and construction work (including overheads) needed to implement the conclusions of the system impact study(s).
- 3.5.4 Design for any required Interconnection Facilities and/or Upgrades shall be performed under the facilities study agreement. The Distribution Provider may contract with consultants to perform activities required under the facilities study agreement. The Interconnection Customer and the Distribution Provider may agree to allow the Interconnection Customer to separately arrange for the design of some of the Interconnection Facilities. In such cases, facilities design will be reviewed and/or modified prior to acceptance by the Distribution Provider, under the provisions of the facilities study agreement. If the Parties agree to separately arrange for design and construction, and provided security and confidentiality requirements can be met, the Distribution Provider shall make sufficient information available to the Interconnection Customer in accordance with confidentiality and critical infrastructure requirements to permit the Interconnection Customer to obtain an independent design and cost estimate for any necessary facilities.
- **3.5.5** A deposit of the good faith estimated costs for the facilities study may be required from the Interconnection Customer.
- **3.5.6** The scope of and cost responsibilities for the facilities study are described in the attached facilities study agreement.
- 3.5.7 Upon completion of the facilities study, and with the agreement of the Interconnection Customer to pay for Interconnection Facilities and Upgrades identified in the facilities study, the Distribution Provider shall provide the Interconnection Customer an executable interconnection agreement within five Business Days.

# Section 4. Provisions that Apply to All Interconnection Requests

# 4.1 Reasonable Efforts

The Distribution Provider shall make reasonable efforts to meet all time frames provided in these procedures unless the Distribution Provider and the Interconnection Customer agree to a different schedule. If the Distribution Provider cannot meet a deadline provided herein, it shall notify the Interconnection Customer, explain the reason for the failure to meet the deadline, and provide an estimated time by which it will complete the applicable interconnection procedure in the process.

### 4.2 Disputes

- **4.2.1** The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.
- **4.2.2** In the event of a dispute, either Party shall provide the other Party with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute.
- **4.2.3** If the dispute has not been resolved within two Business Days after receipt of the Notice, either Party may contact FERC's Dispute Resolution Service (DRS) for assistance in resolving the dispute.
- **4.2.4** The DRS will assist the Parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or technical expert) to assist the Parties in resolving their dispute. DRS can be reached at 1-877-337-2237 or via the internet at http://www.ferc.gov/legal/adr.asp.
- **4.2.5** Each Party agrees-to conduct all negotiations in good faith and will be responsible for one-half of any costs paid to neutral third-parties.
- **4.2.6** If neither Party elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then either Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of this Agreement.

# 4.3 Interconnection Metering

Any metering necessitated by the use of the Small Generating Facility shall be installed at the Interconnection Customer's expense in accordance with Federal Energy Regulatory Commission, state, or local regulatory requirements or the Distribution Provider's specifications.

## 4.4 Commissioning

Commissioning tests of the Interconnection Customer's installed equipment shall be performed pursuant to applicable codes and standards. The Distribution Provider must be given at least five Business Days written notice, or as otherwise mutually agreed to by the Parties, of the tests and may be present to witness the commissioning tests.

# 4.5. Confidentiality

- 4.5.1 Confidential information shall mean any confidential and/or proprietary information provided by one Party to the other Party that is clearly marked or otherwise designated "Confidential." For purposes of this Agreement all design, operating specifications, and metering data provided by the Interconnection Customer shall be deemed confidential information regardless of whether it is dearly marked or otherwise designated as such.
- 4.5.2 Confidential Information does not include information previously in the public domain, required to be publicly submitted or divulged by

Governmental Authorities (after notice to the other Party and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce this Agreement. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under this Agreement, or to fulfill legal or regulatory requirements.

- 4.5.2.1 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party as it employs to protect its own Confidential Information.
- 4.5.2.2 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.
- Notwithstanding anything in this article to the contrary, and pursuant to 18 CFR § 1b.20, if FERC, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained In confidence pursuant to this Agreement, the Party shall provide the requested information to FERC, within the time provided for in the request for information. In providing the information to FERC, the Party may, consistent with 18 CFR § 388.112, request that the information be treated as -confidential and non-public by FERC and that the information be withheld from public-disclosure. Parties are prohibited from notifying the other Party to this Agreement prior to the release of the Confidential Information to FERC. The Party shall notify the other Party to this Agreement when it is notified by FERC that a request to release Confidential Information has been received by FERC, at which time either of the Parties may respond before such information would be made public, pursuant to 18 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

### 4.6 Comparability

The Distribution Provider shall receive, process and analyze all Interconnection Requests in a timely manner as set forth in this document. The Distribution Provider shall use the same reasonable efforts in processing and analyzing Interconnection Requests from all Interconnection Customers, whether the Small Generating Facility is owned or operated by the Distribution Provider, its subsidiaries or affiliates, or others.

#### 4.7 Record Retention

The Distribution Provider shall maintain for three years records, subject to audit, of all Interconnection Requests received under these procedures, the times required to complete Interconnection Request approvals and disapprovals, and justification for the actions taken on the Interconnection Requests.

# 4.8 Interconnection Agreement

After receiving an interconnection agreement from the Distribution Provider, the Interconnection Customer shall have 30 Business Days or another mutually agreeable timeframe to sign and return the interconnection agreement, or request that the Distribution Provider file an unexecuted interconnection agreement with the Federal Energy Regulatory Commission. If the Interconnection Customer does not sign the interconnection agreement, or ask that it be filed unexecuted by the Distribution Provider within 30 Business Days, the Interconnection Request shall be deemed withdrawn. After the interconnection agreement is signed by the Parties, the interconnection of the Small Generating Facility shall proceed under the provisions of the interconnection agreement.

# 4.9 Coordination with Affected Systems

The Distribution Provider shall coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems with Affected System operators and, if possible, include those results (if available) in its applicable interconnection study within the time frame specified in these procedures. The Distribution Provider will include such Affected System operators in all meetings held with the Interconnection Customer as required by these procedures. The Interconnection Customer will cooperate with the Distribution Provider in all matters related to the conduct of studies and the determination of modifications to Affected Systems. A Distribution Provider which may be an Affected System shall cooperate with the Distribution Provider with whom interconnection has been requested in all matters related to the conduct of studies and the determination of modifications to Affected Systems.

# 4.10 Capacity of the Small Generating Facility

- 4.10.1 If the Interconnection Request is for an increase in capacity for an existing Small Generating Facility, the Interconnection Request shall be evaluated on the basis of the new total capacity of the Small Generating Facility.
- 4.10.2 If the Interconnection Request is for a Small Generating Facility that includes multiple energy production devices at a site for which the Interconnection Customer seeks a single Point of Interconnection, the Interconnection Request shall be evaluated on the basis of the aggregate capacity of the multiple devices.
- 4.10.3 The Interconnection Request shall be evaluated using the maximum rated capacity of the Small Generating Facility.

# 4.11 Interconnection Customer to Meet Requirements of Distribution Provider's Interconnection Handbook

The Interconnection Customer's Interconnection Facilities shall be designed, constructed, operated and maintained in accordance with the Distribution Provider's Interconnection Handbook. In the event of a conflict between the terms of the SGIP and the terms of the Distribution Provider's Interconnection Handbook. the terms in the SGIP shall govern.

# **Attachment 1 Glossary of Terms**

**10 kW Inverter Process** – The procedure for evaluating an Interconnection Request for a certified inverter-based Small Generating Facility no larger than 10 kW that uses the section 2 screens. The application process uses an all-in-one document that includes a simplified Interconnection Request, simplified procedures, and a brief set of terms and conditions. See SGIP Attachment 5.

**Affected System** – An electric system other than the Distribution Provider's Distribution System that may be affected by the proposed interconnection.

**Business Day – Monday through Friday, excluding federal holidays.** 

**CAISO** shall mean the California Independent System Operator Corporation, a state chartered, nonprofit, corporation that controls certain transmission facilities of all Participating Transmission Owners and dispatches certain generating units and loads.

**CAISO Tariff** shall mean the California Independent System Operator Corporation's Operating Agreement and Tariff, dated March 31, 1997, as it may be modified from time to time.

**Distribution System** – The Distribution Provider's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which Distribution Systems operate differ among areas.

**Distribution Upgrades** – The additions, modifications, and upgrades to the Distribution Provider's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generating Facility and render the transmission service necessary to effect the Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Fast Track Process** – The procedure for evaluating an Interconnection Request for a certified Small Generating Facility no larger than 2 MW that includes the section 2 screens, customer options meeting, and optional supplemental review.

**Interconnection Customer** – Any entity, including the Distribution Provider, the Distribution Owner or any of the affiliates or subsidiaries of either, that proposes to interconnect its Small Generating Facility with the Distribution Provider's Distribution System.

Interconnection Facilities – The Distribution Provider's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generating Facility to the Distribution Provider's Distribution System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades or Network Upgrades.

**Interconnection Handbook** — A handbook, developed by the Distribution Provider and posted on the Distribution Provider's website or otherwise made available by the Distribution Provider, describing the technical and operational requirements for wholesale generators and loads connected to the Distribution System, as such handbook may be modified or superseded from time to time. In the event of a conflict between the terms of the SGIP and terms of the Distribution Provider's Interconnection Handbook, the terms of the SGIP shall govern.

**Interconnection Request** — The Interconnection Customer's request, in accordance with the Tariff, to interconnect a new Small Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Small Generating Facility that is interconnected with the Distribution Provider's Distribution System.

**Material Modification** — A modification that has a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

**Network Upgrades** — Additions, modifications, and upgrades to the Distribution Provider's Transmission System required at or beyond the point at which the Distribution System connects to the Distribution Provider's Transmission System. Network Upgrades do not include Distribution Upgrades.

**Party or Parties** — The Distribution Provider, Distribution Owner, Interconnection Customer or any combination of the above.

**Point of Interconnection** — The point where the Interconnection Facilities connect with the Distribution Provider's Distribution System.

**Queue Position** — The order of a valid Interconnection Request, relative to all other pending valid Interconnection Requests, that is established based upon the date and time of receipt of the valid Interconnection Request by the Distribution Provider.

**Small Generating Facility** — The Interconnection Customer's device for the production of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**Study Process** — The procedure for evaluating an Interconnection Request that includes the section 3 scoping meeting, feasibility study, system impact study, and facilities study.

**Distribution Owner** — The entity that owns, leases or otherwise possesses an interest in the portion of the Distribution System at the Point of Interconnection and may be a Party to the Small Generator Interconnection Agreement to the extent necessary.

**Distribution Provider** — The public utility (or its designated agent) that owns, controls, or operates transmission or distribution facilities used for the distribution of electricity in interstate commerce and provides distribution service under the Tariff. The term Distribution Provider should be read to include the Distribution Owner when the Distribution Owner is separate from the Distribution Provider.

**Transmission System** — Those transmission facilities owned by the Distribution Provider that have been placed under the CAISO's operational control and are part of the CAISO Grid.

**Upgrades** — The required additions and modifications to the Distribution Provider's Transmission System and Distribution System at or beyond the Point of Interconnection. Upgrades may be network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

# SMALL GENERATOR INTERCONNECTION REQUEST (Application Form)

Distribution Provider: _		
Designated Contact Pe	erson:	
Address:		
Telephone Number		
Fax:		
E-Mail Address:		
An Interconnection Rea		nplete when it provides all applicable
Preamble and Instruc	etions	
jurisdictional interconne		Federal Energy Regulatory Commission Interconnection Request by hand delivery,
Processing Fee or De	eposit	
If the Interconnection Frefundable processing		der the Fast Track Process, the non-
or an Interconnection	Request that did not	nder the Study Process, whether a new submission pass the Fast Track Process, the Interconnection ider a deposit not to exceed \$1,000 towards the cost
Interconnection Cust	omer information	
Legal Name of the Inte	rconnection Customer	(or, if an individual, Individual's name)
Name:		
Contact Person:		
Mailing Address:		
		Zip:
Facility Location (if diffe	erent from above):	
Telephone (Day):		Telephone (Evening):
Fax:		E-Mail
Address:		

Alternative Contact Information (if different from the Interconnection Customer)					
Contact Name:					
Title:					
Address:					
Telephone (Day):		_Telephone (Evening):			
Fax:		E-Mail Address:			
Application is for:	New Small Generating Capacity Addition to Ex	Facility cisting Small Generating Facility			
If capacity addition to e	xisting facility, please de	scribe:			
Will the Small Generation	ng Facility be used for ar	ny of the following:			
To supply power	Yeser to the interconnection of others: Yes	customer: Yes NoTo			
For installations at loca will interconnect, provide		c service to which the proposed Small Generating Facility			
(Local Electric Service	Provider)	(Existing Account Number)			
[To be provided by the Interconnection Customer if the local electric service provider is different from the Distribution Provider.]					
Contact name:					
Title:					
Address:					
Telephone (Day):		Telephone (Evening):			
Fax:		E-Mail Address:			
Requested Point of Inte	erconnection:				
Interconnection Custom	ner's Requested In-Servi	ce Date:			

Short circuit produced by generator \_\_\_\_\_ amps

# **Small Generating Facility Information** Data apply only to the Small Generating Facility, not the Interconnection Facilities. Energy Source: Solar Wind Hydro Hydro Type (e.g. Run-of-River):\_\_\_ Diesel Natural Gas Fuel Oil Other (state type): Fuel CellRecip Engine Gas Turb Steam Turb Prime Mover: Microturbine PV Other Induction Type of Generator: Synchronous Inverter Generator Nameplate kVAR: Generator Nameplate Rating:\_\_\_\_\_kW (Typical) Interconnection Customer or Customer-Site Load: \_\_\_\_\_ kW (if none, so state) Typical Reactive Load (if known):\_\_\_\_\_ Maximum Physical Export Capability Requested: \_\_\_\_\_ kW List components of the Small Generating Facility equipment package that are currently certified: **Equipment Type** Certifying Entity Is the prime mover compatible with the certified protective relay package? Yes\_\_\_\_No\_\_\_\_ Generator (or solar collector) Manufacturer, Model Name & Number: Version Number: Nameplate Output Power Rating in kW: (Summer) \_\_\_\_\_ (Winter) \_\_\_\_\_ Nameplate Output Power Rating in kVA: (Summer)\_\_\_\_\_ (Winter) \_\_\_\_\_\_ Individual Generator Power Factor Rated Power Factor: Leading: Lagging: Three phase winding configuration: \_\_ 3 wire delta \_\_ 3 wire wye \_\_ 4 wire wye Total Number of Generators in wind farm to be interconnected pursuant to this Interconnection Request:\_\_\_\_\_ Elevation:\_\_\_\_\_ Single Phase Three Phase Inverter Manufacturer, Model Name & Number (if used):\_\_\_\_\_\_ List of adjustable set points for the protective equipment or software: Small Generating Facility Characteristic Data (for inverter-based machines) Max design fault contribution current:\_\_\_\_\_ Instantaneous\_\_\_\_ or RMS?

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Wiring configuration Single phase Three phase
Provide complete dynamic model in GE PSLF format
(Provide equivalent impedance model of the Solar Collector System in GE PSLF format)
Harmonics Characteristics:
Start-up requirements:

Small Generating Facility Characteristic Data (for rotating machines)				
Rated RPM:				
Neutral Grounding System L Applicable):	Jsed underground	led solidly gro	ounded neu	utral grounding Resistor (If
Synchronous Generators:				
Direct Axis Synchronous Rea Direct Axis Transient Reactar Direct Axis Subtransient Rea Negative Sequence Reactan Zero Sequence Reactance, X KVA Base: Field Volts: Field Amperes:	nce, X'd <sup>ii</sup> ctance, X" <u>d:</u> : P. ce, X2: P.U.	U. 		
Induction Generators:				
Motoring Power (kW):  I₂²t or K (Heating Time Const Rotor Resistance, Rr:  Stator Resistance, Rs:  Stator Reactance, Xs: Rotor Reactance, Xr:  Magnetizing Reactance, Xm: Short Circuit Reactance, Xd" Exciting Current:  Temperature Rise: Frame Size: Design Letter: Reactive Power Required In Reactive Power Required In Total Rotating Inertia, H:  Note: Please contact the Dist determine if the specified information and Governor Systems of the Stabilizer (PSS) in accordance required by applicable studie	Vars (No Load): Vars (Full Load): Per tribution Provider price price or above is reconstant to the content of the	Unit on kVA Base or to submitting the quired.	<u>Only</u> n, governor syst teria. A PSS ma	em and power system by be determined to be
Interconnection Facilities Info	ormation_			
Will a transformer be used be	etween the generator	and the point of c	ommon coupling	g? YesNo
Will the transformer be provide	ded by the Interconne	ection Customer?	YesN	0
Transformer Data (If Applicat	ole. For Interconnecti	ion Customer-Own	ned Transformer	<u>),</u>
Is the transformer:si Transformer Impedance:			Si	ze:kVA
If Three Phase: Transformer Primary:	Volta	Dolto	Myra	Muo Croundad
Transformer Secondary:		Delta Delta	<u>Wye</u> Wye	Wye Grounded Wye Grounded
Transformer Tertiary:			Wye	

Transformer Fuse Date (If A	pplicable. For Interd	connection Customer-Owne	d Fuse):
(Attach copy of fuse manufacture)	cturer's Minimum m	nelt and Total Clearing Time	-Current Curves)
Manufacturer:	Type:	Size:Sp	eed:
Interconnecting Circuit Break	ker (If Applicable):		
Manufacturer:Load Rating (Amps):	Type: Interrupting	Rating (Amps):	Trip Speed (Cycles):
Interconnection Protective R	elays (If Applicable	<u>):</u>	
If Microprocessor-C	Controlled:		
List of Functions and Adjusta	able Setpoints for th	ne protective equipment or s	oftware:
Setpoint Function		Minimum	Maximum
1			
2			
3			
4.			
5			
6			
If Discrete Components:			
(Enclose Copy of any Propos	sed Time-Overcurre	ent Coordination Curves)	
			Proposed Setting:
Manufacturer:	ı ype:	Style/Catalog No.:	Proposed Setting: Proposed Setting:
Manufacturer	1 ype	Style/Catalog No	Proposed Setting
Manufacturer:	_ Type: Style	e/Catalog No.:	Proposed Setting:
Manufacturer.	_ Type: Style	e/Catalog No.:	Proposed Setting:
Current Transformer Data (if	Applicable).		
Current Transformer Data (if (Enclose Copy of Manufactu		Patio Correction Curves	
		,	
Manufacturer: Type:	Accuracy Cla	ass: Proposed Ratio Connec	ction:
Manufacturer: Type:			ntion:
Potential Transformer Data (	-	ass. riupuseu Kallu Cunnet	oliOH.
Manufacturer:			
Type:	Accuracy Cla	ass: Proposed Ratio Connec	ction:
Manufacturer:			

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Type:	Accuracy Class: Proposed Ratio Col	nnection:
General Information		
equipment, current and potential of	r-line diagram showing the configuration in the configuration in the control school is and protection and control school is a control school in the control in the configuration in the configurati	nemes. This one-line diagram must
	ntation that indicates the precise physi pographic map or other diagram or do	
	erface equipment on property (includess)	
Enclose copy of any site documen control schemes. Is Available Doc	ntation that describes and details the cumentation Enclosed?	operation of the protection and Yes No
Enclose copies of schematic draw potential circuits, and alarm/monite Are Schematic Drawings Enclosed		uits, relay current circuits, relay
Applicant's Signature		
I hereby certify that, to the best of Interconnection Request is true an	my knowledge, all the information prond correct.	ovided in this
For Interconnection Customer		_Date:

**Synchronous Generator – General Information:** 

1.

# Complete only if requested by Distribution Provider

# APPENDIX A TO ATTACHMENT 2 ADDITIONAL GENERATING FACILITY DATA

	(Rep	eat the f	ollowing for each generator model)
	A.	Rated	d Generator speed (rpm):
	B.		d MVA:
	C.	Rated	d Generator Power Factor:
	D.	Gene	rator Efficiency at Rated Load (%):
	E.	Mome	ent of Inertia (including prime mover):
	F.	Inertia	ent of Inertia (including prime mover): a Time Constant (on machine base) H: sec or MJ/MVA
	G.	SCR	(Short-Circuit Ratio - the ratio of the field current required for rated open-circuit
	О.		ge to the field current required for rated short-circuit current):
	Н.		h generator reactive capability curves.
	l.		d Hydrogen Cooling Pressure in psig (Steam Units only):
	J.		h a plot of generator terminal voltage versus field current that shows the air gap line,
	J.		
		factor	pen-circuit saturation curve, and the saturation curve at full load and rated power
•	F'4	-4: 0-	
2.			ystem Information
	(кере	eat the to	ollowing for each generator model)
	A.	Indica	ate the Manufacturerof
		excita	ation system used for the generator. For exciter type, please choose from 1 to 9
			or describe the specific excitation system.
		(1)	Rotating DC commutator exciter with continuously acting regulator. The
		( )	regulator power source is independent of the generator terminal voltage and current.
		(2)	Rotating DC commentator exciter with continuously acting regulator. The
		(2)	regulator power source is bus fed from the generator terminal voltage.
		(2)	
		(3)	Rotating DC commutator exciter with non-continuously acting regulator (i.e.,
		(4)	regulator adjustments are made in discrete increments).
		(4)	Rotating AC Alternator Exciter with non-controlled (diode) rectifiers. The
			regulator power source is independent of the generator terminal voltage and
		(5)	current (not bus-fed).
		(5)	Rotating AC Alternator Exciter with controlled (thyristor) rectifiers. The regulator
		4-1	power source is fed from the exciter output voltage.
		(6)	Rotating AC Alternator Exciter with controlled (thyristor) rectifiers.
		(7)	Static Exciter with controlled (thyristor) rectifiers. The regulator power source is
			bus-fed from the generator terminal voltage.
		(8)	Static Exciter with controlled (thyristor) rectifiers. The regulator power source is
			bus-fed from a combination of generator terminal voltage and current
			(compound-source controlled rectifiers system.
		(9)	Other (specify):
	B.	Attacl	h a copy of the block diagram of the excitation system from its instruction manual.
			liagram should show the input, output, and all feedback loops of the excitation
		syste	

	C. D. E. F.	Full lo Maxim	ation system response ratio (ASA):  ad rated exciter output voltage:  num exciter output voltage (ceiling voltage):  comments regarding the excitation system?
	١.		confinents regarding the excitation system:
3.	(Repea	at the fo an exe	m Stabilizer Information bllowing for each generator model. All new generators are required to install PSS mption has been obtained from WECC. Such an exemption can be obtained for ot have suitable excitation systems.)
	A.	Manu	facturer:
	В.	Is the	PSS digital or analog?
	C.		he input signal source for the PSS?  Bus frequency Shaft speed Bus Voltage
			Other (specify source)
	D.		n a copy of a block diagram of the PSS from the PSS Instruction Manual and the
	E:		spondence between dial settings and the time constants or PSS gain. comments regarding the PSS?
			<del></del>
4.			ernor Information
	(Repea	at the fo	ollowing for each generator model)
	Complete for both		t A for steam, gas or combined-cycle turbines, Part B for hydro turbines, and Part C
	A.	Steam	n, gas or combined-cycle turbines:
		(1) (2)	List type of unit (Steam, Gas, or Combined-cycle):  If steam or combined-cycle, does the turbine system have a reheat process (i.e., both high and low pressure turbines)?
		(3)	If steam with reheat process, or if combined-cycle, indicate in the space provided, the percent of full load power produced by each turbine:  Low pressure turbine or gas turbine: %
	B.	Hydro	High pressure turbine or steam turbine:% turbines:
		(1) (2) (3) (4) (5) (6) (7) (8)	Turbine efficiency at rated load:%  Length of penstock:ft  Average cross-sectional area of the penstock:ft2  Typical maximum head (vertical distance from the bottom of the penstock, at the gate, to the water level):ft  Is the water supply run-of-the-river or reservoir:  Water flow rate at the typical maximum head:ft3/sec  Average energy rate:kW-hrs/acre-ft  Estimated yearly energy production:kW-hrs
	0		• • •
	C.	·	lete this section for each machine, independent of the turbine type.
		(1)	Turbine manufacturer:

	(2) (3) (4)	Minim	num turbine power output:kW num turbine power output (while on line):kW rnor information: Droop setting (speed regulation): Is the governor mechanical-hydraulic or electro-hydraulic (Electro-hydraulic governors have an electronic speed sensor and transducer.)?
		(c)	Other comments regarding the turbine governor system?
5.	Step-Up Trar	nsforme	r Data
	For each step	-up tran	sformer, fill out the data form provided in Table 1.
6.	Interconnect	ion Faci	ilities Line Data
	However, for provide the fo	transmis Ilowing i	
	Line Length:		kV miles
	Line terminati	on Point	s: Size:
	Conductor Ty	pe:	Size:
	Phase Config	umber p	er phase:, Bundle spacing:in. Vertical:, Horizontal:ft., B-C:ft., C-A:ft.
	Phase Spacin	na A-R	ft B-C: ft C-A: ft
	Distance of lo	west cor	nductor to Ground at full load and 40°C:ft
			Size: Distance to Ground:ft
			ration Diagram
			n amperes (normal and emergency)
			esistance (R):p.u.** (for entire line length)
			eactance: ( X ): p.u**(for entire line length)
	Zero Segueno	ce React	tance (R0):p.u.** (for entire line length)
	Line Charging	(B/2):	tance: (X0): p.u.** (for entire line length)
	** On 100-MV	À and n	ominal line voltage (kV) Base
7.			ic plants, provide collector System Equivalence Impedance Data es for each equivalence collector circuit at all voltage levels.
	Nominal Volta	age:	
	Summer line	ratings ir	n amperes (normal and emergency)
	Positive Sequ	ence Re	esistance (R1): p.u. ** (for entire line length of each collector circuit)
			eactance: (X1): p.u** (for entire line length of each collector circuit)
	Zero Sequeno	ce Kesis	tance (R0): p.u. ** (for entire line length of each collector circuit)
	Line Charging		tance: (X0): p.u** (for entire line length of each collector circuit) p.u.** (for entire line length of each collector circuit)
	** On 100-MV	ر کری. A and n	ominal line voltage (kV) Base

# 8. Wind Generators

List of adjustable set points for the protective equipment or software:
Field Volts:
Field Amperes:
Motoring Power (kW):
Neutral Grounding Resistor (If Applicable):
I22t or K (Heating Time Constant):
Rotor Resistance:
Stator Resistance:
Stator Reactance:
Rotor Reactance:
Magnetizing Reactance:
Short Circuit Reactance:
Exciting Current:
Temperature Rise:
Frame Size:
Design Letter:
Reactive Power Required In Vars (No Load):
Reactive Power Required In Vars (Full Load):
Total Rotating Inertia, H: Per Unit on 100 MVA Base

Note: A completed General Electric Company Positive Sequence Load Flow (GE PSLF) data sheet must be supplied with the Interconnection Request. If other data sheets are more appropriate to the proposed device then they shall be provided and discussed at Scoping Meeting.

### 9. Load Flow and Dynamic Models:

Provide load flow model for the generating plant and its interconnection facilities in GE PSLF \*.epc format, including new buses, generators, transformers, interconnection facilities. An equivalent model is required for the plant with generation collector systems. This data should reflect the technical data provided in the Interconnection Request.

If applicable, for each generator, governor, exciter and power system stabilizer, select the appropriate dynamic model from the GE PSLF User's Manual and provide the required input data. Include any user written \*.p EPCL files to simulate inverter based plants' dynamic responses (typically needed for inverter based PV/wind plants). Provide a completed \*.dyd file that contains the information specified in this section.

There are links within the GE PSLF User's Manual to detailed descriptions of specific models, a definition of each parameter, a list of the output channels, explanatory notes, and a control system block diagram.

If you require assistance in developing the models, we suggest you contact General Electric. Accurate models are important to obtain accurate study results. Costs associated with any changes in facility requirements that are due to differences between model data provided by the generation developer and the actual generator test data, may be the responsibility of the generation developer.

# TABLE 1

# TRANSFORMER DATA (Provide for each level of transformation)

UNIT\_\_\_\_\_

NUMBER OF TRANSFORMERS PHASE					
RATING	H Winding	X Winding	Y Winding		
Rated MVA					
Connection (Delta, Wye, Gnd.)					
Cooling Type (OA,OA/FA, etc):					
Temperature Rise Rating					
Rated Voltage					
BIL					
Available Taps (% of rating)					
Load Tap Changer? (Y or N)					
Tap Settings					
IMPEDANCE	H-X	H-Y	X-Y		
Percent					
MVA Base					
Tested Taps					
WINDING RESISTANCE	Н	Х	Υ		
Ohms					
CURRENT TRANSFORMER RATIOS					
H X	Y	N	<del></del>		
Percent exciting current a	at 100 % Voltage; _	110% Volta	ge		

Supply copy of nameplate and manufacture's test report when available

#### **Certification Codes and Standards**

IEEE1547 Standard for Interconnecting Distributed Resources with Electric Power Systems (including use of IEEE 1547.1 testing protocols to establish conformity)

UL 1741 Inverters, Converters, and Controllers for Use in Independent Power Systems IEEE

Std 929-2000 IEEE Recommended Practice for Utility Interface of Photovoltaic (PV) Systems

NFPA 70 (2002), National Electrical Code

IEEE Std C37.90.1-1989 (R1994), IEEE Standard Surge Withstand Capability (SWC) Tests for Protective Relays and Relay Systems

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

IEEE Std C37.108-1989 (R2002), IEEE Guide for the Protection of Network Transformers IEEE

Std C57.12.44-2000, IEEE Standard Requirements for Secondary Network Protectors

IEEE Std C62.41 .2-2002, IEEE Recommended Practice on Characterization of Surges in Low Voltage (1000V and Less) AC Power Circuits

IEEE Std C62.45-1992 (R2002), IEEE Recommended Practice on Surge Testing for Equipment Connected to Low-Voltage (1000V and Less) AC Power Circuits

ANSI C84.1-1995 Electric Power Systems and Equipment – Voltage Ratings (60 Hertz)

IEEE Std 100-2000, IEEE Standard Dictionary of Electrical and Electronic Terms NEMA MG 1-1998, Motors and Small Resources, Revision 3

IEEE Std 519-1992, IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems

NEMA MG 1-2003 (Rev 2004), Motors and Generators Revision 1

# **Certification of Small Generator Equipment Packages**

- 1.0 Small Generating Facility equipment proposed for use separately or packaged with other equipment in an interconnection system shall be considered certified for interconnected operation if (1) it has been tested in accordance with industry standards for continuous utility interactive operation in compliance with the appropriate codes and standards referenced below by any Nationally Recognized Testing Laboratory (NRTL) recognized by the United States Occupational Safety and Health Administration to test and certify interconnection equipment pursuant to the relevant codes and standards listed in SGIP Attachment 3, (2) it has been labeled and is publicly listed by such NRTL at the time of the interconnection application, and (3) such NRTL makes readily available for verification all test standards and procedures it utilized in performing such equipment certification, and, with consumer approval, the test data itself. The NRTL may make such information available on its website and by encouraging such information to be included in the manufacturer's literature accompanying the equipment.
- 2.0 The Interconnection Customer must verify that the intended use of the equipment fells within the use or uses for which the equipment was tested, labeled, and listed by the NRTL.
- 3.0 Certified equipment shall not require further type-test review, testing, or additional equipment to meet the requirements of this interconnection procedure; however, nothing herein shall preclude the need for an on-site commissioning test by the parties to the interconnection nor follow-up production testing by the NRTL.
- 4.0 If the certified equipment package includes only interface components (switchgear, inverters, or other interface devices), then an Interconnection Customer must show that the generator or other electric source being utilized with the equipment package is compatible with the equipment package and is consistent with the testing and listing specified for this type of interconnection equipment.
- 5.0 Provided the generator or electric source, when combined with the equipment package, is within the range of capabilities for which it was tested by the NRTL, and does not violate the interface components' labeling and listing performed by the NRTL, no further design review, testing or additional equipment on the customer side of the point of common coupling shall be required to meet the requirements of this interconnection procedure.
- 6.0 An equipment package does not include equipment provided by the utility.
- 7.0 Any equipment package approved and listed in a state by that state's regulatory body for interconnected operation in that state prior to the effective date of these small generator interconnection procedures shall be considered certified under these procedures for use in that state.

# Application, Procedures, and Terms and Conditions for Interconnecting a Certified Inverter-Based Small Generating Facility No Larger than 10 kW ("10 kW Inverter Process")

- 1.0 The Interconnection Customer ("Customer") completes the Interconnection Request ("Application") and submits it to the Distribution Provider ("Company).
- 2.0 The Company acknowledges to the Customer receipt of the Application within three Business Days of receipt
- 3.0 The Company evaluates the Application for completeness and notifies the Customer within ten Business Days of receipt that the Application is or is not complete and, if not, advises what material is missing.
- 4.0 The Company verifies that the Small Generating Facility can be interconnected safely and reliably using the screens contained in the Fast Track Process in the Small Generator Interconnection Procedures (SGIP). The Company has 15 Business Days to complete this process. Unless the Company determines and demonstrates that the Small Generating Facility cannot be interconnected safely and reliably, the Company approves the Application and returns it to the Customer. Note to Customer. Please check with the Company before submitting the Application if disconnection equipment is required.
- 5.0 After installation, the Customer returns the Certificate of Completion to the Company. Prior to parallel operation, the Company may inspect the Small Generating Facility for compliance with standards which may include a witness test, and may schedule appropriate metering replacement, if necessary.
- 6.0 The Company notifies the Customer in writing that interconnection of the Small Generating Facility is authorized. If the witness test is not satisfactory, the Company has the right to disconnect the Small Generating Facility. The Customer has no right to operate in parallel until a witness test has been performed, or previously waived on the Application. The Company is obligated to complete this witness test within ten Business Days of the receipt of the Certificate of Completion. If the Company does not inspect within ten Business Days or by mutual agreement of the Parties, the witness test is deemed waived.
- 7.0 Contact Information The Customer must provide the contact information for the legal applicant (i.e. the Interconnection Customer). If another entity is responsible for interfacing with the Company, that contact information must be provided on the Application.
- 8.0 Ownership Information Enter the legal names of the owner(s) of the Small Generating Facility. Include the percentage ownership (if any) by any utility or public utility holding company, or by any entity owned by either.
- 9.0 UL1741 Listed This standard (Inverters, Converters, and Controllers for Use in Independent Power Systems") addresses the electrical interconnection design of various forms of generating equipment. Many manufacturers submit their equipment to a Nationally Recognized Testing Laboratory (NRTL) that verifies compliance with UL1741. This "listing" is then marked on the equipment and supporting documentation.

# Application for Interconnecting a Certified Inverter-Based Small Generating Facility No Larger than 10kW

This Application is considered complete when it provides all applicable and correct Information required below. Additional information to evaluate the Application may be required.

### Processing Fee

A non-refundable processing fee of \$100 must accompany this Application.

Interconnection Customer Name:				
Contact Person:				
Address:				
City:			·	
Telephone (Day):	(Evening):			
Fax:	E-Mail Address:			
Contact (if different from Interconnection Customer)	) Name:			
Address:				
City	State:		Zip:	
Telephone (Day):	(Evening):	(Evening):		
Fax:	E-Mail Address:			
Owner of the facility (include % ownership by any elsonall Generating Facility Information.	lectric utility	):		
Location (if different from above):				
Electric Service Company:				
Account Number:				
Account Nambon				
Inverter Manufacturer(kW) (kVA)		Model(AC Volts)		
Single PhaseThree Phase				
System Design Capacity: (kW) (kVA)				
Prime Mover. Photovoltaic Reciprocating Engine Fuel Cell				
Turbine Other				
Energy Source: Solar Wind Hydro		Diesel	Natural Gas	
Fuel Oil Other (describe)	)		_	
Is the equipment UL1741 Listed? Yes  If Yes, attach manufacturer's cut-sheet sho	No owing UL17	41 listing		
Estimated Installation Date:		Estimated In-Serv	vice Date:	

The 10 kW Inverter Process is. available only for inverter-based Small Generating Facilities no larger than 10 kW that meet the codes, standards, and certification requirements of Attachments 3 and 4 of the Small Generator Interconnection Procedures (SGIP), or the Distribution Provider has reviewed the design or tested the proposed Small Generating Facility and is satisfied that it is safe to operate.

List components of the Small Generating Facility equipme	ent package that are currently certified:
Equipment Type 1 2 3 4 5	Certifying Entity
Interconnection Customer Signature	
I hereby certify that, to the best of my knowledge, the info to abide by the Terms and Conditions for Interconnecting Larger than 10kW and return the Certificate of Completior installed.  Signed:	an Inverter-Based Small Generating Facility Non when the Small Generating Facility has been
Title:	Date:
Contingent Approval to Interconnect the Small Generating	g Facility
(For Company use only)	
Interconnection of the Small Generating Facility is approfor Interconnecting an Inverter-Based Small Generating Certificate of Completion.	
Company Signature:	
Title:	Date:
Application ID number	
Company waives inspection/witness test? Yes	_No

	Small Ge	nerating Facility Certificate of C	ompletion
Is the Small (	Generating Facility owner-ins	stalled? YesNo	
Interconnection	on Customer:		
	on:		
City:		State:	Zip Code:
Telephone (D	Day):	(Evening):	
Fax:		E-Mail Addre	ss:
Electrician: N	ame:		
Address:			
			Zip Code:
Telephone (D	Day):	(Evening):	
Fax:		E-Mail Address:	
License numb	ber		
Date Approva	al to Install Facility granted b	y the Company:	
Application ID	O number:		
Inspection:			
The Small Go	phorating Eacility has been in	estalled and inspected in compliance	e with the local building/electrical code o
THE SHAII GE	eneraling Facility has been in	istalied and inspected in compliant	e with the local building/electrical code o
Signed (Loca	l electrical wiring inspector,	or attach signed electrical inspectio	n):
Print Name:_			
Date:			
	n of interconnection, you are mit to (insert Company inforr		form along with a copy of the signed
	Name:		
	Company:		
	Address:		
	City, State ZIP:		
	Fax:		
Approval to	Energize the Small Generati	ng Facility (For Company use only)	
		is approved contingent upon the Tonall Generating Facility No Larger t	
	Company Signature:		
	Title:	D	rate:

Terms and Conditions for interconnecting an Inverter-Based Small Generating Facility No Larger than 10kW

#### 1.0 Construction of the Facility

The Interconnection Customer (the "Customer) may proceed to construct (including operational testing not to exceed two hours) the Small Generating Facility when the Distribution Provider (the "Company") approves the Interconnection Request (the "Application") and returns it to the Customer.

#### 2.0 Interconnection and Operation

The Customer may operate Small Generating Facility and interconnect with the Company's electric system once all of the following have occurred:

- 2.1 Upon completing construction, the Customer will cause the Small Generating Facility to be inspected or otherwise certified by the appropriate local electrical wiring inspector with jurisdiction, and
- 2.2 The Customer returns the Certificate of Completion to the Company, and
- 2.3 The Company has either:
  - 2.3.1 Completed its inspection of the Small Generating Facility to ensure that all equipment has been appropriately installed and that all electrical connections have been made in accordance with applicable codes. All inspections must be conducted by the Company, at its own expense, within ten Business Days after receipt of the Certificate of Completion and shall take place at a time agreeable to the Parties. The Company shall provide a written statement that the Small Generating Facility has passed inspection or shall notify the Customer of what steps it must take to pass inspection as soon as practicable after the inspection takes place; or
  - 2.3.2 if the Company does not schedule an inspection of the Small Generating Facility within ten business days after receiving the Certificate of Completion, the witness test is deemed waived (unless the Parties agree otherwise); or
  - 2.3.3 The Company waives the right to inspect the Small Generating Facility.
- 2.4 The Company has the right to disconnect the Small Generating Facility in the event of improper installation or failure to return the Certificate of Completion.
- 2.5 Revenue quality metering equipment must be installed and tested in accordance with applicable ANSI standards.

### 3.0 Safe Operations and Maintenance

The Customer shall be fully responsible to operate, maintain, and repair the Small Generating Facility required to ensure that it complies at all times with the interconnection standards to which it has been certified.

#### 4.0 Access

The Company shall have access to the disconnect switch (if the disconnect switch is required) and metering equipment of the Small Generating Facility at all times. The Company shall provide reasonable notice to the Customer when possible prior to using its right of access.

#### 5.0 Disconnection

The Company may temporarily disconnect the Small Generating Facility upon the following conditions:

- 5.1 For scheduled outages upon reasonable notice.
- 5.2 For unscheduled outages or emergency conditions.
- 5.3 If the Small Generating Facility does not operate in the manner consistent with these Terms and Conditions.
- 5.4 The Company shall inform the Customer in advance of any scheduled disconnection, or as is reasonable after an unscheduled disconnection.

#### 6.0 Indemnification

The Parties shall at ail times indemnify, defend, and save the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or inactions of its obligations under this agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

#### 7. 0 Insurance

The Parties each agree to maintain commercially reasonable amounts of insurance.

#### 8.0 Limitation of Liability

Each party's liability to the other party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either party be liable to the other party for any indirect, incidental, special, consequential, or punitive damages of any kind whatsoever, except as allowed under paragraph 6.0.

#### 9.0 Termination

The agreement to operate in parallel may be terminated under the following conditions:

- 9.1 By the Customer
  - By providing written notice to the Company.
- 9.2 By the Company
  - If the Small Generating Facility fails to operate for any consecutive 12 month period or the Customer falls to remedy a violation of these Terms and Conditions.
- 9.3 Permanent Disconnection
  - In the event this Agreement is terminated, the Company shall have the right to disconnect its facilities or direct the Customer to disconnect its Small Generating Facility.
- 9.4 Survival Rights
  - This Agreement shall continue in effect after termination to the extent necessary to allow or require either Party to fulfill rights or obligations that arose under the Agreement.
- 10.0 Assignment transfer of Ownership of the Facility This Agreement shall survive the transfer of ownership of the Small Generating Facility to a new owner when the new owner agrees in writing to comply with the terms of this Agreement and so notifies the Company.

# Attachment 6 Feasibility Study Agreement

THIS AGREEMENT is n	nade and entered into this $\_$	day of _	· · · · · · · · · · · · · · · · · · ·	_ 20	_ by
and between	and		organized and e	existing u	nder
the laws of the State of		_, ("Interconnection	Customer,") and		
	,	existing unde	r the laws of the	State of	
("I	Distribution Provider"). Interd	connection Custome	er and Distributio	n Provide	∍r
each may be referred to	as a "Party," or collectively	as the "Parties."			

#### **RECITALS**

WHEREAS, Interconnection Customer is proposing to develop a Small Generating Facility or generating capacity addition to an existing Small Generating Facility consistent with the Interconnection Request completed by Interconnection Customer on ; and

WHEREAS, Interconnection Customer desires to interconnect the Small Generating Facility with the Distribution Provider's Distribution System; and

WHEREAS, Interconnection Customer has requested the Distribution Provider to perform a feasibility study to assess the feasibility of interconnecting the proposed Small Generating Facility with the Distribution Provider's Distribution System, and of any Affected Systems;

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated or the meanings specified in the standard Small Generator Interconnection Procedures.
- 2.0 The Interconnection Customer elects and the Distribution Provider shall cause to be performed an interconnection feasibility study consistent the standard Small Generator Interconnection Procedures in accordance with the Open Access Distribution Tariff.
- 3.0 The scope of the feasibility study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The feasibility study shall be based on the technical information provided by the Interconnection Customer in the Interconnection Request, as may be modified as the result of the scoping meeting. The Distribution Provider reserves the right to request additional technical information from the Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the feasibility study and as designated in accordance with the standard Small Generator Interconnection Procedures. If the Interconnection Customer modifies its Interconnection Request, the time to complete the feasibility study may be extended by agreement of the Parties.
- In performing the study, the Distribution Provider shall rely, to the extent reasonably practicable, on existing studies of recent vintage. The Interconnection Customer shall not be charged for such existing studies; however, the Interconnection Customer shall be responsible for charges associated with any new study or modifications to existing studies that are reasonably necessary to perform the feasibility study.
- 6.0 The feasibility study report shall provide the following analyses for the purpose of identifying any potential adverse system impacts that would result from the interconnection of the Small Generating Facility as proposed:
  - 6.1 Initial identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection:
  - 6.2 Initial identification of any thermal overload or voltage limit violations resulting from the interconnection;
  - 6.3 Initial review of grounding requirements and electric system protection; and

- 6.4 Description and non-bonding estimated cost of facilities required to interconnect the proposed Small Generating Facility and to address the identified short circuit and power flow issues.
- 7.0 The feasibility study shall model the impact of the Small Generating Facility regardless of purpose in order to avoid the further expense and interruption of operation for reexamination of feasibility and impacts if the Interconnection Customer later changes the purpose for which the Small Generating Facility is being installed.
- 8.0 The study shall include the feasibility of any interconnection at a proposed project site where there could be multiple potential Points of Interconnection, as requested by the Interconnection Customer and at the Interconnection Customer's cost.
- 9.0 A deposit of the lesser of 50 percent of good faith estimated feasibility study costs or earnest money of \$1,000 may be required from the Interconnection Customer.
- 10.0 Once the feasibility study is completed, a feasibility study report shall be prepared and transmitted to the Interconnection Customer. Barring unusual circumstances, the feasibility study must be completed and the feasibility study report transmitted within 30 Business Days of the Interconnection Customer's agreement to conduct a feasibility study.
- 11.0 Any study fees shall be based on the Distribution Provider's actual costs and will be invoiced to the Interconnection Customer after the study is completed and delivered and will include a summary of professional time.
- 12.0 The Interconnection Customer must pay any study costs that exceed the deposit without interest within 30 calendar days on receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, the Distribution Provider shall refund such excess within 30 calendar days of the invoice without interest.
- 13.0 Miscellaneous.
  - 13.1 Substantial portions of technical data and assumptions used to perform the facilities study, such as system conditions, existing and planned generation, and unit modeling, may change after the Distribution Provider provides the facilities study report to the Interconnection Customer. Study results will reflect available data at the time the Distribution Provider provides the facilities study to the Interconnection Customer. The Distribution Provider shall not be responsible for any additional costs, including, without limitation, costs of new or additional facilities, system upgrades, or schedule changes, that may be incurred by the Interconnection Customer as a result of changes in such data and assumptions.
  - 13.2 The Distribution Provider shall maintain records and accounts of all costs incurred in performing the facilities study, inclusive of any re-studies or amendments thereto, in sufficient detail to allow verification of all costs incurred, including associated overhead. The Interconnection Customer shall have the right, upon reasonable notice, within a reasonable time following receipt of the final cost report associated with this facilities study at the Distribution Provider's offices and at its own expense, to audit the Distribution Provider's records as necessary and as appropriate in order to verify costs incurred by the Distribution Provider. Any audit requested by the Interconnection Customer shall be completed, and written notice of any audit dispute provided to the Distribution Provider within one hundred eighty (180) calendar days following receipt by the Interconnection Customer of the Distribution Provider's notification of the final costs of the facilities study, inclusive of any re-study or amendment thereto.
  - 13.3 This Agreement shall become effective upon the date the fully executed Agreement and deposit specified in Section 6.0 of this Agreement are received by the Distribution Provider. If the Distribution Provider does not receive the fully executed Agreement

- and payment within 30 Business Days, or request an extension, pursuant to Section 4.1 of the SGIP, then the Interconnection Request will be deemed withdrawn.
- 13.4 Dispute Resolution. Any dispute, or assertion of a claim, arising out of or in connection with this Agreement, shall be resolved in accordance with Section 4.2 of the SGIP.
- 13.5 Confidentiality. Confidential Information shall be treated in accordance with Section 4.5 of the SGIP.
- 13.6 Binding Effect. This Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.
- 13.7 Conflicts. In the event of a conflict between the body of this Agreement and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed the final intent of the Parties.
- 13.8 Rules of Interpretation. This Agreement, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Agreement, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any applicable laws and regulations means such applicable laws and regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder, (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article or Section of this Agreement or such Appendix to this Agreement, or such Section to the SGIP or such Appendix to the SGIP, as the case may be; (6) 'hereunder", "hereof, 'herein', 'hereto' and words of similar import shall be deemed references to this Agreement as a whole and not to any particular Article, Section, or other provision hereof or thereof; (7) 'including' (and with correlative meaning 'include') means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of lime, 'from' means "from and including', Ice means "to but excluding' and 'through' means "through and including'.
- 13.9 Entire Agreement. This Agreement, including all Appendices and Schedules attached hereto, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this Agreement.
- 13.10 No Third Party Beneficiaries. 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, their successors in interest and, where permitted, their assigns.
- 13.11 Waiver. 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 a waiver of any obligation, right, or duty of, or imposed upon, such Party.
  - Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right or duty of this Agreement. Termination or default of this Agreement for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an

interconnection from the Distribution Provider. Any waiver of this Agreement shall, if requested, be provided in writing.

- 13.12 Headings. The descriptive headings of the various Articles and Sections of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement
- 13.13 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.
- 13.14 Reservation of Rights. The Distribution Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.
- 13.15 No Partnership. This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.
- 13.16 Assignment. This Agreement may be assigned by a Party only with the written consent of the other Party; provided that a Party may assign this Agreement without the consent of the other Party to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement; and provided further that the Interconnection Customer shall have the right to assign this Agreement, without the consent of the other Party, for collateral security purposes to aid in providing financing for the Small Generating Facility, provided that the Interconnection Customer will require any secured party, trustee or mortgagee to notify the other Party of any such assignment. Any financing arrangement entered into by the Interconnection Customer pursuant to this Section will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the other Party of the date and particulars of any such exercise of assignment right(s). Any attempted assignment that violates this Section is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

[Insert name of Distribution Provider]	[insert name of Interconnection Customer]
Signed:	Signed:
Name (Printed)	Name (Printed)
Title	Title

# Attachment A to Feasibility Study Agreement Assumptions Used in Conducting the Feasibility Study

The feasibility	study will I	be based	upon the	informatio	n set fort	h in the	Interconnection	Request	and
agreed upon i	n the scopi	ing meetin	ng held or	1			·		

- 1) Designation of Point of Interconnection and configuration to be studied.
- 2) Designation of alternative Points of Interconnection and configuration.
- 1) and 2) are to be completed by the Interconnection Customer. Other assumptions (listed below) are to be provided by the Interconnection Customer and the Distribution Provider.

#### **ATTACHMENT 7**

#### SYSTEM IMPACT STUDY AGREEMENT

THIS	AGREEMENT is made and entered	into this	_ day of	, 20	_, by and
betwe under	the laws of the State of	, a	("Interc	organized a connection Custo	ing existing mer") and
Califo referre	AGREEMENT is made and entered een, the laws of the State of, a, rnia ("Distribution Provider"). Interceed to as a "Party," or collectively as the state of	onnection Cus the "Parties."	existing ustomer and Distri	under the laws of bution Provider e	the State of each may be
		RECITA	LS		
gener	REAS, the Interconnection Customer ating capacity addition to an existing est completed by the Interconnection	Small Gener	ating Facility cor		
	REAS, the Interconnection Customer oution Provider's Distribution System		terconnect the S	mall Generating	Facility with the
study feasib	REAS, the Distribution Provider has to the Interconnection Customer (Thillity study(s) to assess the impact of pution Provider's Distribution System	nis recital to be interconnecti	e omitted if the P ng the Small Gei	arties have agreen nerating Facility v	ed to forego the
	, THEREFORE, in consideration of a sagreed as follows:	and subject to	the mutual cove	nants contained	herein, the
1.0	When used in this Agreement, wit meanings indicated or the meanin Procedures.				
2.0	The Interconnection Customer ele system impact study(s) consistent in accordance with the Open Acce	t with the stan	dard Small Gene		
3.0	The scope of a system impact stu to this Agreement.	dy shall be su	ibject to the assu	ımptions set forth	ı in Attachment A
4.0	A system impact study will be bas information provided by Interconne Distribution Provider reserves the Interconnection Customer as may Practice during the course of the sits designated Point of Interconner provided therein is modified, the times of the sits designated provided therein is modified.	ection Custom right to reque reasonably b system impact ction, Intercor	ner in the Interco est additional tech ecome necessar t study. If the Int nnection Reques	onnection Request nnical information ry consistent with terconnection Cu t, or the technica	st. The n from the n Good Utility stomer modifies I information
5.0	A system impact study shall consi flow analysis, voltage drop and flic				

studies, and grounding reviews, as necessary. A system impact study shall state the assumptions upon which it is based, state the results of the analyses, and provide the requirement or potential impediments to providing the requested interconnection service, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in those analyses and implement the interconnection. A

- system impact study shall provide a list of facilities that are required as a result of the Interconnection Request and non-binding good faith estimates of cost responsibility and time to construct.
- A distribution system impact study shall incorporate a distribution load flow study, an analysis of equipment interrupting ratings, protection coordination study, voltage drop and flicker studies, protection and set point coordination studies, grounding reviews, and the impact on electric system operation, as necessary.
- 7.0 Affected Systems may participate in the preparation of a system Impact study, with a division of costs among such entities as they may agree. All Affected Systems shall be afforded an opportunity to review and comment upon a system impact study that covers potential adverse system impacts on their electric systems, and the Distribution Provider has 20 additional Business Days to complete a system impact study requiring review by Affected Systems.
- 8.0 If the Distribution Provider uses a queuing procedure for sorting or prioritizing projects and their associated cost responsibilities for any required Network Upgrades, the system impact study shall consider all generating facilities (and with respect to paragraph 8.3 below, any identified Upgrades associated with such higher queued interconnection) that, on the date the system impact study is commenced
  - 8.1 Are directly interconnected with the Distribution Provider's electric system; or
  - 8.2 Are interconnected with Affected Systems and may have an impact on the proposed interconnection; and
  - 8.3 Have a pending higher queued Interconnection Request to interconnect with the Distribution Provider's electric system.
- 9.0 A distribution system impact study, if required, shall be completed and the results transmitted to the Interconnection Customer within 30 Business Days after this Agreement is signed by the Parties. A distribution system impact study, if required, shall be completed and the results transmitted to the Interconnection Customer within 45 Business Days after this Agreement is signed by the Parties, or in accordance with the Distribution Provider's queuing procedures.
- 10.0 A deposit of the equivalent of the good faith estimated cost of a distribution system impact study and the one half the good faith estimated cost of a distribution system impact study may be required from the Interconnection Customer.
- 11.0 Any study fees shall be based on the Distribution Providers actual costs and will be invoiced to the Interconnection Customer after the study is completed and delivered and will include a summary of professional time.
- 12.0 The Interconnection Customer must pay any study costs that exceed the deposit without interest within 30 calendar days on receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, the Distribution Provider shall refund such excess within 30 calendar days of the invoice without interest.
- 13.0 Miscellaneous.
  - 13.1 Substantial portions of technical data and assumptions used to perform the facilities study, such as system conditions, existing and planned generation, and unit modeling, may change after the Distribution Provider provides the facilities study report to the Interconnection Customer. Study results will reflect available

- data at the time the Distribution Provider provides the facilities study to the Interconnection Customer. The Distribution Provider shall not be responsible for any additional costs, including, without limitation, costs of new or additional facilities, system upgrades, or schedule changes, that may be incurred by the Interconnection Customer as a result of changes in such data and assumptions.
- 13.2 The Distribution Provider shall maintain records and accounts of all costs incurred in performing the facilities study, inclusive of any re-studies or amendments thereto, in sufficient detail to allow verification of all costs incurred, including associated overhead. The Interconnection Customer shall have the right, upon reasonable notice, within a reasonable time following receipt of the final cost report associated with this facilities study at the Distribution Provider's offices and at its own expense, to audit the Distribution Providers records as necessary and as appropriate in order to verify costs incurred by the Distribution Provider. Any audit requested by the Interconnection Customer shall be completed, and written notice of any audit dispute provided to the Distribution Provider within one hundred eighty (180) calendar days following receipt by the Interconnection Customer of the Distribution Provider's notification of the final costs of the facilities study, inclusive of any re-study or amendment thereto.
- 13.3 This Agreement shall become effective upon the date the fully executed Agreement and deposit specified in Section 6.0 of this Agreement are received by the Distribution Provider. If the Distribution Provider does not receive the fully executed Agreement and payment within 30 Business Days, or request an extension, pursuant to Section 4.1 of the SGIP, then the Interconnection Request will be deemed withdrawn.
- 13.4 Dispute Resolution. Any dispute, or assertion of a claim, arising out of or in connection with this Agreement, shall be resolved in accordance with Section 4.2 of the SGIP.
- 13.5 Confidentiality. Confidential Information shall be treated in accordance with Section 4.5 of the SGIP.
- 13.6 Binding Effect. This Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.
- 13.7 Conflicts. In the event of a conflict between the body of this Agreement and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed the final intent of the Parties.
- Rules of Interpretation. This Agreement, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Agreement, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any applicable laws and regulations means such applicable laws and regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated

thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article or Section of this Agreement or such Appendix to this Agreement, or such Section to the SGIP or such Appendix to the SGIP, as the case may be; (6) "hereunder", `hereof', 'herein', 'hereto" and words of similar import shall be deemed references to this Agreement as a whole and not to any particular Article, Section, or other provision hereof or thereof; (7) Including' (and with correlative meaning Include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, 'from' means "from and including', 'to' means "to but excluding' and `through" means "through and including".

- 13.9 Entire Agreement. This Agreement, including all Appendices and Schedules attached hereto, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this Agreement.
- 13.10 No Third Party Beneficiaries. 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, their successors in interest and, where permitted, their assigns.
- 13.11 Waiver. 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 a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right or duty of this Agreement. Termination or default of this Agreement for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Distribution Provider. Any waiver of this Agreement shall, if requested, be provided in writing.

- 13.12 Headings. The descriptive headings of the various Articles and Sections of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement
- 13.13 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
- 13.14 Reservation of Rights. The Distribution Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in

any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.

- 13.15 No Partnership. This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.
- Assignment. This Agreement may be assigned by a Party only with the written consent of the other Party; provided that a Party may assign this Agreement without the consent of the other Party to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement; and provided further that the Interconnection Customer shall have the right to assign this Agreement, without the consent of the other Party, for collateral security purposes to aid in providing financing for the Small Generating Facility, provided that the Interconnection Customer will require any secured party, trustee or mortgagee to notify the other Party of any such assignment. Any financing arrangement entered into by the Interconnection Customer pursuant to this Section will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the other Party of the date and particulars of any such exercise of assignment right(s). Any attempted assignment that violates this Section is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

IN WITNESS THEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

[Insert name of Distribution Provider	Insert name of Interconnection Customer
Signed	Signed
Name (printed)	Name (printed)
Title	Title

### Attachment A to System Impact Study Agreement

### Assumptions Used in Conducting the System impact Study

The system impact study shall be based upon the results of the feasibility study, subject to any modifications in accordance with the standard Small Generator Interconnection Procedures, and the

- following assumptions: 1) Designation of Point of Interconnection and configuration to be studied.
- 2) Designation of alternative Points of Interconnection and configuration.
- 3) 1) and 2) are to be completed by the Interconnection Customer. Other assumptions (listed below) are to be provided by the Interconnection Customer and the Distribution Provider.

## Attachment 8 Facilities Study Agreement

THIS AGREEMENT is made and entered into this  20 by and between	day of	-
	der the laws of the State of	
, ("Interconnection Custome	er,") and existir	ηg
under the laws of the State of ("Distribution Provider").	Interconnection Customer and Distribution	_
Provider each may be referred to as a "Party," or collect	ctively as the "Parties."	

#### **RECITALS**

WHEREAS, the Interconnection Customer is proposing to develop a Small Generating Facility or generating capacity addition to an existing Small Generating Facility consistent with the Interconnection Request completed by the Interconnection Customer on \_\_ and

WHEREAS, the Interconnection Customer desires to interconnect the Small Generating Facility with the Distribution Provider's Distribution System;

WHEREAS, the Distribution Provider has completed a system impact study and provided the results of said study to the Interconnection Customer, and

WHEREAS, the Interconnection Customer has requested the Distribution Provider to perform a facilities study to specify and estimate the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the system impact study in accordance with Good Utility Practice to physically and electrically connect the Small Generating Facility with the Distribution Provider's Distribution System.

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated or the meanings specified in the standard Small Generator Interconnection Procedures.
- 2.0 The Interconnection Customer elects and the Distribution Provider shall cause a facilities study consistent with the standard Small Generator Interconnection Procedures to be performed in accordance with the Open Access Distribution Tariff.
- 3.0 The scope of the facilities study shall be subject to data provided in Attachment A to this Agreement
- 4.0 The facilities study shall specify and estimate the cost of the equipment, engineering, procurement and construction work (inducing overheads) needed to implement the conclusions of the system impact study(s). The facilities study shall also identify (1) the electrical switching configuration of the equipment, including, without limitation, transformer, switchgear, meters, and other station equipment, (2) the nature and estimated cost of the Distribution Provider's Interconnection Facilities and Upgrades necessary to accomplish the interconnection, and (3) an estimate of the time required to complete the construction and installation of such facilities.
- 5.0 The Distribution Provider may propose to group facilities required for more than one Interconnection Customer in order to minimize facilities costs through economies of scale, but any Interconnection Customer may require the installation of facilities required for its own Small Generating Facility if it is willing to pay the costs of those facilities.
- A deposit of the good faith estimated facilities study costs may be required from the Interconnection Customer.

- 7.0 In cases where Upgrades are required, the facilities study must be completed within 45 Business Days of the receipt of this Agreement. In cases where no Upgrades are necessary, and the required facilities are limited to Interconnection Facilities, the facilities study must be completed within 30 Business Days.
- 8.0 Once the facilities study is completed, a facilities study report shall be prepared and transmitted to the nterconnection Customer. Barring unusual circumstances, the facilities study must be completed and the facilities study report transmitted within 30 Business Days of the Interconnection Customer's agreement to conduct a facilities study.
- 9.0 Any study fees shall be based on the Distribution Provider's actual costs and will be invoiced to the Interconnection Customer after the study is completed and delivered and will include a summary of professional time.
- 10.0 The Interconnection Customer must pay any study costs that exceed the deposit without interest within 30 calendar days on receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, the Distribution Provider shall refund such excess within 30 calendar days of the invoice without interest.

#### 11.0 Miscellaneous.

- 11.1 Substantial portions of technical data and assumptions used to perform the facilities study, such as system conditions, existing and planned generation, and unit modeling, may change after the Distribution Provider provides the facilities study report to the Interconnection Customer. Study results will reflect available data at the time the Distribution Provider provides the facilities study to the Interconnection Customer. The Distribution Provider shall not be responsible for any additional costs, including, without limitation, costs of new or additional facilities, system upgrades, or schedule changes, that may be incurred by the Interconnection Customer as a result of changes in such data and assumptions.
- 11.2 The Distribution Provider shall maintain records arid accounts of all costs incurred in performing the facilities study, inclusive of any re-studies or amendments thereto, in sufficient detail to allow verification of all costs incurred, including associated overhead. The Interconnection Customer shall have the right, upon reasonable notice, within a reasonable time following receipt of the final cost report associated with this facilities study at the Distribution Provider's offices and at its own expense, to audit the Distribution Provider's records as necessary and as appropriate in order to verify costs incurred by the Distribution Provider. Any audit requested by the Interconnection Customer shall be completed, and written notice of any audit dispute provided to the Distribution Provider within one hundred eighty (180) calendar days following receipt by the Interconnection Customer of the Distribution Provider's notification of the final costs of the facilities study, inclusive of any re-study or amendment thereto.
- 11.3 This Agreement shall become effective upon the date the fully executed Agreement and deposit specified in Section 6.0 of this Agreement are received by the Distribution Provider. If the Distribution Provider does not receive the fully executed Agreement and payment within 30 Business Days, or request an extension, pursuant to Section 3.5 of the SGIP, then the Interconnection Request will be deemed withdrawn.
- 11.4 Dispute Resolution. Any dispute, or assertion of a claim, arising out of or in connection with this Agreement, shall be resolved in accordance with Section 4.2 of the SGIP.
- 11.5 Confidentiality. Confidential Information shall be treated in accordance with Section 4.5 of the SGIP.
- 11.6 Binding Effect. This Agreement and the rights and obligations hereof, shall be binding

upon and shall inure to the benefit of the successors and assigns of the Parties hereto.

- 11.7 Conflicts. In the event of a conflict between the body of this Agreement and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed the final intent of the Parties.
- 11.8 Rules of Interpretation. This Agreement, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Agreement, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and In effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof, (4) reference to any applicable laws and regulations means such applicable laws and regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article or Section of this Agreement or such Appendix to this Agreement, or such Section to the SGIP or such Appendix to the SGIP, as the case may be; (6) "hereunder', "hereof", 'herein', "hereto' and words of similar import shall be deemed references to this Agreement as a whole and not to any particular Article, Section, or other provision hereof or thereof; (7) 'including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from' means Iran and including', "to' means 'to but excluding' and "through' means "through and including".
- 11.9 Entire Agreement. This Agreement, including all Appendices and Schedules attached hereto, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this Agreement.
- 11.10 No Third Party Beneficiaries. 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, their successors in interest and, where permitted, their assigns.

Waiver. 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 a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right or duty of this Agreement. Termination or default of this Agreement for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Distribution Provider. Any waiver of this Agreement shall, if requested, be provided in writing.

11.12 Headings. The descriptive headings of the various Articles and Sections of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement.

11.13 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.

- 11.14 Reservation of Rights. The Distribution Provider shall have the right to make a unilateral Ming with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.
- 11.15 No Partnership. This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.
- Assignment. This Agreement may be assigned by a Party only with the written consent of 11.16 the other Party, provided that a Party may assign this Agreement without the consent of the other Party to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement; and provided further that the Interconnection Customer shall have the right to assign this Agreement, without the consent of the other Party, for collateral security purposes to aid in providing financing for the Small Generating Facility, provided that the Interconnection Customer will require any secured party, trustee or mortgagee to notify the other Party of any such assignment Any financing arrangement entered into by the Interconnection Customer pursuant to this Section will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement the secured creditor, the trustee or mortgagee will notify the other Party of the date and particulars of any such exercise of assignment right(s). Any attempted assignment that violates this Section is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

[Insert name of Distribution Provider]	[Insert name of Interconnection Customer]		
Signed	Signed		
Name (Printed):	Name (Printed)		
Title:	Title:		

# Attachment A to Facilities Study Agreement

# Data to Be Provided by the Interconnection Customer with the Facilities Study Agreement

Provide location plan and simplified one-line diagram of the plant and station facilities. For staged projects, please indicate future generation, distribution circuits, etc.

On the one-line diagram, indicate the generation capacity attached at each metering location. (Maximum load on CT/PT)

On the one-line diagram, indicate the location of auxiliary power. (Minimum load on CT/PT) Amps

One set of metering is required for each generation connection to the new ring bus or existing Distribution Provider station. Number of generation connections:

Will an alternate source of auxiliary power be available during CT/PT maintenance? Yes No

Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation?

Yes

No

(Please indicate on the one-line diagram).

What type of control system or PLC will be located at the Small Generating Facility?

What protocol does the control system of PLC use?

Please provide a 7.5 minute quadrangle map of the site. Indicate the plant, station, distribution line, and property lines.

Physical dimensions of the proposed interconnection station:

Bus length from generation to interconnection station:

Line Length from interconnection station to Distribution Providers Distribution System.

Tower number observed in the field. (Painted on tower leg)\*:

Number of third party easements required for distribution lines:

To be completed in coordination with Distribution Provider.

Is the Small Generating Facility located in Distribution Provider's service area:

Yes\_\_\_\_ No\_\_\_\_ If No, please provide name of local provider:\_\_\_\_\_\_

Please provide the following proposed schedule dates:

Begin Construction Date:\_\_\_\_\_

### San Diego Gas & Electric Company Open Access Distribution Tariff, Volume No. 6

Generator step-up transformers Date: receive back feed power	;	
Generation Testing	Date:	
Commercial Operation	Date:	