

San Diego Gas & Electric Company
Open Access Distribution Tariff, Volume 6
Tariff Sheets – Redlined Version

15. PROCEDURES FOR DISTRIBUTION SERVICE AND INTERCONNECTION SERVICE

15.1 Interconnection: An Eligible Customer requesting interconnection to the Distribution System shall follow the procedures set forth in Section 15. A Generator shall follow the SGIP or LGIP based on the maximum output megawatts as set forth in Attachment D and Attachment F, as applicable, to request Interconnection Service and Section 15.2 through 15.8 to request Distribution Service. If the Generator requests both Interconnection Service and Distribution Service at the same time, SDG&E shall process such requests concurrently in accordance with the SGIP. The Generator requesting Interconnection Service shall execute the SGIA or LGIA based on the maximum output megawatts pursuant to the terms of the SGIP or the LGIA.

15.2 Application: Distribution Service may be requested only by written Application at least sixty (60) days in advance of the calendar month in which service is to commence. SDG&E will consider requests for such services on shorter notice when feasible. An Application may be submitted by mail or in person to the name and address posted on SDG&E's Internet website. Such name and address is subject to change with a 10 day notice, but shall initially be:

Regulatory Policy Manager,

FERC Regulatory Affairs, Sempra Utilities

8330 Century Park Court, CP 32D

San Diego, CA 92123-1530

SDG&E shall treat all information provided by an Eligible Customer consistent with the standards of conduct contained in Part 358 of the Commission's regulations. SDG&E shall time-stamp each Application for establishing the priority of the Application.

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15.3 Completed Application: A Completed Application shall provide all of the information included in 18 CFR § 2.20 including but not limited to the following:

- i. The identity, address, telephone number and facsimile number of the entity requesting service and the name and contact information of the entity's Designated Agent;
- ii. A statement that the entity requesting service is, or will be upon commencement of service, an Eligible Customer under the Tariff, and a brief description of why or how the entity does or will qualify as an Eligible Customer;
- iii. The desired points of interconnection to the Distribution System and the points on the ~~CAISO~~ Controlled Grid for: 1) LSE resource take out; or 2) Generator resource delivery, including requested deliverability status to the aggregate of Load on the CAISO Controlled Grid.
- iv. For LSEs, a description of the supply characteristics of the capacity and energy to be delivered and a description of the load to be served. For Generators, a description of the generating facility, including generating capacity and intended operation, and a description of load served.
- v. A forecast of desired Distribution Service capacity, including a five (5) year forecast of monthly and peak demand requirements beginning with the first year after the service is scheduled to commence. For LSEs, consistent with SDG&E Distribution Planning criteria, forecasts must incorporate a minimum 7% reserve. The forecast required in this section shall be used to set LSE contract demand in Service Agreements;

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Attachment D

**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 time-stamped 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 date- and 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.

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.

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): _____

Prime Mover: Fuel Cell Recip Engine Gas Turb Steam Turb
Microturbine PV Other

Type of Generator: Synchronous Induction Inverter

Generator Nameplate Rating: _____ kW (Typical) Generator Nameplate kVAR: _____

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

1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

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?

Short circuit produced by generator _____ amps

Deleted: Note: A completed Power Systems Load Flow data sheet must be supplied with the Interconnection Request.¶

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: _____

Deleted: Frequency

Neutral Grounding System Used undergrounded solidly grounded neutral grounding Resistor (If Applicable): _____

Deleted: *

Deleted: i

Deleted: System

Synchronous Generators:

Direct Axis Synchronous Reactance, X_d : _____ P.U.

Direct Axis Transient Reactance, X'_d : _____

Direct Axis Subtransient Reactance, X''_d : _____ P.U.

Negative Sequence Reactance, X_2 : _____ P.U.

Zero Sequence Reactance, X_0 : _____ P.U.

KVA Base: _____

Field Volts: _____

Field Amperes: _____

Induction Generators:

Motoring Power (kW): _____

I_2^2t or K (Heating Time Constant): _____

Rotor Resistance, R_r : _____

Stator Resistance, R_s : _____

Stator Reactance, X_s : _____

Rotor Reactance, X_r : _____

Magnetizing Reactance, X_m : _____

Short Circuit Reactance, X_d'' : _____

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 kVA Base

Note: Please contact the Distribution Provider prior to submitting the Interconnection Request to determine if the specified information above is required.

Excitation and Governor System Data for Synchronous Generators Only

Provide appropriate IEEE model block diagram of excitation system, governor system and power system stabilizer (PSS) in accordance with the regional reliability council criteria. A PSS may be determined to be required by applicable studies. A copy of the manufacturer's block diagram may not be substituted.

Interconnection Facilities Information

Will a transformer be used between the generator and the point of common coupling? Yes _____ No

Will the transformer be provided by the Interconnection Customer? Yes _____ No

Transformer Data (If Applicable. For Interconnection Customer-Owned Transformer).

Is the transformer: _____ single phase _____ three phase? Size: _____ kVA

Transformer Impedance: _____ % on _____ kVA Base

If Three Phase:

Transformer Primary: Volts Delta Wye Wye Grounded

Transformer Secondary: Volts Delta Wye Wye Grounded

Transformer Tertiary: Volts Delta Wye Wye Grounded

Transformer Fuse Data (If Applicable. For Interconnection Customer-Owned Fuse):

(Attach copy of fuse manufacturer's Minimum melt and Total Clearing Time-Current Curves)

Manufacturer: _____ Type: _____ Size: _____ Speed: _____

Interconnecting Circuit Breaker (If Applicable):

Manufacturer: _____ Type: _____
Load Rating (Amps): _____ Interrupting Rating (Amps): _____ Trip Speed (Cycles): _____

Interconnection Protective Relays (If Applicable):

If Microprocessor-Controlled:

List of Functions and Adjustable Setpoints for the protective equipment or software:

Setpoint Function	Minimum	Maximum
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____
6. _____	_____	_____

If Discrete Components:

(Enclose Copy of any Proposed Time-Overcurrent Coordination Curves)

Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____

Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____

Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____

Current Transformer Data (if Applicable):

(Enclose Copy of Manufacturers Excitation and Ratio Correction Curves)

Manufacturer: _____
Type: _____ Accuracy Class: Proposed Ratio Connection: _____

Manufacturer: _____
Type: _____ Accuracy Class: Proposed Ratio Connection: _____

Potential Transformer Data (If Applicable):

Manufacturer: _____
Type: _____ Accuracy Class: Proposed Ratio Connection: _____

Manufacturer: _____

Complete only if requested by Distribution Provider

APPENDIX A TO ATTACHMENT 2
ADDITIONAL GENERATING FACILITY DATA

1. Synchronous Generator – General Information:

(Repeat the following for each generator model)

- A. Rated Generator speed (rpm):
- B. Rated MVA:
- C. Rated Generator Power Factor:
- D. Generator Efficiency at Rated Load (%):
- E. Moment of Inertia (including prime mover):
- F. Inertia 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 voltage to the field current required for rated short-circuit current):
- H. Attach generator reactive capability curves.
- I. Rated Hydrogen Cooling Pressure in psig (Steam Units only):
- J. Attach a plot of generator terminal voltage versus field current that shows the air gap line, the open-circuit saturation curve, and the saturation curve at full load and rated power factor.

2. Excitation System Information

(Repeat the following for each generator model)

- A. Indicate the Manufacturer _____ and Type _____ of excitation system used for the generator. For exciter type, please choose from 1 to 9 below 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 commutator exciter with continuously acting regulator. The regulator power source is bus fed from the generator terminal voltage.
 - (3) Rotating DC commutator exciter with non-continuously acting regulator (i.e., 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 current (not bus-fed).
 - (5) Rotating AC Alternator Exciter with controlled (thyristor) rectifiers. The regulator 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. Attach a copy of the block diagram of the excitation system from its instruction manual. The diagram should show the input, output, and all feedback loops of the excitation system.

- C. Excitation system response ratio (ASA):
D. Full load rated exciter output voltage:
E. Maximum exciter output voltage (ceiling voltage):
F. Other comments regarding the excitation system?

3. Power System Stabilizer Information

(Repeat the following for each generator model. All new generators are required to install PSS unless an exemption has been obtained from WECC. Such an exemption can be obtained for units that do not have suitable excitation systems.)

- A. Manufacturer:
B. Is the PSS digital or analog?
C. Note the input signal source for the PSS?
Bus frequency Shaft speed Bus Voltage
Other (specify source)
D. Attach a copy of a block diagram of the PSS from the PSS Instruction Manual and the correspondence between dial settings and the time constants or PSS gain.
E: Other comments regarding the PSS?

4. Turbine-Governor Information

(Repeat the following for each generator model)

Complete Part A for steam, gas or combined-cycle turbines, Part B for hydro turbines, and Part C for both.

A. Steam, gas or combined-cycle turbines:

- (1) List type of unit (Steam, Gas, or Combined-cycle):
(2) 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: %
High pressure turbine or steam turbine: %

B. Hydro turbines:

- (1) Turbine efficiency at rated load: %
(2) Length of penstock: ft
(3) Average cross-sectional area of the penstock: ft²
(4) Typical maximum head (vertical distance from the bottom of the penstock, at the gate, to the water level): ft
(5) Is the water supply run-of-the-river or reservoir:
(6) Water flow rate at the typical maximum head: ft³/sec
(7) Average energy rate: kW-hrs/acre-ft
(8) Estimated yearly energy production: kW-hrs

C. Complete this section for each machine, independent of the turbine type.

- (1) Turbine manufacturer:

- (2) Maximum turbine power output: _____ kW
(3) Minimum turbine power output (while on line): _____ kW
(4) Governor information:
(a) Droop setting (speed regulation): _____
(b) 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 Transformer Data

For each step-up transformer, fill out the data form provided in Table 1.

6. Interconnection Facilities Line Data

There is no need to provide data for new lines that are to be planned by the Participating TO. However, for transmission lines that are to be planned by the generation developer, please provide the following information:

Nominal Voltage: _____ kV
Line Length: _____ miles
Line termination Points: _____
Conductor Type: _____ Size: _____
If bundled. Number per phase: _____, Bundle spacing: _____ in.
Phase Configuration. Vertical: _____, Horizontal: _____
Phase Spacing: A-B: _____ ft., B-C: _____ ft., C-A: _____ ft.
Distance of lowest conductor to Ground at full load and 40°C: _____ ft
Ground Wire Type: _____ Size: _____ Distance to Ground: _____ ft
Attach Tower Configuration Diagram _____
Summer line ratings in amperes (normal and emergency) _____
Positive Sequence Resistance (R): _____ p.u.** (for entire line length)
Positive Sequence Reactance: (X): _____ p.u.** (for entire line length)
Zero Sequence Resistance (R0): _____ p.u.** (for entire line length)
Zero Sequence Reactance: (X0): _____ p.u.** (for entire line length)
Line Charging (B/2): _____ p.u.**
** On 100-MVA and nominal line voltage (kV) Base

7. For Wind/photovoltaic plants, provide collector System Equivalence Impedance Data **Provide values for each equivalence collector circuit at all voltage levels.**

Nominal Voltage: _____
Summer line ratings in amperes (normal and emergency) _____
Positive Sequence Resistance (R1): _____ p.u. ** (for entire line length of each collector circuit)
Positive Sequence Reactance: (X1): _____ p.u.** (for entire line length of each collector circuit)
Zero Sequence Resistance (R0): _____ p.u. ** (for entire line length of each collector circuit)
Zero Sequence Reactance: (X0): _____ p.u.** (for entire line length of each collector circuit)
Line Charging (B/2): _____ p.u.** (for entire line length of each collector circuit)
** On 100-MVA and nominal 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 _____

<u>RATING</u>	<u>H Winding</u>	<u>X Winding</u>	<u>Y Winding</u>
<u>Rated MVA</u>	_____	_____	_____
<u>Connection (Delta, Wye, Gnd.)</u>	_____	_____	_____
<u>Cooling Type (OA,OA/FA, etc) :</u>	_____	_____	_____
<u>Temperature Rise Rating</u>	_____	_____	_____
<u>Rated Voltage</u>	_____	_____	_____
<u>BIL</u>	_____	_____	_____
<u>Available Taps (% of rating)</u>	_____	_____	_____
<u>Load Tap Changer? (Y or N)</u>	_____	_____	_____
<u>Tap Settings</u>	_____	_____	_____
<u>IMPEDANCE</u>	<u>H-X</u>	<u>H-Y</u>	<u>X-Y</u>
<u>Percent</u>	_____	_____	_____
<u>MVA Base</u>	_____	_____	_____
<u>Tested Taps</u>	_____	_____	_____
<u>WINDING RESISTANCE</u>	<u>H</u>	<u>X</u>	<u>Y</u>
<u>Ohms</u>	_____	_____	_____

CURRENT TRANSFORMER RATIOS

H _____ X _____ Y _____ N _____

Percent exciting current at 100 % Voltage; _____ 110% Voltage _____

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

ATTACHMENT F

STANDARD LARGE GENERATOR INTERCONNECTION PROCEDURES (LGIP)

(Applicable to Generating Facilities that exceed 20 MW)

STANDARD LARGE GENERATOR INTERCONNECTION PROCEDURES

Section 1. Definitions.

Adverse System Impact shall mean the negative effects due to technical or operational limits on conductors or equipment being exceeded that may compromise the safety and reliability of the electric system.

Affected System shall mean an electric system other than the Distribution Provider's Distribution System that may be affected by the proposed interconnection.

Affected System Operator shall mean the entity that operates an Affected System.

Affiliate shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

Ancillary Services shall mean those services that are necessary to support the transmission of capacity and energy from resources to loads while maintaining reliable operation of the Distribution Provider's Distribution System in accordance with Good Utility Practice.

Applicable Laws and Regulations shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

Applicable Reliability Council shall mean the reliability council applicable to the Distribution System to which the Generating Facility is directly interconnected.

Applicable Reliability Standards shall mean the requirements and guidelines of NERC, the Applicable Reliability Council, and the Control Area of the Distribution System to which the Generating Facility is directly interconnected.

Base Case shall mean the base case power flow, short circuit, and stability data bases used for the Interconnection Studies by the Distribution Provider or Interconnection Customer

Breach shall mean the failure of a Party to perform or observe any material term or condition of the Standard Large Generator Interconnection Agreement.

Breaching Party shall mean a Party that is in Breach of the Standard Large Generator Interconnection Agreement.

Business Day shall mean 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 Controlled Grid shall mean the transmission lines and associated facilities of the Participating TOs that have been placed under the CAISO's operational control.

CAISO Grid shall mean the system of transmission lines and associated facilities of the Participating Transmission Owners that have been placed under the CAISO's operational control.

CAISO Generator Interconnection Procedures (GIP) shall mean the procedures included in Appendix Y to the CAISO Tariff to interconnect a Generating Facility as such procedures may be modified from time to time, and accepted by the Commission.

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

Calendar Day shall mean any day including Saturday, Sunday or a Federal Holiday.

Clustering shall mean the process whereby a group of Interconnection Requests is studied together, instead of serially, for the purpose of conducting the Interconnection System Impact Study.

Commercial Operation shall mean the status of a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.

Commercial Operation Date of an Electric Generating Unit shall mean the date on which an Electric Generating Unit at a Generating Facility commences Commercial Operation as agreed to by the Parties pursuant to Appendix E to the Standard Large Generator Interconnection Agreement.

Confidential Information shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise.

Control Area shall mean an electrical system or systems bounded by interconnection metering and telemetry, capable of controlling generation to maintain its interchange schedule with other Control Areas and contributing to frequency regulation of the interconnection. A Control Area must be certified by an Applicable Reliability Council.

Default shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of the Standard Large Generator Interconnection Agreement.

Delivery Network Upgrades shall mean the transmission facilities at or beyond the point where the Distribution Provider's Distribution System interconnects to the CAISO Grid, other than Reliability Network Upgrades, identified in the Interconnection Studies to relieve constraints on the CAISO Grid.

Dispute Resolution shall mean the procedure for resolution of a dispute between the Parties in which they will first attempt to resolve the dispute on an informal basis.

Distribution Owner shall mean an 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 Standard Large Generator Interconnection Agreement to the extent necessary.

Distribution Provider shall mean the public utility (or its designated agent) that owns, controls, or operates transmission or distribution facilities used for the transmission of electricity in interstate commerce and provides transmission 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.

Distribution Provider's Interconnection Facilities shall mean all facilities and equipment owned, controlled, or operated by the Distribution Provider from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to the Standard Large Generator Interconnection Agreement, including any modifications, additions or upgrades to such facilities and equipment. Distribution Provider's Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

Distribution Service shall mean the wholesale distribution service provided under the Tariff.

Distribution System shall mean those non-CAISO transmission and distribution facilities owned, controlled and operated by the Distribution Provider that are used to provide Distribution Service under the Tariff, which facilities and equipment are 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 shall mean the additions, modifications, and upgrades to the Distribution Provider's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Generating Facility and render the transmission service necessary to effect Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

Effective Date shall mean the date on which the Standard Large Generator Interconnection Agreement becomes effective upon execution by the Parties subject to acceptance by FERC, or if filed unexecuted, upon the date specified by FERC.

Electric Generating Unit shall mean an individual electric generator and its associated plant and apparatus whose electrical output is capable of being separately identified and metered.

Emergency Condition shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of a Distribution Provider, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to Distribution Provider's Distribution System, Distribution Provider's Interconnection Facilities or the electric systems of others to which the Distribution Provider's Distribution System is directly connected; or (3) that, in the case of Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Generating Facility or Interconnection Customer's Interconnection Facilities. System restoration and black start shall be considered Emergency Conditions provided that Interconnection Customer is not obligated by the Standard Large Generator Interconnection Agreement to possess black start capability.

Engineering & Procurement (E&P) Agreement shall mean an agreement that authorizes the Distribution Provider to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection in order to advance the implementation of the Interconnection Request.

Environmental Law shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

Federal Power Act shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a *et seq.*

FERC shall mean the Federal Energy Regulatory Commission (Commission) or its successor.

Generating Facility shall mean Interconnection Customer's Electric Generating Unit(s) used for the production of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

Generating Facility Capacity shall mean the net capacity of the Generating Facility and the aggregate net capacity of the Generating Facility where it includes multiple Electric Generating Units.

Good Utility Practice shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

Governmental Authority shall mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include Interconnection Customer, Distribution Provider, or any Affiliate thereof.

Hazardous Substances shall mean any chemicals, materials or substances defined as or included in the definition of "hazardous substances," "hazardous wastes," "hazardous materials," "hazardous constituents," "restricted hazardous materials," "extremely hazardous substances," "toxic substances," "radioactive substances," "contaminants," "pollutants," "toxic pollutants" or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

Initial Synchronization Date shall mean the date upon which the Generating Facility is initially synchronized and upon which Trial Operation begins.

In-Service Date shall mean the date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Distribution Provider's Interconnection Facilities to obtain back feed power.

Interconnection Customer shall mean any entity, including the Distribution Provider, Distribution Owner or any of the Affiliates or subsidiaries of either, that proposes to interconnect its Generating Facility with the Distribution Provider's Distribution System.

Interconnection Customer's Interconnection Facilities shall mean all facilities and equipment, as identified in Appendix A of the Standard Large Generator Interconnection Agreement, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the Distribution Provider's Distribution System. Interconnection Customer's Interconnection Facilities are sole use facilities.

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

Interconnection Facilities Study shall mean a study conducted by the Distribution Provider or a third party consultant for the Interconnection Customer to determine a list of facilities (including Distribution Provider's Interconnection Facilities, Distribution Upgrades, and Network Upgrades as identified in the Interconnection System Impact Study), the cost of those facilities, and the time required to interconnect the Generating Facility with the Distribution Provider's Distribution System. The scope of the study is defined in Section 8 of the Standard Large Generator Interconnection Procedures.

Interconnection Facilities Study Agreement shall mean the form of agreement contained in Appendix 4 of the Standard Large Generator Interconnection Procedures for conducting the Interconnection Facilities Study.

Interconnection Feasibility Study shall mean a preliminary evaluation of the system impact and cost of interconnecting the Generating Facility to the Distribution Provider's Distribution System, the scope of which is described in Section 6 of the Standard Large Generator Interconnection Procedures.

Interconnection Feasibility Study Agreement shall mean the form of agreement contained in Appendix 2 of the Standard Large Generator Interconnection Procedures for conducting the Interconnection Feasibility Study.

Interconnection Handbook shall mean 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. Distribution Provider's standards contained in the

Interconnection Handbook shall be deemed consistent with Good Utility Practice and Applicable Reliability Standards. In the event of a conflict between the terms of the Standard Large Generator Interconnection Procedures and the terms of the Distribution Provider's Interconnection Handbook, the terms in the Standard Large Generator Interconnection Procedures shall govern.

Interconnection Request shall mean an Interconnection Customer's request, in the form of Appendix 1 to the Standard Large Generator Interconnection Procedures, in accordance with the Tariff, to interconnect a new Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Generating Facility that is interconnected with the Distribution Provider's Distribution System.

Interconnection Service shall mean the service provided by the Distribution Provider associated with interconnecting the Interconnection Customer's Generating Facility to the Distribution Provider's Distribution System and enabling it to receive electric energy and capacity from the Generating Facility at the Point of Interconnection, pursuant to the terms of the Standard Large Generator Interconnection Agreement and, if applicable, the Distribution Provider's Tariff.

Interconnection Study shall mean any of the following studies: the Interconnection Feasibility Study, the Interconnection System Impact Study, and the Interconnection Facilities Study described in the Standard Large Generator Interconnection Procedures.

Interconnection System Impact Study shall mean an engineering study that evaluates the impact of the proposed interconnection on the safety and reliability of Distribution Provider's Distribution System and, if applicable, an Affected System. The study shall identify and detail the system impacts that would result if the Generating Facility were interconnected without project modifications or system modifications, focusing on the Adverse System Impacts identified in the Interconnection Feasibility Study, or to study potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Standard Large Generator Interconnection Procedures.

Interconnection System Impact Study Agreement shall mean the form of agreement contained in Appendix 3 of the Standard Large Generator Interconnection Procedures for conducting the Interconnection System Impact Study.

IRS shall mean the Internal Revenue Service.

Large Generating Facility shall mean a Generating Facility having a Generating Facility Capacity of more than 20 MW.

Loss shall mean any and all losses 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 performance, or non-performance of its obligations under the Standard Large Generator Interconnection Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnifying Party.

Material Modification shall mean those modifications that have a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

Metering Equipment shall mean all metering equipment installed or to be installed at the Generating Facility pursuant to the Standard Large Generator Interconnection Agreement at the metering points, including but not limited to instrument transformers, MWh-meters, data acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines, and fiber optics.

NERC shall mean the North American Electric Reliability Council or its successor organization.

Network Upgrades shall mean Delivery Network Upgrades and Reliability Network Upgrades.

Notice of Dispute shall mean a written notice of a dispute or claim that arises out of or in connection with the Standard Large Generator Interconnection Agreement or its performance.

Optional Interconnection Study shall mean a sensitivity analysis based on assumptions specified by the Interconnection Customer in the Optional Interconnection Study Agreement.

Optional Interconnection Study Agreement shall mean the form of agreement contained in Appendix 5 of the Standard Large Generator Interconnection Procedures for conducting the Optional Interconnection Study.

Party or Parties shall mean Distribution Provider, Distribution Owner, Interconnection Customer or any combination of the above.

Point of Change of Ownership shall mean the point, as set forth in Appendix A to the Standard Large Generator Interconnection Agreement, where the Interconnection Customer's Interconnection Facilities connect to the Distribution Provider's Interconnection Facilities.

Point of Interconnection shall mean the point, as set forth in Appendix A to the Standard Large Generator Interconnection Agreement, where the Interconnection Facilities connect to the Distribution Provider's Distribution System.

Queue Position shall mean 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.

Reasonable Efforts shall mean, with respect to an action required to be attempted or taken by a Party under the Standard Large Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

Reliability Network Upgrades shall mean the transmission facilities at or beyond the point where the Distribution Provider's Distribution System interconnects to the CAISO Grid, necessary to interconnect a Large Generating Facility safely and reliably to the CAISO Grid, which would not have been necessary but for the interconnection of the Large Generating Facility, including Network Upgrades necessary to remedy short circuit or stability problems resulting from the interconnection of the Large Generating Facility to the Distribution Provider's Distribution System. Reliability Network Upgrades also include, consistent with WECC practice, the facilities necessary to mitigate any adverse impact the Large Generating Facility's interconnection may have on a path's WECC rating.

Scoping Meeting shall mean the meeting between representatives of the Interconnection Customer and Distribution Provider conducted for the purpose of discussing alternative interconnection options, to exchange information including any transmission data and earlier study evaluations that would be reasonably expected to impact such interconnection options, to analyze such information, and to determine the potential feasible Points of Interconnection.

Site Control shall mean documentation reasonably demonstrating: (1) ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the Generating Facility; (2) an option to purchase or acquire a leasehold site for such purpose; or (3) an exclusivity or other business relationship between Interconnection Customer and the entity having the right to sell, lease or grant Interconnection Customer the right to possess or occupy a site for such purpose.

Small Generating Facility shall mean a Generating Facility that has a Generating Facility Capacity of no more than 20 MW.

Stand Alone Network Upgrades shall mean Network Upgrades that an Interconnection Customer may construct without affecting day-to-day operations of the Transmission System during their construction. Both the Distribution Provider and the Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the Standard Large Generator Interconnection Agreement.

Standard Large Generator Interconnection Agreement (LGIA) shall mean the form of interconnection agreement applicable to an Interconnection Request pertaining to a Large Generating Facility that is included in the Distribution Provider's Tariff.

Standard Large Generator Interconnection Procedures (LGIP) shall mean the interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that are included in the Distribution Provider's Tariff.

System Protection Facilities shall mean the equipment, including necessary protection signal communications equipment, required to protect (1) the Distribution Provider's Distribution System, the CAISO Controlled Grid and Affected Systems from faults or other electrical disturbances occurring at the Generating Facility; and (2) the Generating Facility from faults or other electrical system disturbances occurring on the Distribution Provider's Distribution System, the CAISO Controlled Grid or on other delivery systems or other generating systems to which the Distribution Provider's Distribution System and Transmission System is directly connected.

Tariff shall mean the Wholesale Distribution Open Access Tariff, the Distribution Provider's Tariff through which open access transmission service and Interconnection Service are offered, as filed with FERC, and as amended or supplemented from time to time, or any successor tariff.

Transmission System shall mean those transmission facilities owned by the Distribution Provider or that have been placed under the CAISO's operational control and are part of the CAISO Grid.

Trial Operation shall mean the period during which Interconnection Customer is engaged in on-site test operations and commissioning of the Generating Facility prior to Commercial Operation.

Uncontrollable Force shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm, flood, earthquake, explosion, breakage or accident to machinery or equipment, any curtailment, order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond the reasonable control of the Distribution Provider or Interconnection Customer which could not be avoided through the exercise of Good Utility Practice. An Uncontrollable Force event does not include acts of negligence or intentional wrongdoing by the Party claiming Uncontrollable Force.

Section 2. Scope and Application.

2.1 Application of Standard Large Generator Interconnection Procedures.

Sections 2 through 13 apply to processing an Interconnection Request pertaining to a Large Generating Facility.

2.2 Comparability.

Distribution Provider shall receive, process and analyze all Interconnection Requests in a timely manner as set forth in this LGIP. Distribution Provider will use the same Reasonable Efforts in processing and analyzing Interconnection Requests from all Interconnection Customers, whether the Generating Facilities are owned by Distribution Provider, its subsidiaries or Affiliates or others.

2.3 Base Case Data.

Distribution Provider shall provide base power flow, short circuit and stability databases, including all underlying assumptions, and contingency list upon request subject to confidentiality provisions in LGIP Section 13.1. Distribution Provider is permitted to require that Interconnection Customer sign a confidentiality agreement before the release of commercially sensitive information or Critical Energy Infrastructure Information in the Base Case data. Such Base Cases shall include all (1) generation projects; and (2) transmission projects, including merchant transmission projects that are proposed for the Transmission System for which a transmission expansion plan has been submitted and approved by the applicable authority.

2.4 No Applicability to Distribution Service.

Nothing in this LGIP shall constitute a request for transmission service or Distribution Service or confer upon an Interconnection Customer any right to receive transmission service or Distribution Service.

Section 3. Interconnection Requests.

3.1 General.

An Interconnection Customer shall submit to Distribution Provider an Interconnection Request in the form of Appendix 1 to this LGIP and a refundable deposit of \$10,000. Distribution Provider shall apply the deposit toward the cost of an Interconnection Feasibility Study. Interconnection Customer shall submit a separate Interconnection Request for each site and may submit multiple Interconnection Requests for a single site. Interconnection Customer must submit a deposit with each Interconnection Request even when more than one request is submitted for a single site. An Interconnection Request to evaluate one site at two different voltage levels shall be treated as two Interconnection

Requests.

If the Interconnection Customer also desires Distribution Service, then the Interconnection Customer shall submit to the Distribution Provider an Application in accordance with Section 15.2 of the Tariff, including the required deposit. If the Application for Distribution Service is deemed a Completed Application, then the schedule for performing the System Impact Study and Facilities Study, and for executing the Service Agreement shall coincide with the schedule for performing the Interconnection System Impact Study and Interconnection Facilities Study, and executing the LGIA.

At Interconnection Customer's option, Distribution Provider and Interconnection Customer will identify alternative Point(s) of Interconnection and configurations at the Scoping Meeting to evaluate in this process and attempt to eliminate alternatives in a reasonable fashion given resources and information available. Interconnection Customer will select the definitive Point(s) of Interconnection to be studied no later than the execution of the Interconnection Feasibility Study Agreement.

3.2 Interconnection Service.

3.2.1 The Product.

Interconnection Service allows Interconnection Customer to connect the Large Generating Facility to the Distribution System and be eligible to deliver the Large Generating Facility's output using the capacity of the Distribution System to the CAISO Grid. Interconnection Service does not in and of itself convey any right to deliver electricity to any specific customer or Point of Delivery.

3.2.2 The Interconnection Studies.

The Interconnection Studies consist of short circuit/fault duty, steady state (thermal and voltage) and stability analyses. The short circuit/fault duty analysis would identify direct Interconnection Facilities, Distribution Upgrades, and any required Reliability Network Upgrades necessary to address short circuit issues associated with the Interconnection Facilities. The stability and steady state studies would identify any necessary Delivery Network Upgrades to allow full output of the proposed Large Generating Facility and would also identify the maximum allowed output, at the time the study is performed, of the interconnecting Large Generating Facility without the Delivery Network Upgrades. The Distribution Provider may also study the Distribution System under non-peak load conditions. However, upon request by the Interconnection Customer, the Distribution Provider must explain in writing to the Interconnection Customer why the study of nonpeak load conditions is required for reliability purposes.

The Distribution Provider will complete or cause to be completed all Interconnection Studies required within the timelines provided in this LGIP.

Each Interconnection Customer shall pay the actual cost of all Interconnection Studies and any additional studies the Distribution Provider determines to be reasonably necessary in response to the Interconnection Request.

3.2.3 Deliverability Assessment.

3.2.3.1 Distribution System Deliverability. Deliverability from the Point of Interconnection to the point where the Distribution Provider's Distribution System interconnects to the CAISO Grid 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.

3.2.3.2 CAISO Grid Deliverability. If requested by the Interconnection Customer in writing to the Distribution Provider, after at least ten (10) Business Days following the Scoping Meeting, the Distribution Provider shall submit the Interconnection Request to the CAISO whereby the CAISO will perform on behalf of the Distribution Provider 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 those terms are defined in Appendix A to the CAISO Tariff) which shall determine the Interconnection Customer's Large Generating Facility's ability to deliver its energy to the CAISO Controlled Grid (as defined in Appendix A to the CAISO Tariff) and identify Delivery Network Upgrades required to provide the Generation Facility with Full Capacity Deliverability Status (as these terms are 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 Interconnection Request, the Interconnection Request 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 the Distribution Provider for the actual cost attributable to the Generating Facility of such Interconnection Customer of the Interconnection Studies (including the Deliverability Assessment that the CAISO performs).

Deleted: CAISO (or alternatively

Deleted:)

3.2.3.3 Network Upgrades. Unless the Distribution Provider elects to fund the capital for Network Upgrades, they shall be solely funded by the Interconnection Customer pursuant to CAISO GIP Section 12.3.1.

3.2.3.4 Repayment of Amounts Advanced for Network Upgrades. The Interconnection Customer shall be entitled to a repayment for the cost of Network Upgrades in accordance with CAISO GIP Section 12.3.2.

3.3 Valid Interconnection Request.

3.3.1 Initiating an Interconnection Request.

To initiate an Interconnection Request, Interconnection Customer must submit all of the following: (i) a \$10,000 deposit; (ii) a completed application in the form of Appendix 1; and (iii) demonstration of Site Control or a posting of an additional deposit of \$10,000. Such deposits shall be applied toward any Interconnection Studies pursuant to the Interconnection Request. If Interconnection Customer demonstrates Site Control within the cure period specified in Section 3.3.3 after submitting its Interconnection Request, the additional deposit shall be refundable; otherwise, all such deposit(s), additional and initial, become non-refundable.

The expected In-Service Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility shall be no more than the process window for the regional expansion planning period (or in the absence of a regional planning process, the process window for Distribution Provider's expansion planning period) not to exceed seven years from the date the Interconnection Request is received by Distribution Provider, unless Interconnection Customer demonstrates that engineering, permitting and construction of the new Large Generating Facility or increase in capacity of the existing Generating Facility will take longer than the regional expansion planning period. The In-Service Date may succeed the date the Interconnection Request is received by Distribution Provider by a period up to ten years, or longer where Interconnection Customer and Distribution Provider agree, such agreement not to be unreasonably withheld.

3.3.2 Acknowledgment of Interconnection Request.

Distribution Provider shall acknowledge receipt of the Interconnection Request within five (5) Business Days of receipt of the request and attach a copy of the received Interconnection Request to the acknowledgment.

the other Party prior to the release of the Confidential Information to FERC or its staff. The Party shall notify the other Party to the LGIA when it is notified by FERC or its staff 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 section 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner, consistent with applicable state rules and regulations.

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13.1.9 Subject to the exception in Section 13.1.8, any information that a Party claims is competitively sensitive, commercial or financial information ("Confidential Information") shall not be disclosed by the other Party to any person not employed or retained by the other Party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Party, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this LGIP or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or CAISO or to a subregional, regional or national reliability organization or planning group. The Party asserting confidentiality shall notify the other Party in writing of the information it claims is confidential. Prior to any disclosures of the other Party's Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

13.1.10 This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a Breach of this provision).

13.1.11 Distribution Provider shall, at Interconnection Customer's election, destroy, in a confidential manner, or return the Confidential Information provided at the time of Confidential Information is no longer needed.

13.2 Delegation of Responsibility.

Distribution Provider may use the services of subcontractors as it deems appropriate to perform its obligations under this LGIP. Distribution Provider shall remain primarily liable to Interconnection Customer for the performance of such subcontractors and compliance with its obligations of this LGIP. The subcontractor shall keep all information provided confidential and shall use such information solely for the performance of such obligation for which it was provided and no other purpose.