



**Part 1 – Introduction and Overview**

- A. Applicability:** This Generating Facility Interconnection Application (Application) is used to request the interconnection of a Generating Facility to Southern California Edison's (SCE) Distribution System (over which the California Public Utilities Commission (CPUC) has jurisdiction). Refer to SCE's Rule 21 to determine the specific requirements for interconnecting a Generating Facility. Capitalized terms used in this Application, and not otherwise defined herein, shall have the same meanings as defined in SCE's Rule 21 and Rule 1.

Except as noted in the next paragraph, this Application may be used for any Generating Facility to be operated by, or for, a Customer and/or Producer to serve part or all of its electric energy requirements that would otherwise be provided by SCE, including "distributed generation", "cogeneration," emergency, backup, and standby generation, and Net Energy Metered Generating Facilities. A simpler, shorter form is also available from SCE for Net Energy Metered (NEM) Generating Facilities with a nameplate rating less than 10kW. While Customers operating Generating Facilities isolated from SCE's Distribution System are not obligated to enter into an Interconnection Agreement with SCE, parts of this Application will still need to be completed to satisfy SCE's notice requirements for operating an isolated Generating Facility as per California Health and Safety Code Section 119085 (b).

This Application may not be used to apply for interconnecting Generating Facilities used to participate in transactions where all, or a portion of, the electrical output of the Generating Facility is scheduled with the California Independent System Operator. Such transactions are subject to the jurisdiction of the Federal Energy Regulatory Commission (FERC) and require a different application available from SCE.

This Application is not applicable for incentives and/or rebates offered by the Energy Resources Conservation and Development Commission ("CEC") or the CPUC. Please contact those agencies directly or on their respective websites ([www.energy.state.ca.us](http://www.energy.state.ca.us) and [www.cpuc.ca.gov](http://www.cpuc.ca.gov)).

- B. Guidelines and Steps for Interconnection:** This Application must be completed and sent to SCE along with the additional information indicated in Part 1 Section C below to initiate SCE's interconnection review of the proposed Generating Facility. An Initial Review fee of \$800 (payable by check or money order to SCE) must accompany the Applications except those Applications for isolated Generating Facilities, Solar and Net Energy Metering Generating Facilities. Supplemental Review and Interconnection Study fees may be required for large capacity and/or more complex Generating Facility Interconnections; see SCE's Rule 21 Section C.1.b. & c. You may also refer to SCE's Electric Service Requirements (ESR's) located on SCE's website: <http://www.sce.com/nrc/aboutsce/regulatory/distributionmanuals/esr.pdf> for more information regarding interconnection of a Rule 21 or NEM generator to SCE's Distribution System.

This document is only an Application. Upon acceptance, SCE will prepare an Interconnection Agreement for execution by the "Producer," the party that will be responsible for the Generating Facility. SCE may also require an inspection and testing of the Generating Facility and installation of any related Interconnection Facilities prior to giving the Producer written authorization to operate in parallel. **Unauthorized Parallel Operation may be dangerous and may result in injury to persons and/or may cause damage to equipment and/or property for which a Producer/Customer may be liable!**

Please note, other approvals may need to be acquired, and/or other agreements may need to be formed with SCE or regulatory agencies, such as the Air Quality Management Districts and local governmental building and planning commissions prior to operating a Generating Facility. SCE's authorization to operate in parallel does not satisfy the need for an Applicant to acquire such other approvals.

- C. Required Documents:** Two (2) copies of this Application and each of the following documents **must be submitted** before this application will be processed. Drawings must conform to accepted engineering standards and must be legible. 11"x17" drawings are preferred.
1. A **Single-line drawing** showing the electrical relationship and descriptions of the significant electrical components such as the primary switchgear, secondary switchboard, protective relays, transformers, generators, circuit breakers, with operating voltages, capacities, and protective functions of the Generating Facility, the Customer's loads, and the interconnection with SCE's Distribution System. Please show the location of all required net generation electric output meters and the A.C. manually operated disconnect devices on the single line drawing.
  2. **Site plans and diagrams** showing the physical relationship of the significant electrical components of the Generating Facility such as generators, transformers, primary switchgear/secondary switchboard, and control panels, the Customer's loads and the interconnection with SCE's Distribution System. Please show the location of all required net generation electric output meters and the A.C. manually operated disconnect devices on the site plans.
  3. If **transformers** are used to interconnect the Generating Facility with SCE's Distribution System, please provide transformer nameplate information (voltages, capacity, winding arrangements, connections, impedance, et cetera).
  4. If a **transfer switch** or scheme is used to interconnect the Generating Facility with SCE Distribution System, please provide component descriptions, capacity ratings, and a technical description of how the transfer scheme is intended to operate.
  5. If **protective relays** are used to control the interconnection, provide protection diagrams or elementary drawings showing relay wiring and connections, proposed relay settings, and a description of how the protection scheme is intended to function.
  6. An Initial Review fee check or money order in the amount of \$ 800, if applicable, made out to SCE referencing the electric account number (Part 2. A.) and "Initial Interconnection Review Fee"



**Part 1 Cont'd – Introduction and Overview**

**D. Mailing Instructions, Assistance:** When this application has been completed it may be printed and mailed, along with the required attachments to:

**1. NEM Projects “10 kW – 1,000 kW” Only**

Southern California Edison Company  
Attention: Net Energy Metering Administrator (NEM)  
2244 Walnut Grove Ave, GO 1, Quad 4 D  
Rosemead, CA 91770

Alternatively, you may contact SCE for NEM at (626) 302-9680 or FAX to (626) 571-4272 and make arrangements to e-mail or fax copies of the required information with payment of the required fees to follow. If you have questions or need assistance in completing this application please call.

**2. All Other Distributed Generation Projects (DG)**

Southern California Edison Company  
Attention: Manger Grid Contract and Rule 21 Development  
2244 Walnut Grove Ave, GO 1, Quad 4 C  
Rosemead, CA 91770

Alternatively, you may contact **SCE for DG** at (626) 302-9597 or FAX to (626) 302-1152 and make arrangements to e-mail or fax copies of the required information with payment of the required fees to follow. If you have questions or need assistance in completing this application please call.

**GENERATING FACILITY INTERCONNECTION APPLICATION**

**Part 2 – Identifying the Generating Facility’s Location and Responsible Parties**

Project Name:	Date Received:	Generating Facility ID:	Application Expiration Date (Refer to Part 2, Section E)

(For SCE Use Only)

**NEM Projects Only (Check one):**

California Solar Initiative - PBI \_\_\_\_\_ EPBB \_\_\_\_\_  
 Self Generation Incentive Program \_\_\_\_\_  
 CEC - NHSP \_\_\_\_\_ ERP \_\_\_\_\_

**A. Customer Electric Account Information** (To what electric service will the Generating Facility be interconnected for parallel operation with SCE? For aggregated electric accounts (under BG-NEM, dairy operations only) provide the primary and all associated accounts/meter information)

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Name shown on SCE service account      Service Account Number      Meter Number

*NOTE: Customer Service account number must match the customer's utility bill account information.*

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Service Account Street Address      City      State      Zip

**Customer Account Contact Information** (Who is the customer contact for progress updates and /or additional information?)

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Contact Person      Company Name

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Phone      Fax      E-mail

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Mailing Address      City      State      Zip

**B. Project Contact Information** (Who is the project contact for this Generating Facility?)

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Project Contact Person      Company Name

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Phone      Fax      E-mail

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Mailing Address      City      State      Zip

B.1. Will the Generating Facility be owned by a (third) party other than the name appearing on the SCE service account in A. above (please check)? \_\_\_\_\_ Yes **\_\_\_\_\_ No**



**Part 2 Cont'd – Identifying the Generating Facility's Location and Responsible Parties**

**C. 1. Customer – Generation Facility Interconnection Agreement (GFIA) Information or the Customer Generation Agreement (CGA) (applicable to 3<sup>rd</sup> party owner only)** (Please identify, if known, the party that will execute the applicable agreement. Not applicable for NEM Applicants because SCE and the Customer, not the 3<sup>rd</sup> party must enter into the NEM Interconnection Agreement)

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Person Executing the GFIA/CGA

Title of Person Executing GFIA/CGA

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Name of Legal Entity to be entered in signatures section of the GFIA/CGA

**C.2. 3<sup>rd</sup> Party Owner – GFIA Information** (Please identify the 3<sup>rd</sup> party, if known, that will execute the GFIA). Not applicable for Net Energy Metering Applicants, because SCE and the Customer, not the 3<sup>rd</sup> party must enter into the NEM Interconnection Agreement

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Person Executing the GFIA

Title of Person Executing GFIA

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Name of Legal Entity to be entered in signatures section of the GFIA

**D. Operating Date** (What date is this Generating Facility expected to begin operation?)

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**E. Expiration Date\*** (The date the status of this Application is changed to "withdrawn" by SCE?)

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\* The information submitted in this Application will remain active and valid for a period of 12 months from the date the Application was accepted by SCE as a "completed" Application. If the project has not received written authorization to operate in parallel, or reasonable proof the project is going forward has not been submitted to SCE by that time, the Application will be considered "withdrawn". To the extent that the Initial Review, Supplemental Review, or Detailed Interconnection Study fees have been paid to and the corresponding reviews/study completed by SCE, Applicant will only be entitled to a return of one-half of the Initial Review fee of \$400. All other fees will be forfeited.

**Part 2 Cont'd – Identifying the Generating Facility's Location and Responsible Parties**

**F. Estimated Versus Actual Cost Responsibility**

Under Rule 21 Applicants can elect estimated or actual costs for (1) detailed interconnection studies, and/or (2) Interconnection Facilities and distribution system modifications. This election must be made at the time of application submission. Under both cost options, an estimate is prepared. If the Applicant elects the actual cost option, there will be a true up after the completion of the work. If actual costs exceed the original estimated amounts, Applicant will be responsible for costs above the estimated amounts. Conversely, if actual costs are less than the original estimated amounts, SCE will refund the difference. Applicants seeking interconnection under SCE's Net Energy Metering tariffs are not responsible for Initial Review, Supplemental Review and Detailed Interconnection Study fees, nor for distribution system modifications' costs.

**Selection of detailed interconnection study cost responsibility\* (Non-NEM only):**

**Estimated Cost**

**Actual Cost**

**Selection of Interconnection Facilities and distribution system modifications' (if applicable) cost responsibility\*:**

**Estimated Cost**

**Actual Cost**

\* **Note:** If no selections are made, estimated cost responsibility will apply.

**Part 3 - Describing the Generating Facility and Host Customer's Electrical Facilities**

A. (MP&I)	Indicate the operating mode of the Generating Facility	operating mode options: <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 (Choose one)
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Instructions and Notes

Choose from the following operating mode options:

1. **Parallel Operation:** The Generating Facility will interconnect and operate "in parallel" with SCE's Distribution System for more than one (1) second.
2. **Momentary Parallel (MP) Operation:** The Generating Facility will interconnect and operate on a "momentary parallel" basis with SCE's Distribution System for a duration of one (1) second or less through transfer switches or operating schemes specifically designed and engineered for such operation.
3. **Isolated (I) Operation:** The Generating Facility will be "isolated" and prevented from becoming interconnected with SCE's Distribution System through a transfer switch or operating scheme specifically designed and engineered for such operation.

If the answer is operating mode option 1, "parallel operation," please supply all of the information requested for the Generating Facility. Be sure to supply adequate information including diagrams and written descriptions regarding the protective relays that will be used to detect faults or abnormal operating conditions on SCE's Distribution System.

If the answer is operating mode option 2, "momentary parallel operation," only questions A, E and F of this Part 3 and questions A, B, E, F, I, L, M, N, and S of Part 4 need be answered. Be sure, however, to supply adequate information including diagrams and written descriptions regarding the switching device or scheme that will be used to limit the parallel operation period to one second or less. Please also describe the back up or protective device and controls that will trip the Generating Facility should the transfer switch or scheme not complete the transfer in one second or less.

If the answer is operating mode option 3, "Isolated Operation," only questions A, E, and F of this Part 3 and questions A, B, F, and S of Part 4 need be answered. Be sure, however, to supply adequate information including diagrams and written descriptions regarding the isolating switching device or scheme that will be used to prevent the Generating Facility from operating in parallel with SCE's Distribution System.

**Part 3 Cont'd - Describing the Generating Facility and Host Customer's Electrical Facilities**

<p>B. <i>Parallel Operation Applications Only</i></p>	<p>If the Answer to Section A. above was operating mode option 1, please indicate the type of agreement that is being requested with this Application. If operating mode option 2 or 3 was selected, please skip to questions E and F.</p> <p>If agreement options 2, 3, 5, 6, 8, 9 10, 11, 12, 13 or 14 to this Section B are chosen, please provide an estimate of the maximum kW the Generating Facility is expected to export to SCE's Distribution System. If SCE determines that the amount of power to be exported is significant in relation to the capacity available on its Distribution System, it may request additional information, including time of delivery or seasonal kW/kWh estimates.</p>	<p>agreement options:</p> <p><u>  </u>1 <u>  </u>2 <u>  </u>3 <u>  </u>4 <u>  </u>5</p> <p><u>  </u>6 <u>  </u>7 <u>  </u>8 <u>  </u>9 <u>  </u>10</p> <p><u>  </u>11 <u>  </u>12 <u>  </u>13 <u>  </u>14</p> <p>(Choose all that apply)</p>  <p style="text-align: center;">_____</p> <p style="text-align: center;">Maximum kW</p>
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Instructions and Notes

Sample agreements are available from SCE for review. Choose from the following fourteen (14) agreement options:

**Customer Owned Generating Facility (not NEM-eligible)**

1. **A Generating Facility Interconnection Agreement (Non-Export) (Form 14-731)** that provides for parallel operation of the Generating Facility, but does not provide for exporting power to SCE's Distribution System.
2. **A Generating Facility Interconnection Agreement (Inadvertent Export) (Form 14-745)** that provides for parallel operation of the Generating Facility, and the occasional, inadvertent, non-compensated, export of power to SCE's Distribution System.
3. **A "Qualifying Facility" Power Purchase Agreement** that provides for parallel operation of the Generating Facility, and exporting power to SCE's Distribution System for sale to SCE. This option is available only to "Qualifying Facilities" with a total Nameplate Capacity of 100 kW or less. See Question F for the definition of a Qualifying Facility. (This type of agreement has not yet been developed by SCE or approved by the CPUC. Check with SCE for availability)

**Third Party Owned Generating Facility (not NEM-eligible)**

4. **A "Public Water and Wastewater Agency" power purchase agreement** that provides for parallel operation of the Generating Facility, and exporting power to SCE's Distribution System for sale to SCE. This option is available only to SCE customers who own and operate an "Eligible Renewable Generating Facility as defined in SCE's Tariff Schedule WATER ("Water Agency Tariff For Eligible Renewables") with a total effective generation capacity of not more than 1.5 megawatts (MW). Please indicate the power sale option and applicable contract that is being requested below:
  - Feed-In (wherein customer sells all power generated to SCE, and SCE provides all of customer's energy requirements) (Form 14-733)
  - Excess sale (wherein customer uses power generated to serve its energy requirements, and sells excess energy to SCE) (Form 14-734)
5. **A "California Renewable Energy Small Tariff" power purchase agreement** that provides for parallel operation of the Generating Facility, and exporting power to SCE's Distribution System for sale to SCE. This option is available only to SCE customers who own and operate an "Eligible Renewable Generating Facility as defined in SCE's Tariff Schedule CREST ("California Renewable Energy Small Tariff") For Eligible Renewables") with a total effective generation capacity of not more than 1.5 megawatts (MW). Please indicate the power sale option and applicable contract that is being requested below:
  - Feed-In (wherein customer sells all power generated to SCE, and SCE provides all of customer's energy requirements) (Form 14-786)
  - Excess sale (wherein customer uses power generated to serve its energy requirements, and sells excess energy to SCE) (Form 14-734)
6. **A Generating Facility Interconnection Agreement (Non-Export) (Form 14-742)** that provides for parallel operation of the Generating Facility, but does not provide for exporting power to SCE's Distribution System.
7. **A Generating Facility Interconnection Agreement (Inadvertent Export) (form 14-743)** that provides for parallel operation of the Generating Facility, and the occasional, inadvertent, non-compensated, export of power to SCE's Distribution System.
8. **A "Qualifying Facility" Power Purchase Agreement** that provides for parallel operation of the third party owned Generating Facility, and exporting power to SCE's Distribution System for sale to SCE. This option is available only to "Qualifying Facilities" with a total Nameplate Capacity of 100 kW or less. See Question F for the definition of a Qualifying Facility.
9. **A Customer Generation Agreement (Form 14-744)** that defines the relationship between SCE and the Customer whose name appears on SCE's Customer Account. This agreement must be executed in addition to agreements 6 and 7.

**Part 3 Cont'd- Describing the Generating Facility and Host Customer's Electrical Facilities**

**Net Energy Metering Generating Facility**

10. **A Net Energy Metering And Generating Facility Interconnection Agreement (Form 16-344)** that provides for parallel operation of the Generating Facility, and exporting energy to SCE's Distribution System for credit under the terms of SCE's schedule NEM for solar and wind Generating Facilities of 1 MW or less.
11. **A Biogas Digester Electrical Generating Facility Net Energy Metering And Interconnection Agreement (Form 14-750)** that provides for parallel operation of the Generating Facility, and exporting energy to SCE's Distribution System for credit under the terms of SCE's schedule BG-NEM for qualifying bio gas digester Generating Facilities only.
12. **A Fuel Cell Electrical Generating Facility Net Energy Metering And Interconnection Agreement (Form 14-755)** that provides for the parallel operation of the Generating Facility, and exporting energy to SCE's Distribution System for credit under the terms of SCE's schedule FC-NEM for qualifying fuel cell Generating Facilities only.
13. **Generating Facility Interconnection Agreement (Multiple tariff) (Form 14-773)** that provides for the parallel operation of a Generating Facility that utilizes generators eligible for service under NEM or other applicable NEM tariffs (e.g., NEM, BG-NEM, FC-NEM) that are electrically connected behind the same Point of Common Coupling (PCC) with generators not eligible to receive service under a NEM tariff.
14. **Other, please describe:** \_\_\_\_\_

C.  
*Parallel  
Operation  
Applications  
Only*

<p>If the answer to Section B above was agreement option 1 or 6, please indicate the protection option that will be used to prevent energy from being exported to SCE's Distribution System.</p> <p>If protection option 3 to this Section C is selected, please provide the continuous current rating of the host Customer facility's service entrance equipment (service panel rating):</p> <p>If protection option 4 to this Section C is selected, please provide the minimum load of the host Customer facility:</p>	<p>protection option:  <input type="checkbox"/> 1   <input type="checkbox"/> 2   <input type="checkbox"/> 3   <input type="checkbox"/> 4          (Choose one)</p> <p>_____ Amps</p> <p>_____ kW</p>
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Instructions and Notes

Refer to SCE's Rule 21, Section I.3.b., for additional information as to how to answer this question. If the Generating Facility will never export power to SCE's Distribution System, a simpler, lower cost, protection scheme may be used to control the interface between the Generating Facility and SCE's Distribution System. Choose from the following four options:

1. A reverse-power protection device will be installed to measure any export of power and trip the Generating Facility or open an inter-tie breaker to isolate the Generating Facility if limits are exceeded. Note: Please check with SCE before you elect this option. The required relay sensitivity levels are often difficult to achieve.
2. An under-power protection device will be installed to measure the inflow of power and trip or reduce the output of the Generating Facility if limits are not maintained.
3. The Generating Facility Interconnection Facility equipment has been certified as Non-Islanding and the incidental export of power will be limited by the design of the interconnection. If this option is to be used, the continuous ampere rating of the service entrance equipment (service panel rating) that is used by the host Customer facility must be stated in the space provided above.
4. The Gross Nameplate Rating of the Generating Facility will not exceed 50% of the host Customer facility's minimum electrical load. If this option is to be used, the minimum load of the host Customer facility must be stated in the space provided above.

Note: With the approval of SCE, a Producer that wishes to retain the option to export power from a Generating Facility to SCE's Distribution System may use a different protection scheme that provides for the detection of faults and other abnormal operating conditions.

**Part 3 Cont'd – Describing the Generating Facility and Host Customer's Electrical Facilities**

D.  
*Parallel  
Operation  
Applications  
Only*

What is the maximum 3-phase fault current that will be contributed by the Generating Facility to a 3-phase fault at the Point of Common Coupling (PCC)? (If the Generating Facility is single phase in design, please provide the contribution for a line-to-line fault.)

Please indicate the short circuit interrupting rating of the host Customer facility's service panel:

\_\_\_\_\_ Amps

\_\_\_\_\_ Amps

Instructions and Notes

Refer to SCE's Rule 21 Sections D.4.a. (1) and I.3.g. for significance and additional information. To determine this value, any transformers and/or significant lengths of interconnecting conductor used between each of the Generators (if there are more than one) that make up the Generating Facility and the PCC must be taken into account. The details, impedance, and arrangement of such transformers and interconnecting conductors should be shown on the single-line diagram that is provided. Consult an electrical engineer or the equipment supplier if assistance is needed in answering this question.

It is expected that most Applicants will want to reserve the flexibility to operate any or all of their Generators in parallel. If the design of the proposed Generating Facility limits the amount of generation that may be interconnected at any time to SCE's Distribution System, please describe the assumptions used in calculating the maximum fault current contribution value.

E.  
(MP&I)

Please indicate how this Generating Facility will be operated.

\_\_1\_\_ \_\_2\_\_ \_\_3\_\_ \_\_4\_\_ \_\_5\_\_ \_\_6\_\_  
(Please choose all options that may apply.)

Instructions and Notes

Choose from the following five operation options:

1. **Combined Heat and Power or Cogeneration** – Where the operation of the Generating Facility will produce thermal energy for a process other than generating electricity.
2. **Peak Shaving/Demand Management** – Where the Generating Facility will be operated primarily to reduce electrical demands of the host Customer facility during SCE's "peak pricing periods".
3. **Primary Power Source** – Where the Generating Facility will be used as the primary source of electric power and power supplied by SCE to the host Customer's loads will be required for supplemental, standby, or backup power purposes only.
4. **Standby / Emergency / Backup** – Where the Generating Facility will normally be operated only when SCE's electric service is not available.
5. **Net Energy Metering** – Where the Generating Facility qualifies and receives service under one of SCE's Net Energy Metering tariffs.
6. **Multiple Tariff** – Generating Facilities that have a combination of non-Net Energy Metering (non-NEM) generator(s) and Net Energy Metering (NEM) generator(s). Select one of the following four options:
  - New facility installing non-NEM generator(s) and/or differently tariffed NEM generators at the same time.
  - Existing facility with non-NEM generator(s) and planning to add NEM generator(s). Please provide data for the table below.
  - Existing facility with NEM generator(s) and planning to add non-NEM generator(s). Please provide data for the table below.
  - Existing facility with NEM generator(s) and planning to add NEM generator(s) under a different NEM tariff. Please provide data for the table below.



**Part 3 Cont'd - Describing the Generating Facility and Host Customer's Electrical Facilities**

F. (MP&I)	Please indicate if Qualifying Facility Status will be obtained from the FERC for this Generating Facility.	<input type="checkbox"/> Yes <input type="checkbox"/> No
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Instructions and Notes

Parties operating Generating Facilities complying with all of the requirements for qualification as either a small power production facility or cogeneration facility pursuant to the regulations of the FERC (18 Code of Federal Regulations Part 292, Section 292.203 et seq.) implementing the Public Utility Regulatory Policies Act of 1978 (16 U.S.C.A. Section 796, et seq.), or any successor requirements for "Qualifying Facilities," may seek certification from FERC to have the Generating Facility designated as a Qualifying Facility or "QF." In summary, QFs are Generating Facilities using renewable or alternative fuels as a primary energy source or facilities that utilize the thermal energy given off by the generation process for some other useful purpose. QFs enjoy certain rights and privileges not available to non-QF Generating Facilities.

QF status is not required to interconnect and operate in parallel with SCE's Distribution System.

G.	Please indicate if Generating Facility will meet the annual Efficiency and Operating Standards of PUC Code 218.5. (Applicable to Co-Generation only.)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
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**Part 4 – Describe each of the Generators (See Instructions.) Use additional sheets, if necessary.**

Instructions  
(see Part 4)

	Generator Information	New Generator Type	New Generator Type	Existing Generator Type	Totals For All Generators
#	Please indicate the number of each "type" of Generator being installed:  (See instructions)				
A (MP&I)	Generator/Inverter Manufacturer (Name)				
B (MP&I)	Generator/Inverter Model (Name/Number)				
C	Generator/Inverter Software Version (Number)				
D	Is the Generator Certified by a Nationally Recognized Testing Laboratory (NRTL) according to Rule 21?	__Yes __No	__Yes __No	__Yes __No	
E (MP)	Generator Type (Choose One)	__Synchronous __Induction __Inverter	__Synchronous __Induction __Inverter	__Synchronous __Induction __Inverter	
F (MP&I)	Gross Nameplate Rating (kVA)				
G	Gross Nameplate Rating (kW)				
H	Net Nameplate Rating (kW)				
I (MP)	Operating Voltage (Volts or kV)				
J	Power Factor Rating (%)				
K	PF Adjustment Range (%)	Min. _____ Max. _____	Min. _____ Max. _____	Min. _____ Max. _____	
L (MP)	Wiring Configuration (Choose One)	__Single-Phase __Three-Phase	__Single-Phase __Three-Phase	__Single-Phase __Three-Phase	



**Part 4 Cont'd – Describe each of the Generators (See instructions) Use additional sheets if necessary**

	<b>Generator Information</b>	<b>New Generator Type</b>	<b>New Generator Type</b>	<b>Existing Generator Type</b>
(MP)				
M	3-Phase Winding	<input type="checkbox"/> 3 Wire Delta	<input type="checkbox"/> 3 Wire Delta	<input type="checkbox"/> 3 Wire Delta
(MP)	Configuration	<input type="checkbox"/> 3 Wire Wye	<input type="checkbox"/> 3 Wire Wye	<input type="checkbox"/> 3 Wire Wye
	(Choose One)	<input type="checkbox"/> 4 Wire Wye	<input type="checkbox"/> 4 Wire Wye	<input type="checkbox"/> 4 Wire Wye
N	Neutral Grounding System Used	<input type="checkbox"/> Ungrounded	<input type="checkbox"/> Ungrounded	<input type="checkbox"/> Ungrounded
	(Choose One)	<input type="checkbox"/> Solidly Grounded	<input type="checkbox"/> Solidly Grounded	<input type="checkbox"/> Solidly Grounded
		<input type="checkbox"/> Ground Resistor	<input type="checkbox"/> Ground Resistor	<input type="checkbox"/> Ground Resistor
		_____ Ohms	_____ Ohms	_____ Ohms
O	<i>For Synchronous Generators Only:</i>			
	Synchronous Reactance:	_____ (Xd %)	_____ (Xd %)	_____ (Xd %)
	Transient Reactance:	_____ (X'd %)	_____ (X'd %)	_____ (X'd %)
	Subtransient Reactance:	_____ (X''d %)	_____ (X''d %)	_____ (X''d %)
P	<i>For Induction Generators Only:</i>			
	Locked Rotor Current:	_____	_____	_____
		(Amps)	(Amps)	(Amps)
	<b>OR</b>			
	<b>Stator Resistance:</b>	_____ (%)	_____ (%)	_____ (%)
	Stator Leakage Reactance:	_____ (%)	_____ (%)	_____ (%)
	Rotor Resistance:	_____ (%)	_____ (%)	_____ (%)
	Rotor Leakage Reactance:	_____ (%)	_____ (%)	_____ (%)
Q	Short Circuit Current Produced by Generator:	_____	_____	_____
		(Amps)	(Amps)	(Amps)
R	For Generators that are Started as a "Motor" Only:	_____	_____	_____
	1. In-Rush Current	(Amps)	(Amps)	(Amps)
	Host Customer's Service Entrance Panel (Main Panel) Continuous Current Rating	_____	_____	_____
		(Amps)	(Amps)	(Amps)
S	<b>Prime Mover Type:</b>	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6
(MP&I)	<b>(Circle One)</b>	7 8 9 10 11	7 8 9 10 11	7 8 9 10 11
		12 13 14 15	12 13 14 15	12 13 14 15

Instructions for Part 4 – Describing the Generators		
	Generator Information	Instructions and Comments
#	Please indicate the number of each “type” of Generator being installed:	Please provide the following information for each Generator “type”. Be sure all Generators classified as one “type” are identical in all respects. If only one type of Generator is to be used, only one column needs to be completed. Please be sure the information in the “Totals” column is correct and reflects the total number of Generator units to be installed.
A	Generator/Inverter Manufacturer	Enter the brand name of the Generator.
B	Generator/Inverter Model	Enter the model name or number assigned by the manufacturer of the Generator.
C	Generator/Inverter Software Version	If this Generator’s control and or protective functions are dependent on a “software” program supplied by the manufacturer of the equipment, please provide the version or release number for the software that will be used.
D	Is the Generator Certified by a Nationally Recognized Testing Laboratory (NRTL) according to Rule 21?	Answer “Yes” only if the Generator manufacturer can or has provided certification data. See SCE’s Rule 21, Section J for additional information regarding Generator certification.
E	Generator Design	Please indicate the designated type of each Generator. Designate “Inverter” anytime an inverter is used as the interface between the Generator and the electric system regardless of the primary power production/storage device used.
F	Gross Nameplate Rating (kVA)	This is the capacity value normally supplied by the manufacturer and stamped on the Generator’s “nameplate”. This value is not required where the manufacturer provides only a “kW” rating. However, where both kVA and kW values are available, please indicate both.
G	Gross Nameplate Rating (kW)	This is the capacity value normally supplied by the manufacturer and stamped on the Generator’s “nameplate”. This value is not required where the manufacturer provides only a “kVA” rating. However, where both kVA and kW values are available, please indicate both.
H	Net Nameplate Rating (kW)	This capacity value is determined by subtracting the “Auxiliary” or “Station Service” loads used to operate the Generator or Generating Facility. Applicants are not required to supply this value but, if it is not supplied, applicable Standby Charges may be based on the higher “gross” values.
I	Operating Voltage	This value should be the voltage rating designated by the manufacturer and used in this Generating Facility. Please indicate phase-to-phase voltages for 3-phase installations. See SCE’s Rule 21, Section D.2.b. for additional information.
J	Power Factor Rating	This value should be the nominal power factor rating designated by the manufacturer for the Generator. See SCE’s Rule 21, Section D.2.i. for additional information.

**Instructions for Part 4 Cont'd – Describing the Generators**

	<b>Generator Information</b>	<b>Instructions and Comments</b>
K	PF Adjustment Range	Where the power factor of the Generator is adjustable, please indicate the maximum and minimum operating values. See SCE's Rule 21, Section D.2.i.
L	Wiring Configuration	Please indicate whether the Generator is a single-phase or three-phase device. See SCE's Rule 21, Section D.3.
M	3-Phase Winding Configuration	For three-phase generating units, please indicate the configuration of the Generator's windings or inverter systems.
N	Neutral Grounding	Wye connected generating units are often grounded – either through a resistor or directly, depending upon the nature of the electrical system to which the Generator is connected. If the grounding method used at this facility is not listed, please attach additional descriptive information.
O	<i>For Synchronous Generators Only:</i>	If the Generator is of a "synchronous" design, please provide the synchronous reactance, transient reactance, and subtransient reactance values supplied by the manufacturer. This information is necessary to determine the short circuit contribution of the Generator and as data in load flow and short circuit computer models of SCE's Distribution System. If the Generator's Gross Nameplate Capacity is 10 MW or greater, SCE may request additional data to better model the nature and behavior of the Generator with relation to its Distribution System.
P	<i>For Induction Generators Only:</i>	If the Generator is of an "induction" design, please provide the "locked rotor current" value supplied by the manufacturer. If this value is not available, the stator resistance, stator leakage reactance, rotor resistance, rotor leakage reactance values supplied by the manufacturer may be used to determine the locked rotor current. If the Generator's Gross Nameplate Capacity is 10 MW or greater, SCE may request additional data to better model the nature and behavior of the Generator with relation to its Distribution System.
Q	For Generators that are Started as a "Motor" Only: 1. In-Rush Current  2. Host Customer's Service Entrance Panel (Main Panel) Continuous Current Rating	This information is needed only for Generators that are started by "motoring" the generator. See SCE's Rule 21, Section I.3.e. for significance and additional information. If this question was answered in Part 3, question C of this Application, it need not be answered here.
R	Short Circuit Current Produced by Generator	Please indicate the current each Generator can supply to a three-phase fault across its output terminals. For single phase Generators, please supply the phase-to-phase fault current.

<b>Instructions for Part 4 Cont'd – Describing the Generators</b>	
<b>Generator Information</b>	<b>Instructions and Comments</b>
<p>S</p> <p><i>For Generators that are Started as a "Motor" Only:</i></p> <ol style="list-style-type: none"> <li>1. In-Rush Current</li> <li>2. Host Customer's Service Entrance Panel (Main Panel) Continuous Current Rating</li> </ol>	<p>This information is needed only for Generators that are started by "motoring" the generator.</p> <p>See SCE's Rule 21, Section I.3.e. for significance and additional information.</p> <p>If this question was answered in Part 3, question C of this Application, it need not be answered here.</p>
<p>T</p> <p>Prime Mover Type</p>	<p>Please indicate the type and fuel used as the "prime mover" or source of energy for the Generator.</p> <ol style="list-style-type: none"> <li>1 = Internal Combustion Engine – Natural Gas Fueled</li> <li>2 = Internal Combustion Engine – Diesel Fueled</li> <li>3 = Internal Combustion Engine - Other Fuel</li> <li>4 = Microturbine– Natural Gas Fueled</li> <li>5 = Microturbine – Other Fuel</li> <li>6 = Combustion Turbine Natural Gas Fueled</li> <li>7 = Combustion Turbine - Other Fuel</li> <li>8 = Steam Turbine</li> <li>9 = Photovoltaic Panels</li> <li>10 = Solar-thermal engine</li> <li>11 = Fuel Cell– Natural Gas Fueled</li> <li>12 = Fuel Cell– Other Fuel</li> <li>13 = Hydroelectric Turbine</li> <li>14 = Wind Turbine</li> <li>15 = Other (please describe)</li> </ol>