



Southern California Edison
Rosemead, California (U 338-E)

Revised Cal. PUC Sheet No. 59902-E
Cancelling Revised Cal. PUC Sheet No. 58815-E

Sheet 1

NET ENERGY METERING (NEM)
GENERATING FACILITY INTERCONNECTION APPLICATION

Form 14-957

(To be inserted by utility)

Advice 3448-E
Decision 16-06-052

Issued by
Caroline Choi
Senior Vice President

(To be inserted by Cal. PUC)

Date Filed Aug 8, 2016
Effective Sep 7, 2016
Resolution _____

NET ENERGY METERING (NEM) GENERATING FACILITY INTERCONNECTION APPLICATION

APPLICABILITY

This Net Energy Metering (NEM) Generating Facility Interconnection Application (Application) is used to request the interconnection of a Renewable Electrical Generating Facility (Generating Facility) to Southern California Edison's (SCE) Distribution System over which the California Public Utilities Commission (CPUC or Commission) has jurisdiction for the purposes of receiving service under SCE's NEM tariffs, including rate schedules NEM and NEM-ST (including NEM Aggregation (NEM-A) and NEM-MT¹), MASH-VNM and MASH-VNM-ST, NEM-V and NEM-V-ST, and FC-NEM, to offset part or all of the Customer's own electrical requirements. (P)(P) (P)

This document is solely an application. It does not authorize you to operate your Generating Facility in parallel with SCE's electric system. To ensure safety and grid reliability, you must not operate your Generating Facility in parallel with the Distribution System until SCE provides you with written Permission to Operate (PTO). 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 the Customer may be liable.

GUIDELINES AND STEPS FOR INTERCONNECTION

This Application, along with any applicable payments, must be completed online and include all of the additional information indicated in the NEM Interconnection Handbook (see also Section 9 below) to initiate SCE's interconnection review of the proposed Generating Facility. Please refer to SCE's [Rule 21](#), the [NEM Interconnection Handbook](#) and SCE's [Electric Service Requirements](#) (ESRs) for more information regarding the interconnection of a NEM Generating Facility to SCE's Distribution System. **PURSUANT TO CPUC DECISION (D.)14-11-001, CERTAIN DATA PROVIDED ON THIS APPLICATION WILL BE TRANSFERRED TO A THIRD-PARTY FOR PROCESSING AND POSTING ON THE CALIFORNIA SOLAR STATISTICS WEBSITE. A LIST OF THE DATA THAT WILL BE SHARED CAN BE FOUND IN APPENDIX A OF D.14-11-001.** Applications submitted with blank fields (as applicable) will be deemed incomplete and will be returned to the main project contact for completion. The main project contact is also responsible for updating the Application should the information submitted change between system design and installation. (P) | (P)

This Application must be accompanied by a Single Line Diagram (SLD) of the proposed system showing the Generating Facility components and the electrical path from the Generating Facility to SCE's meter. The SLD must clearly identify the point of interconnection (a sample SLD is available at <http://www.sce.com/nem>). Additional documentation may be required as outlined in Section 9 below. **A signed Interconnection Agreement and a copy of the final electrical inspection approval issued by the local jurisdictional authority are required before SCE will issue PTO, but may be submitted separately.** An Application Checklist and all required forms are available at <http://www.sce.com/nem>. (P)

SCE normally provides PTO within 30 working days of receiving all necessary information, including but not limited to a completed Application, SLD, signed Interconnection Agreement and a copy of the final electrical inspection approval issued by the local jurisdictional authority. SCE will notify the Customer of Record (COR) if PTO cannot be issued within 30 working days of receiving all necessary information and will provide an estimate of the date that PTO is likely to be issued.

Please check this box to indicate acknowledgment of the information provided above.

¹ For NEM-MT interconnection requests seeking to interconnect a non-NEM generator behind the same SCE revenue meter / Point of Common Coupling as an existing NEM generator, Application Form 14-732 should be used in lieu of this Application.



NET ENERGY METERING (NEM) GENERATING FACILITY INTERCONNECTION APPLICATION

For SCE Use Only			
Project Name:	Project ID:	Date Application Received:	Application Expiration Date²:
Application Approval Date:	PTO Date:	Decommissioned Date:	

² The information submitted in this Application will remain active and valid consistent with the timelines specified in SCE's Rule 21, including Section D.13 and Section F. (P)

SECTION 1 – Customer and Contractor / Installer Information

A. Customer Electric Account and Contact Information
 This is the electric service account that the Generating Facility will be interconnected to for Parallel Operation with SCE. The Customer Name and Service Account # listed below must match the account information on the Customer's SCE electric bill.

Please check the applicable Customer Sector box:			
<input type="checkbox"/> Residential	<input type="checkbox"/> Commercial	<input type="checkbox"/> Industrial	<input type="checkbox"/> Non-Profit
<input type="checkbox"/> Educational	<input type="checkbox"/> Military	<input type="checkbox"/> Other Government	

Please check the applicable Customer Type box:		
<input type="checkbox"/> Bundled Service (All services are provided by SCE)	<input type="checkbox"/> Direct Access (DA) (Certain services are provided by an Electric Service Provider)	<input type="checkbox"/> Community Choice Aggregation (CCA) / Community Aggregation (Certain services are provided by a Community Choice Aggregator or Community Aggregator)

(P)
(P)

SCE Service Account #	Meter #	Service Voltage of Main Panel (Volts)

Customer Name <i>(i.e., name shown on SCE Service Account)</i>	Customer (Service Account Holder) Title <i>(e.g., Homeowner)</i>

Generating Facility (Service Account) Street Address	City	State	Zip Code

County

Customer Contact Name <i>(if different from above)</i>	Company Name <i>(if different from Customer)</i>

Phone <i>(required)</i>	Fax <i>(if applicable)</i>	Customer Email <i>(required)</i>

Mailing Address <i>(if different from above)</i>	City	State	Zip Code

**NET ENERGY METERING (NEM)
GENERATING FACILITY INTERCONNECTION
APPLICATION**

Please check here if the Customer is the Main Project Contact for this Application

(Do not check here if the Contractor is the main project contact – see Section 1.B below)

B. Contractor / Installer Information

Please check here if this is a Self-Installation *(i.e., installed by Service Account holder) (Proceed to Section 1.C)*

Contractor / Installer Contact Name	Company Name	CSLB # (required*)
--	---------------------	------------------------------

* **Please check here if the installer does not have a CSLB #.** *If the installer does have a CSLB #, it must be entered above.*

Contractor Mailing Address	City	State	Zip Code
-----------------------------------	-------------	--------------	-----------------

Phone <i>(required)</i>	Fax <i>(if applicable)</i>	Contractor Email <i>(required)</i>
--------------------------------	-----------------------------------	---

Please check here if the Contractor is the Main Project Contact for this Application

(Do not check here if the Service Account holder is the main project contact – see Section 1.A above)

C. Preparer Information *(if different from Section 1.B above)*

Please indicate who prepared and submitted this Application:

Preparer Name, Title	Preparer Company (if applicable)
-----------------------------	---

**NET ENERGY METERING (NEM)
GENERATING FACILITY INTERCONNECTION
APPLICATION**

SECTION 2 – Application Type

A. This Application is for:

- A **new** NEM Generating Facility interconnection (at an **existing service** or retrofit)
- A **new** NEM Generating Facility interconnection (at a **new service** or new construction)
- Physical changes to an **existing** NEM Generating Facility that has already received PTO from SCE
(e.g., adding energy storage, adding additional panels, changing inverters / turbines, changing load and/or operations)

B. Please indicate the NEM program under which you intend to participate:

- | | | | |
|--|---|--------------------------------------|-----------------------------------|
| <input type="checkbox"/> NEM | <input type="checkbox"/> NEM Aggregation | <input type="checkbox"/> MASH-VNM | <input type="checkbox"/> NEM-V |
| <input type="checkbox"/> NEM-ST | <input type="checkbox"/> NEM-ST Aggregation | <input type="checkbox"/> MASH-VNM-ST | <input type="checkbox"/> NEM-V-ST |
| <input type="checkbox"/> FC-NEM
<input type="checkbox"/> With Aggregated Accounts | <input type="checkbox"/> NEM-MT (Multiple Tariffs) <input type="checkbox"/> NEM-MT-ST (Multiple Tariffs)
<input type="checkbox"/> New facility installing NEM generator(s) and non-NEM generator(s) at the same time behind the same SCE revenue meter
<input type="checkbox"/> New facility installing differently tariffed NEM generators at the same time behind the same SCE revenue meter
<input type="checkbox"/> Existing facility with non-NEM generator(s) and planning to add NEM generator(s) behind the same SCE revenue meter
<input type="checkbox"/> Existing facility with NEM generator(s) and planning to add NEM generator(s) under a different NEM tariff behind the same SCE revenue meter | | |

(P)
(P)
(P)

C. Please indicate the Electric Rate Schedule under which the Service Account listed in Section 1.A above receives service (prior to NEM) on or will receive service on (for new accounts):

(e.g., Schedule D "Domestic," TOU-GS-1)

D. Will an Electric Vehicle (EV) Charger be installed at the same location (i.e., service account address) as the Generating Facility:

- | | | |
|---|---|--|
| <input type="checkbox"/> Yes , an EV Charger is already installed

Check all that apply:
<input type="checkbox"/> <i>The Generating Facility is intended to serve EV Charging load</i>

<input type="checkbox"/> <i>The EV Charger is separately metered</i> | <input type="checkbox"/> Yes , an EV Charger will be installed

Check all that apply:
<input type="checkbox"/> <i>The Generating Facility is intended to serve EV Charging load</i>

<input type="checkbox"/> <i>The EV Charger will be separately metered</i> | <input type="checkbox"/> No , there are no EV Chargers currently installed or planned to be installed |
|---|---|--|

How many EVs are charged or will be charged by the EV Charger(s)?

**NET ENERGY METERING (NEM)
GENERATING FACILITY INTERCONNECTION
APPLICATION**

SECTION 3 – Rebate Information

This Application is NOT an application for any incentive and/or rebate program. Incentives or rebates must be applied for separately with the appropriate agency – for example, see <http://www.energy.ca.gov> or <http://www.cpuc.ca.gov>.

A. Are you participating in a California rebate program related to the installation of the Generating Facility?

Yes No

If yes, please provide the following information:

i. Rebate Program:	
ii. Rebate Amount:	\$
	<input type="checkbox"/> One-Time Payment <input type="checkbox"/> Annual Payment <input type="checkbox"/> Monthly Payment <input type="checkbox"/> Other
iii. SASH Project No.³ <i>(if applicable)</i>	

(P)
|
|
|
|
(P)

³NEM-ST customers participating in the Single-family Affordable Solar Homes (SASH) Program are exempt from any interconnection application fees, provided the Generating Facility is sized 1 MW or smaller. Participation in the SASH Program, along with the Customer's corresponding unique SASH Project Number, must be indicated in this section for those Customers to receive the NEM-ST interconnection application fee exemption.

SECTION 4 – Ownership, Pricing and Financing

A. Please indicate if the Generating Facility is / will be owned by a third party?
(i.e., owned by someone other than the Service Account holder listed in Section 1.A above)

No (SCE customer-owned)
Please complete Section 4.B **Yes** (third-party-owned)
Please complete Section 4.C

B. For Customer-Owned Generating Facilities, please indicate the following:

i. Purchase Price: <i>(indicate the system cost paid by the Customer)</i>	\$
ii. Was Property Assessed Clean Energy (PACE) financing used?	
<input type="checkbox"/> Yes – Please specify financing entity:	
<input type="checkbox"/> No	

C. For Third-Party-Owned Generating Facilities, please indicate the following:

i. Claimed Federal Investment Tax Credit (ITC) Cost Basis:	\$
ii. Name of Developer: <i>(at the time of sale)</i>	
iii. Contract Type: <i>(e.g., PPA, lease, pre-paid lease, other)</i>	

**NET ENERGY METERING (NEM)
GENERATING FACILITY INTERCONNECTION
APPLICATION**

SECTION 5 – Net Surplus Compensation (NSC) Elections

(P)

Please indicate if the Customer elects to participate in the NSC program and receive compensation for Net Surplus Energy, if any, that may be generated during the Customer's 12-month Relevant Period.

(This option is only available to eligible Bundled Service Customers taking service on Schedules NEM, NEM-ST, MASH-VNM, MASH-VNM-ST, NEM-V or NEM-V-ST.)

- Yes (for ≤1 MW Generating Facilities)** – The Customer is interested in receiving NSC and certifies under the penalty of perjury that the Generating Facility is a Qualifying Facility pursuant to the Public Utility Regulatory Policies Act of 1978 that is exempt from certification filing at the Federal Energy Regulatory Commission (FERC); or,
- Yes (for >1 MW Generating Facilities)** – The Customer is interested in receiving NSC and certifies under the penalty of perjury that the Generating Facility is a Qualifying Facility pursuant to the Public Utility Regulatory Policies Act of 1978 that has been self-certified as a Qualifying Facility with the FERC by the proper completion and filing of FERC Form No. 556, *Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility*. A copy of the completed FERC Form No. 556 must be sent to SCE.
- No** – The Customer is not interesting in participating in the NSC program and elects not to receive NSC.

***Note:** Customers electing to participate in the NSC program will receive any applicable NSC as an on-bill credit at the end of the Customer's Relevant Period. Customers may elect to receive NSC via a check instead in accordance with the provisions of the Customer's applicable NEM rate schedule.*

***Note:** To receive compensation for Renewable Energy Credits (RECs) associated with the Customer's Net Surplus Energy, Form 14-935 must additionally be completed and submitted to SCE.*

(P)

**NET ENERGY METERING (NEM)
GENERATING FACILITY INTERCONNECTION
APPLICATION**

Section 6 – New Generating Facility Description / Technical Information

The information provided in this section is for the Generating Facility that this Application seeks to have interconnected to SCE's Distribution System or the Generating Facility that this Application seeks to modify (e.g., adding energy storage). Subsections A through D of Section 6 must be completed for all Generating Facilities. Subsections E through G are required, as applicable, only for those Generating Facilities that meet one or more of the following criteria: are sized larger than 10 kW; utilize a technology other than wind, solar or fuel cells that use renewable fuels; have a point of interconnection on the line side of the main circuit breaker (line side tap); require net generation output (NGO) metering; have additional generation on-site (including energy storage devices); and/or utilize non-certified equipment. Please complete a separate Section 6 for each new / modified Generating Facility that is seeking interconnection via this Application.

NOTE: Customers with >1 MW Generating Facilities may be subject to and have additional obligations pursuant to the California Independent System Operator (California ISO) tariff. These Customers should contact the California ISO for more information; SCE is not a party to the Customer's interaction with the California ISO.

A. Generating Facility Description (see Appendix A)

i. Number of Generators		
ii. Generator Manufacturer		
iii. Generator Model Number		
iv. Generator Technology Type		
v. Generator CEC-AC Nameplate Rating (kW)		
vi. Generator Gross AC Nameplate Rating (kW) <i>Required for Generators where the CEC-AC Nameplate Rating is not available / applicable</i>		
vii. Generator Estimated Monthly Production (kWh)		
viii. Inverter Information <i>For non-inverter-based Generators, please indicate "0" and "N/A"</i>		
a. Number of Inverters		
b. Inverter Manufacturer(es)		
c. Inverter Model Number(s)		
ix. Module Information <i>For Generators that don't use modules, please indicate "0" and "N/A"</i>		
a. Number of Modules		
b. Module Manufacturer(es)		
c. Module Model Number(s)		
x. Mounting Method	<input type="checkbox"/> Rooftop <input type="checkbox"/> Ground <input type="checkbox"/> Mixed <input type="checkbox"/> N/A	
xi. Tracking Type	<input type="checkbox"/> Fixed* <input type="checkbox"/> Single Axis <input type="checkbox"/> Dual Axis <input type="checkbox"/> Mixed <input type="checkbox"/> N/A	
	*If fixed, indicate:	Tilt: <input type="text"/> Azimuth: <input type="text"/>
	<input type="checkbox"/> Multiple facing arrays	

B. Are System Output Performance Monitoring and Reporting Services being utilized?

Yes No

If yes, please indicate **who** is receiving the data (check all that apply):

Customer Vendor Other

If applicable, which **vendor** is receiving the data:

C. Is the Generator certified by a Nationally Recognized Testing Laboratory (NRTL) in accordance with Rule 21?

Yes

No – Please explain:

(P)
|
(P)
|
(P)
|
(P)
|
(P)

**NET ENERGY METERING (NEM)
GENERATING FACILITY INTERCONNECTION
APPLICATION**

D. Electrical Connection Method			
<input type="checkbox"/> Load side connection <input type="checkbox"/> Line side connection <input type="checkbox"/> Not sure			
E. Additional Generating Facility Technical Information <i>(see Appendix A)</i>			
i. Prime Mover Type			
ii. Generator Software Version Number			
iii. Inverter Software Version Number			
iv. Gross Nameplate Rating (kVA)			
v. Gross Nameplate Rating (kW)			
vi. Net Nameplate Rating (kW)			
vii. Operating Voltage (Volts or kV)			
viii. Power Factor (PF) Rating (%)			
ix. PF Adjustment Range (%)		Maximum	Minimum
x. Wiring Configuration (Choose One)		<input type="checkbox"/> Single-Phase <input type="checkbox"/> Three-Phase	
xi. 3-Phase Winding Configuration (Choose One)		<input type="checkbox"/> 3 Wire Delta <input type="checkbox"/> 3 Wire Wye <input type="checkbox"/> 4 Wire Wye	
xii. Neutral Grounding Systems Used (Choose One)		<input type="checkbox"/> Undergrounded <input type="checkbox"/> Solidly Grounded <input type="checkbox"/> Ground Resistor	
		Ohms	
xiii. Short Circuit Current Produced by Generator (Amps)			
xiv. Generator Design (Choose One)		<input type="checkbox"/> Synchronous <input type="checkbox"/> Induction <input type="checkbox"/> Inverter	
xv. For Synchronous Generators Only: <i>(Gross kVA Nameplate Rating must be provided above)</i>			
a. Base kVA (if different from Gross Nameplate kVA above)			
b. Synchronous Reactance (%)			
c. Transient Reactance (%)			
d. Subtransient Reactance (%)			
xvi. For Induction Generators Only: <i>(Gross kVA Nameplate Rating must be provided above)</i>			
a. Base kVA (if different from Gross Nameplate kVA above)			
b. Locked Rotor Current (Amps) OR			
c. Stator Resistance (%)			
d. Stator Leakage Reactance (%)			
e. Rotor Resistance (%)			
f. Rotor Leakage Reactance (%)			
xvii. For Generators that are Started as a Motor Only:			
a. In-Rush Current (Amps)			
b. Customer's Main Panel Continuous Current Rating (Amps)			

**NET ENERGY METERING (NEM)
GENERATING FACILITY INTERCONNECTION
APPLICATION**

F. Information Required for MASH-VNM/ST and NEM-V/ST Interconnection Requests	
i. Does your interconnection satisfy SCE's ESR?	
<input type="checkbox"/> Yes <input type="checkbox"/> No – Please explain:	
ii. Is the current proposed tie-in point a result of restrictions placed on altering the existing panel or equipment within, as imposed by the local authority having jurisdiction?	
<input type="checkbox"/> Yes <input type="checkbox"/> No – Please explain:	
iii. Are there existing utility facilities in the vicinity of the proposed point of interconnection? Minimum clearances must be maintained from SCE facilities, as specified in SCE's ESR and/or Underground Structures Standards (UGS).	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	

(P)

G. Additional Information Required for Interconnection Requests that Include <u>Energy Storage Devices</u> (e.g., batteries)	
i. Will an Energy Storage Device (ESD) be connected behind the same SCE meter as the New Generating Facility?	
<input type="checkbox"/> Yes, an ESD is currently interconnected (<i>proceed to Section 6.D unless the ESD is being modified</i>)	
<input type="checkbox"/> Yes, an ESD will be interconnected as part of this Application (<i>please complete the information below</i>)	
ii. ESD Type	
iii. Number of ESDs	
iv. ESD Manufacturer(es)	
v. ESD Model Number(s)	
vi. ESD Max Capacity (kWh)	
vii. ESD Rated Discharge (kW)	
viii. ESD Max Discharge (kW)	
ix. Please list the devices used to limit discharge (if any): (e.g., inverter, power control)	

x. Please describe the intended use of the ESD: For example, peak shaving, export to the grid, load shifting, back-up, etc. The intended use specified may be taken into consideration during any applicable study processes.

xi. Energy Storage Charging Function	
a. Rated Charge Load Demand (kW)	
b. Estimated annual Net Energy Usage* of the ESD (kWh) <small>*Net Energy Usage = (kWh input, including charging, storage device auxiliary loads, and losses) – (kWh output, including discharging)</small>	
c. Will SCE's Distribution System be used to charge the ESD:	
<input type="checkbox"/> Yes <input type="checkbox"/> No	
If no: Provide technical description of control systems including:	
• Source of energy for charging:	
• Mechanism to prevent charging from the Distribution System:	

(T)

(N)
|
(N)

(T)

|

|

|

(T)

**NET ENERGY METERING (NEM)
GENERATING FACILITY INTERCONNECTION
APPLICATION**

If yes: Will charging the ESD increase the host facility's existing peak load demand?		(T)
<input type="checkbox"/> Yes <input type="checkbox"/> No		
If yes: Provide the following load information:		
<ul style="list-style-type: none"> • Amount of added peak demand (kW): 		
If no: Provide technical description of control systems, including:		
<ul style="list-style-type: none"> • Charging periods: 		
<ul style="list-style-type: none"> • Mechanism to prevent charging from the Distribution System during host facility peak: 		
		(T)

xii. Generation / Export Function	
a. Will the Generating Facility(ies) export power to SCE's Distribution System? (Include all generation sources behind the SCE meter specified in Section 1.A above, such as PV, an ESD or other technologies when answering)	
<input type="checkbox"/> Yes <input type="checkbox"/> No	
If yes, please specify the Generating Facility's maximum coincident export to the grid: (kW)	
b. If all generation sources are not simultaneously exporting to the grid, please provide a technical description of the control systems for this function:	

**NET ENERGY METERING (NEM)
GENERATING FACILITY INTERCONNECTION
APPLICATION**

(P)
(P)
(P)

Section 7 – Existing Generating Facility Description / Technical Information
The information provided in this section is for previously interconnected generating facilities that already exist behind the same SCE meter as the new Generating Facility(ies) outlined in Section 6 above. If an existing generating facility is being modified by this Application, please complete Section 6 (and not Section 7) for that Generating Facility. Please complete a separate Section 7 for each existing generating facility.

A. Existing Generating Facility Description <i>(see Appendix A)</i>			
i. Number of Generators			
ii. Generator Manufacturer			
iii. Generator Model Number			
iv. Generator Technology Type			
v. Generator CEC-AC Nameplate Rating (kW)			
vi. Generator Gross AC Nameplate Rating (kW) Required for Generators where the CEC-AC Nameplate Rating is not available / applicable			
vii. Generator Estimated Monthly Production (kWh)			
viii. Inverter Information <i>For non-inverter-based Generators, please indicate "0" and "N/A"</i>			
a. Number of Inverters			
b. Inverter Manufacturer(es)			
c. Inverter Model Number(s)			
ix. Module Information <i>For Generators that don't use modules, please indicate "0" and "N/A"</i>			
a. Number of Modules			
b. Module Manufacturer(es)			
c. Module Model Number(s)			
x. Prime Mover Type			
xi. Generator Software Version Number			
xii. Inverter Software Version Number			
xiii. Gross Nameplate Rating (kVA)			
xiv. Gross Nameplate Rating (kW)			
xv. Net Nameplate Rating (kW)			
xvi. Operating Voltage (Volts or kV)			
xvii. Power Factor (PF) Rating (%)			
xviii. PF Adjustment Range (%)		Maximum	Minimum
xix. Wiring Configuration <i>(Choose One)</i> <input type="checkbox"/> Single-Phase <input type="checkbox"/> Three-Phase			
xx. 3-Phase Winding Configuration <i>(Choose One)</i> <input type="checkbox"/> 3 Wire Delta <input type="checkbox"/> 3 Wire Wye <input type="checkbox"/> 4 Wire Wye			
xxi. Neutral Grounding Systems Used <i>(Choose One)</i> <input type="checkbox"/> Underground <input type="checkbox"/> Solidly Grounded <input type="checkbox"/> Ground Resistor			
Ohms			
xxii. Short Circuit Current Produced by Generator <i>(Amps)</i>			
xxiii. Generator Design <i>(Choose One)</i> <input type="checkbox"/> Synchronous <input type="checkbox"/> Induction <input type="checkbox"/> Inverter			
xxiv. For Synchronous Generators Only: <i>(Gross kVA Nameplate Rating must be provided above)</i>			
a. Base kVA <i>(if different from Gross Nameplate kVA above)</i>			
b. Synchronous Reactance (%)			

**NET ENERGY METERING (NEM)
GENERATING FACILITY INTERCONNECTION
APPLICATION**

c. Transient Reactance (%)	
d. Subtransient Reactance (%)	
xxv. For Induction Generators Only: <i>(Gross kVA Nameplate Rating must be provided above)</i>	
a. Base kVA <i>(if different from Gross Nameplate kVA above)</i>	
b. Locked Rotor Current (Amps) OR	
c. Stator Resistance (%)	
d. Stator Leakage Reactance (%)	
e. Rotor Resistance (%)	
f. Rotor Leakage Reactance (%)	
xxvi. For Generators that are Started as a Motor Only:	
a. In-Rush Current (Amps)	
b. Customer's Main Panel Continuous Current Rating (Amps)	

B. Is the Generator served on an NEM tariff?	
<input type="checkbox"/> Yes – Please specify which NEM tariff:	
<input type="checkbox"/> No	

C. Is the Generator certified by a Nationally Recognized Testing Laboratory (NRTL) in accordance with Rule 21?	
<input type="checkbox"/> Yes	
<input type="checkbox"/> No – Please explain:	

D. Electrical Connection Method	
<input type="checkbox"/> Load side connection <input type="checkbox"/> Line side connection <input type="checkbox"/> Not sure	

E. Additional Information Required for Interconnection Requests that Include Existing Energy Storage Devices <i>(e.g., batteries)</i>	
i. ESD Type	
ii. Number of ESDs	
iii. ESD Manufacturer(es)	
iv. ESD Model Number(s)	
v. ESD Max Capacity (kWh)	
vi. ESD Rated Discharge (kW)	
vii. ESD Max Discharge (kW)	
viii. Please list the devices used to limit discharge (if any) <i>(e.g., inverter, power control):</i>	
ix. Energy Storage Charging Function	
a. Rated Charge Load Demand (kW)	
b. Estimated annual Net Energy Usage* of the ESD (kWh) <small>*Net Energy Usage = (kWh input, including charging, storage device auxiliary loads, and losses) – (kWh output, including discharging)</small>	

(N)
|
|
|
(N)

**NET ENERGY METERING (NEM)
GENERATING FACILITY INTERCONNECTION
APPLICATION**

c. Will SCE's Distribution System be used to charge the ESD:		(N)
<input type="checkbox"/> Yes <input type="checkbox"/> No		
If no: Provide technical description of control systems including:		
<ul style="list-style-type: none">• Source of energy for charging:		
<ul style="list-style-type: none">• Mechanism to prevent charging from the Distribution System:		
If yes: Will charging the ESD increase the host facility's existing peak load demand?		
<input type="checkbox"/> Yes <input type="checkbox"/> No		
If yes: Provide the following load information:		
<ul style="list-style-type: none">• Amount of added peak demand (kW):		
If no: Provide technical description of control systems, including:		
<ul style="list-style-type: none">• Charging periods:		
<ul style="list-style-type: none">• Mechanism to prevent charging from the Distribution System during host facility peak:		(N)

Section 8 – Safety and Consumer Protection Acknowledgements

This section is applicable to Customers requesting service on Schedules NEM-ST, MASH-VNM-ST or NEM-V-ST.

A. Equipment Verification

- For Applicants with Solar Generating Facilities** - By checking this box, Applicant verifies that all major solar system components (including PV panels and other generation equipment, inverters and meters) are on the verified equipment list maintained by the California Energy Commission. This requirement is subject to additional verification by SCE.

Note: For all Generating Facilities, SCE may require the Applicant to verify that other equipment, as determined by SCE, has safety certification from a NRTL.

B. Warranty Verification

- By checking this box, Applicant verifies that a warranty of at least 10 years has been provided on all equipment and the installation of that equipment. In appropriate circumstances conforming to industry practice, satisfaction of this requirement may rely on manufacturers' warranties for equipment and separate contractors' warranties for workmanship (i.e., installation). Warranties or service agreements conforming to requirements applicable to the Self-Generation Incentive Program (SGIP) may be used to satisfy this requirement for Generating Facilities with technologies eligible for the SGIP. This requirement is subject to additional verification by SCE.

**NET ENERGY METERING (NEM)
GENERATING FACILITY INTERCONNECTION
APPLICATION**

SECTION 9 – Additional Information

(P)

Please refer to the NEM Interconnection Handbook for a complete list of technical information that is required when submitting this Application. The NEM Interconnection Handbook can be found at <http://www.sce.com/nem> under the “NEM Forms and Documents” section. All drawings must conform to accepted engineering standards and must be legible. 11” x 17” drawings are preferred.

Please also refer to the NEM Application Checklist on <http://www.sce.com/nem> for additional forms that may be required based on your interconnection request.

Finally, please indicate here if there are additional existing generating facilities located on the same Premises (but not behind the same SCE revenue meter) as the NEM Generating Facility that is seeking interconnection pursuant to this Application.

Section 10 – Submittal Instructions and Assistance

(P)

Completed applications must be submitted via SCE’s online application tool, which can be accessed at <https://sceinterconnect.powerclerk.com/Account/Login>.

(P)

(P)

All NEM Projects (except NEM-MT)

If you have questions or need assistance in completing this application, please call SCE’s NEM team at (866) 600-6290.

NEM-MT (Multiple Tariff) Projects

If you have questions or need assistance in completing this NEM-MT Application, please contact SCE for Distributed Generation at (626) 302-3688 or email interconnectionQA@sce.com.

(P)

**NET ENERGY METERING (NEM)
GENERATING FACILITY INTERCONNECTION
APPLICATION**

Appendix A – Instructions for Completing Sections 6 and 7	
Manufacturer	Enter the brand name of the generator.
Model Number	Enter the model number assigned by the manufacturer of the generator.
Technology Type	<ul style="list-style-type: none"> • For <i>Schedules NEM, NEM-ST, NEM-V and NEM-V-ST</i>: biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and any additions or enhancements to the facility using that technology. • For <i>Schedules MASH-VNM and MASH-VNM-ST</i>: Solar PV • For <i>Schedule FC-NEM</i>: Fuel Cells
CEC-AC Nameplate Rating	<p>For NEM generating facilities, this value is the CEC-AC Net Nameplate Rating and is not the same as the Net Nameplate that accounts for auxiliary loads or station service loads. The calculations used are as follows:</p> <p>Technology CEC-AC Nameplate Calculation</p> <p>Solar PV (Qty of Modules) x (PTC Rating) x (Inverter Efficiency %) / 1000 = ____ kW</p> <p>Wind (Qty of Turbines) x (Power Output) x (Inverter Efficiency %) / 1000 = ____ kW</p> <p>Fuel Cell (Qty of Cells) x (Rated Output) x (Inverter Efficiency %) / 1000 = ____ kW</p>
Gross AC Nameplate Rating	This is the capacity value normally supplied by the manufacturer and stamped on the Generator's nameplate.
Estimated Monthly Production	Example (solar): CEC-AC kW * 720 hours * 0.2 (solar) = Estimated Monthly kWh; the factors for other technologies can be found in the NEM Interconnection Handbook.
Inverter Manufacturer	Enter the brand name of the inverter.
Inverter Model Number	Enter the model number assigned by the manufacturer of the inverter.
Module Manufacturer	Enter the brand name of the modules.
Module Model Number	Enter the model number assigned by the manufacturer of the modules.
Mounting Method	Applicable to solar generating facilities.
Tracking Type	Applicable to solar generating facilities.
NRTL Certification	Answer "yes" only if the generator manufacturer can or has provided certification data. Please see SCE's Rule 21, Section L for additional information regarding this certification.
Prime Mover Type	Please indicate the type and fuel used as the prime mover or source of energy for the generator.
Generator Software Version	If the 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.
Inverter Software Version	If the 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.
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 provide both.

(P)

(P)

(P)

**NET ENERGY METERING (NEM)
GENERATING FACILITY INTERCONNECTION
APPLICATION**

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 provide both. For NEM generating facilities, the "gross" value is DC power.
Net Nameplate Rating (kW)	<ul style="list-style-type: none"> • For NEM generating facilities, this value is the CEC-AC Net Nameplate Rating and is not the same as the Net Nameplate that accounts for auxiliary loads or station service loads. • For non-NEM generating facilities (e.g., those included in an NEM-MT installation), 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.
Operating Voltage	This value should be the voltage rating designated by the manufacturer and used in the Generator. Please indicate phase-to-phase voltages for 3-phase installations. See SCE's Rule 21, Section H.2.b. for additional information.
Power Factor (PF) Rating	This value should be the nominal power factor rating designated by the manufacturer for the Generator. See SCE's Rule 21, Section H.2.i. for additional information.
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 H.2.i.
Wiring Configuration	Please indicate whether the Generator is a single-phase or three-phase device. See SCE's Rule 21, Section H.3.
3-Phase Winding Configuration	For three-phase generating units, please indicate the configuration of the Generator's windings or inverter systems.
Neutral Grounding System Used	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.
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.
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.
For Synchronous Generators	If the Generator is a "synchronous" design, please provide the synchronous reactance, transient reactance, and subtransient reactance values supplied by the manufacturer along with the Gross kVA Nameplate Rating or Base kVA, if different. 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.

**NET ENERGY METERING (NEM)
GENERATING FACILITY INTERCONNECTION
APPLICATION**

For Induction Generators	If the Generator is an “induction” design, please provide the locked rotor current value supplied by the manufacturer along with the Gross kVA Nameplate Rating or Base kVA, if different. If this value is not available, the stator resistance, stator leakage reactance, rotor resistance, and rotor leakage reactance values supplied by the manufacturer may be used to determine the locked rotor current.
For Generators started as Motors	This information is needed only for Generators that are started by “motoring” the generator. See SCE’s Rule 21, Section G.1.c. and Section L.3.d for significance and additional information.