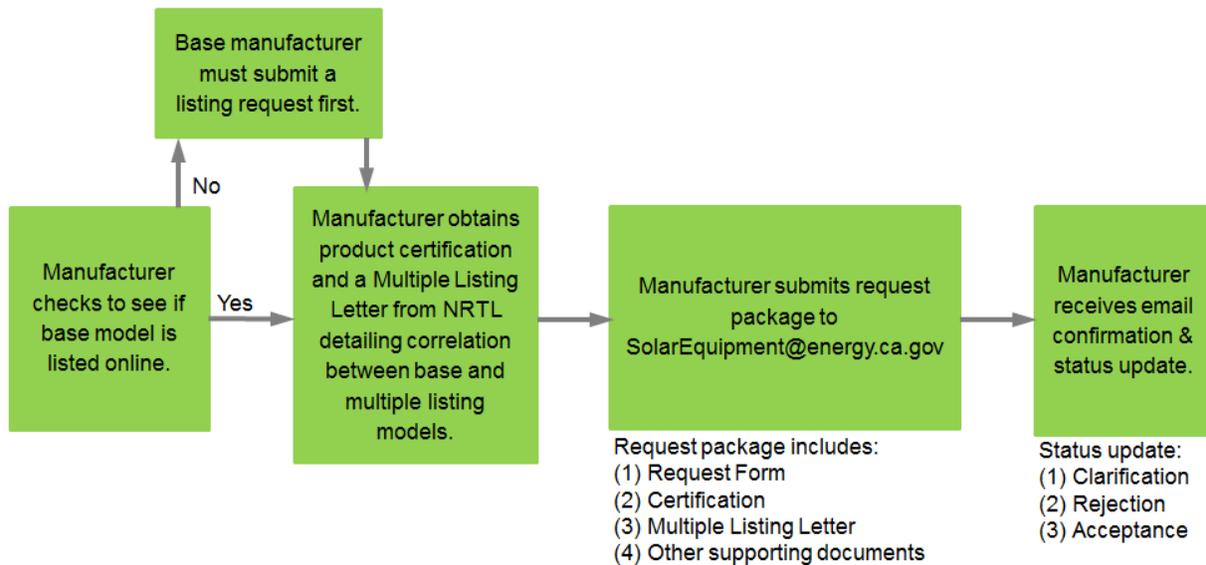


# Multiple Listing Request Instructions



## General Guidance for Multiple Listing Request:

- Requirements are detailed in the [Guidelines for California's Solar Electric Incentive Programs \(Senate Bill 1\), Seventh Edition](#)
- **Equipment manufacturer must submit the request.**
- Reports and documents must be written in English.
- Submit all the required documentation **in a single email**. Incomplete requests will be rejected and will lose their place in the review queue; a complete request must then be resubmitted.
- Requests containing falsified reports or altered forms will be rejected. The equipment may be permanently prohibited from inclusion on the list, and the manufacturer permanently prohibited from having equipment listed.
- Refer to [California Energy Commission website](#) for additional instructions, examples, and best practices to avoid common mistakes.
- **Data and information submitted to the Energy Commission are public record. Do not submit any proprietary or confidential information. Proprietary or confidential information on required documents must be redacted or omitted prior to submission.**

**NOTE: Prior to the approval of each model number requested for multiple listing, the associated base listed model number must be approved to be included on the Solar Equipment Lists or already be listed.**

- **If some of the base listed model numbers are not listed, the base manufacturer must submit a complete request for those models. This request may be submitted prior to or concurrently with the multiple listing request.**
- **If any of the base model numbers are not already listed or approved, the associated multiple listing model numbers will be rejected.**
- **Refer to the [PV Module](#) and [Inverter](#) instructions for instructions.**

## **Document Requirements for a PV Module Listing Request:**

### **1. Required Request Documents**

The multiple listing manufacturer submits the listing request **in a single e-mail** to [SolarEquipment@energy.ca.gov](mailto:SolarEquipment@energy.ca.gov). Include a subject line stating the purpose of the equipment request (new or revised), the equipment type (PV Module), and the manufacturer's name. Attach to the e-mail all required documentation:

- a) PV Module Listing Request Form.
- b) Nationally Recognized Testing Laboratory (NRTL) safety certification(s) to either:
  - UL 1703 from a NRTL whose OSHA Scope of Recognition includes UL 1703.<sup>1</sup>
  - UL 61730 from a NRTL whose OSHA Scope of Recognition includes either UL 1703 or UL 61730.

**Please note that starting January 1, 2020, only safety certification to UL 61730 will be accepted.**

- c) Documentation from NRTL correlating multiple listing model numbers to base listing models.
- d) Additional supporting documentation, as required by Energy Commission staff. Please note that submitted information is public record; **do not submit any proprietary or confidential information.**

### **2. Minimum Criteria for Safety Certification**

The safety certification(s) document must meet the requirements outlined below.

- a) Signed or stamped and dated by NRTL.

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<sup>1</sup> A current list of NRTLs approved by OSHA, along with their recognized scopes, can be found on the OSHA website.

- b) Indicates the UL 1703 or UL 61730 standard and Source Requirement Documents (SRDs) for the test.
- c) Issued to the multiple listing manufacturer.
- d) Specifies the requested multiple listing model number(s) are certified.
- e) Defines all the wildcards in model number(s).

### **3. Minimum Criteria for Correlation Documentation**

The submitted document(s) must meet the requirements outlined below. Examples of documentation containing appropriate correlation information are: the UL 1703 or UL 61730 test report summary, UL 1703 or UL 61730 certificate, or a letter from the NRTL. The document must meet the following:

- a) Signed or stamped and dated by NRTL.
- b) Indicate the base manufacturer and all of their model numbers.
- c) Correlate each base model number(s) to the respective multiple listed model number(s).

### **Instructions for Completing the PV Module Request Form**

Download the latest version of the [PV Module Listing Request Form](#). Complete all of the required fields.

- a) List the multiple listing manufacturer's legal name (as listed on the certification). Any company name differences must be clarified through a signed letter submitted on the company's letterhead (see FAQs #1 below).
- b) Select the appropriate "Request Type", "Add or Revise Multiple Listings". This selection applies to all the groups in that request form. Use separate request forms for different request types (e.g. Addition, Revision, Multiple Listing, ACPV).
- c) Grouping of model numbers is not applicable to multiple listing model numbers. In Table 1, multiple listing model numbers may be entered into the same subgroup table even if they are not similar.
- d) Provide any additional information to further explain or clarify the details of each model number in the respective "Notes" section. Accurate and detailed notes will help prevent the need for clarification and ensure timely processing of the listing request.
- e) Table 2 is not required for multiple listing requests, and should be left blank. The test data will be copied over from the associated DC module.

- f) In the “Correlated Manufacturers” and “Correlated Model Numbers” fields, enter the base manufacturer and the associated base listed model number.
- g) In Table 3, in the description field, enter a description that meets the requirements below. Note: This description will be posted on the Energy Commission’s PV Module List. Do not include any marketing or subjective statements.
  - Power rating.
  - Module type (Monocrystalline, Polycrystalline, and Thin Film).
  - Backsheet color.
  - Definition of each wildcard. Wildcards in the model number are only acceptable for non-technical features that don't affect module performance such as frame type or connector type, but not power rating (see FAQs #4 below).

For example: 300W Monocrystalline module, black backsheet, “y” is wildcard for frame color (W for white or B for black).

- h) Identify the safety standard the model number is certified under, by selecting the applicable option from the dropdown in the “Safety Certification” field of Table 3. Select “Both” and provide safety certification document(s) for both standards if the model number is certified under both UL 1703 and UL 61730.
- i) Identify whether a certification to IEC 61215:2016 is included in the listing request, by selecting “Y” or “N” in the “Design Qualification” field. If “Y”, please provide the certification document(s) in the listing request. If you choose to not submit the certification, select “N”. Refer to the [PV Module Listing Instructions](#) for more information.
- j) Identify whether a test report for IEC 61853-1:2011 is included in the listing request, by selecting “Y” or “N” in the “Performance Evaluation” field. If “Y”, please provide the test report(s) in the listing request. If you choose to not submit the test report, select “N”. Refer to the [PV Module Listing Instructions](#) for more information.
- k) In Table 3, in the “Ac” field, enter the area (in square meters, m<sup>2</sup>), excluding the frame. This value should match the Ac value of the listed base DC module model number.
- l) Look at the notes in the cell headings for additional guidance.

## Document Requirements for an Inverter Listing Request

### 1. Required Request Documents

The multiple listing manufacturer submits the listing request **in a single e-mail** to [SolarEquipment@energy.ca.gov](mailto:SolarEquipment@energy.ca.gov). Include a subject line stating the purpose of the equipment request (new or revised), the equipment type (Inverter), and the manufacturer's name. Attach to the e-mail all required documentation:

- a) Inverter Listing Request Form.
- b) NRTL certification(s) to UL 1741 including Supplement SA from a NRTL whose OSHA Scope of Recognition includes UL 1741.<sup>2</sup>

**Please note that starting January 1, 2020, safety certification to UL 1741 including Supplement SA, or alternatively, safety certification to UL 1741 including IEEE 1547:2018, is required.**

- c) UL 1741 Supplement SA test report or test summary.
- d) Documentation from NRTL correlating multiple listing model numbers to base listing models.
- e) Additional supporting documentation, as required by Energy Commission staff. Please note that submitted information is public record; **do not submit any proprietary or confidential information.**

## **2. Minimum Criteria for Safety Certification**

The UL 1741 certification(s) must meet the requirements outlined below.

- a) The UL 1741 certification document.
  - Signed or stamped and dated by NRTL whose OSHA Scope of Recognition includes UL 1741.
  - Indicates the UL 1741 standard including Supplement SA, as well as Source Requirement Documents (SRDs) for the test.
  - Issued to the multiple listing manufacturer.
  - Specifies the requested multiple listing model number(s) are certified.
  - Specifies inverter type is “Grid Support Utility Interactive”.
- b) UL 1741 Supplement SA test report or test summary.
  - Signed or stamped and dated by the NRTL.
  - Indicates testing completed according to UL 1741 including the Supplement SA sections (SA8-SA15).
  - Specifies the test results are applicable to the requested multiple listing model number(s).
  - Specifies the firmware version(s) tested for grid support functionality (SA8-SA15).

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<sup>2</sup> A current list of NRTLs approved by OSHA, along with their recognized scopes, can be found on the OSHA website.

- To reflect **Reactive Power Priority (RPP)** information on the list, submit supporting language from the NRTL, either in the UL 1741 certificate, UL 1741 test report summary, or an additional document that meets the following minimum criteria:
  - Signed or stamped and dated by NRTL.
  - Specifies the model number(s) tested.
  - Verifies that the Volt/VAr test (UL 1741 SA13) has been completed with reactive power priority enabled.

**Note:** Separate documentation is not required if the certificate or test report meets the requirements.

### **3. Minimum Criteria for Correlation Documentation**

The submitted document(s) must meet the requirements outlined below. Examples of documentation containing the appropriate correlation information are: the UL 1741 test report summary, UL 1741 certificate, or a letter from NRTL. The document must meet the following:

- a) Signed or stamped and dated by NRTL.
- b) Indicate the base manufacturer and all of their model numbers.
- c) Correlate each base model number to the respective multiple listed model number(s).

**Note:** This document allows the ML model numbers to use the performance test results of correlated base models, obtained from the Sandia testing protocol.

### **Instructions for Completing the Inverter Request Form**

Download the latest version of the [Inverter Listing Request Form](#). Complete all boxes and fields or explain in the Request Form Notes why a field is not applicable.

- a) List the multiple listing manufacturer's legal name (as listed on the certification). Any company name differences must be clarified through a signed letter submitted on company letterhead (see FAQs #1 below).
- b) Enter all of the firmware version(s) that were tested for grid support functionality (SA8-SA15). This information must match the UL 1741 test report summary.
- c) In the "Safety Certification" section, fill in the document(s) name and the associated page number(s) for the reactive power priority information. For example, "Test Report number 12345" and "page 13 of 20".

- d) In the “Safety Certification” section, complete the table correlating the inverter model numbers with the test report numbers and dates. These report numbers should match the submitted documents; mismatched information may require clarification which in turn would delay the review and processing of the request.
- e) In the “Communications Conformance” section, if applicable enter the name of the entity that issued the certificate or compatibility report.
- f) Complete the Multiple Listing Cross-Reference section. Be sure to include each individual base listed model number corresponding with the appropriate requested multiple listings.
- g) Provide any additional information to further explain or clarify the request in the “Notes” section. Accurate and detailed notes will help prevent the need for clarification and ensure timely processing of the listing request without further delays.

## **Instructions for Submitting Optional Documentation with an Inverter Listing Request**

The multiple listing manufacturer may submit, as a part of the listing request, extra document(s) to demonstrate additional functionality. If submitted, the information will be evaluated by Energy Commission staff. Upon approval of the listing request, Energy Commission staff will indicate that the model numbers have completed the optional certification or testing on the Energy Commission’s Solar Equipment Lists. The documents that will be accepted are:

- a) Test report summary for UL 1741 including UL Certification Requirement Decision (CRD) (dated October 22, 2019).
- b) Certification of the inverter to the Common Smart Inverter Profile (CSIP).
- c) NRTL report for inverter compatibility with CSIP-certified gateway.
- d) Attestation for Scheduling and Monitor Key Data functions.

### **Minimum Criteria for Optional Document(s)**

The entity issuing the document(s) must meet the following qualifications:

- a) Test report summary for **UL 1741 including UL Certification Requirement Decision (CRD)**.
  - o The laboratory is recognized by the OSHA NRTL program.
  - o The laboratory’s OSHA Scope of Recognition includes UL 1741.
- b) Certification of the inverter to **Common Smart Inverter Profile (CSIP)** (One of the following):

- A laboratory recognized by the OSHA NRTL program.
  - SunSpec Alliance.
  - A laboratory approved by SunSpec Alliance.
- c) NRTL report for inverter compatibility with CSIP-certified gateway:
- A laboratory recognized by the OSHA NRTL program.
  - A laboratory approved by SunSpec Alliance.

Any document(s) provided to support the indication of optional functionality must include the following:

- a) Test report summary for **UL 1741 including UL Certification Requirement Decision (dated October 22, 2019)**.
- Signed or stamped and dated by the NRTL.
  - Indicates testing completed according to UL 1741 Supplement SA and the CRD sections (SA8-SA18).
  - Specifies the test results are applicable to the multiple listing model number(s).
  - Specifies the firmware version(s) tested for grid support functionality (SA8-SA18).
- b) Certification of the inverter to the **CSIP**.
- Signed or stamped and dated by the certifying entity.
  - Specifies the multiple listing model number(s) certified.
  - Indicates testing met the Common Smart Inverter Profile according to the *SunSpec Common Smart Inverter Profile (CSIP) Conformance Test Procedures*.
- c) NRTL report for inverter compatibility with CSIP-certified gateway.
- Signed or stamped and dated by the NRTL.
  - Specifies the multiple listing manufacturer name.
  - Specifies the inverter model number(s) tested with a CSIP-compliant gateway.
  - Specifies the test results are applicable to the multiple listing model number(s).
  - Specifies the inverter(s) were tested according to CPUC Resolution E-5000 approved testing pathway (as modified by Resolution E-5036).
- d) Attestation for Scheduling and Monitor Key Data functions.
- Signed and dated by an authorized representative of the multiple listing manufacturer.
  - Completed according to the approved template.
  - Specifies all the multiple listing inverter model numbers.

## FAQs

### 1. What if I want my equipment listed under a different manufacturer name than the name on my certification?

If a manufacturer wants equipment listed under a different manufacturer name, the manufacturer must submit a letter containing the information listed below:

- Submitted on company letterhead.
- Signed and dated by an authorized representative of the company.
- The legal name of the manufacturer (from the certification).
- The name that manufacturer wants to use for equipment listing purposes.
- The reasoning behind the request (for example, a manufacturer may want to list the brand name instead).
- An explanation of all manufacturer name variations found on the submitted documents and the relation between each manufacturer name and the manufacturer name reported on the certification (parent company, subsidiary, etc.).

### 2. Do I need my own certification and test report?

Multiple listing model numbers require their own certification with the appropriate standard (UL 1703, UL 61730, or UL 1741) listed on the certificate. However, a performance test report to IEC 61215 (for PV modules) or the Sandia test protocol (for inverters) is not required for the multiple listing. The report submitted by the base manufacturer will be used as a reference for the technical details.

### 3. Do I need my own documents to include advanced functionality information for my inverter model numbers?

Yes. If you choose to submit the optional documents for additional inverter functionality, they must contain the multiple listing manufacturer's name and all the requested multiple listing model numbers.

### 4. Will the Solar Equipment Lists reflect that I am a multiple listing?

No, the manufacturer name and model number of the base equipment will not be noted on the multiple listing model numbers.

### 5. How do I know my request has been received?

The Energy Commission sends a confirmation email upon receipt of an equipment listing request. A unique request ID number ("R number") will be assigned to each request and will be included in the confirmation email.

### 6. What if I have questions or need updates on my request?

You can contact the Solar Equipment Call Center at (916) 654-4120 or [SolarEquipment@energy.ca.gov](mailto:SolarEquipment@energy.ca.gov) for any equipment listing questions. Please reference your "R" number to help Energy Commission staff identify the specific request. Manufacturers also receive email notifications from the Energy Commission when the status of a request changes or decisions (approval, clarification needed, or rejection) are made.

### 7. How does the Energy Commission process my request?

Requests are processed on a first-in, first-out basis, and involve a 2-phased process: Phase 1 consists of an administrative screening, and Phase 2 consists of a technical evaluation. Only those requests

that pass administrative screening will be reviewed for technical evaluation. Requests that are complete and accurate on their first submission take typically no more than 45 days to be approved from the date the request was received. If clarification or additional information is required, or the request is rejected because of omissions or deficiencies, the Energy Commission will typically notify the manufacturer within 30 days. Requests that require clarification will take longer to complete than complete and accurate requests, and may take significantly longer than the 45-day timeline to complete the review and posting of approved equipment on the Energy Commission's Solar Equipment Lists. The Energy Commission updates the solar equipment lists three times a month, typically on the 1<sup>st</sup>, 11<sup>th</sup>, and 21<sup>st</sup> of the month, or the first business day thereafter.