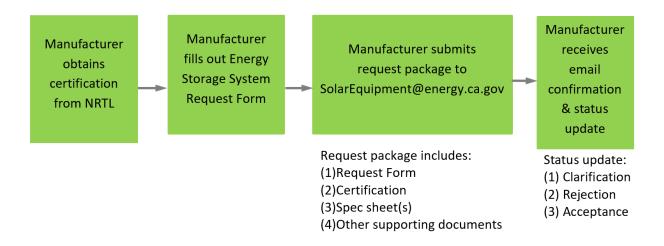
# **Energy Storage System (ESS) Listing Request Instructions**



# **General Guidance for Energy Storage System Listing Request:**

- Requirements are detailed in the <u>Guidelines for California's Solar Electric Incentive Programs</u> (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 the <u>California Energy Commission website</u> for additional instructions, examples, and best practices to avoid common mistakes.
- NOTE: 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.

# Procedure for Submitting an Energy Storage System Listing Request:

#### 1. Required Request Documents

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

- a) Energy Storage System Listing Request Form.
- b) Nationally Recognized Testing Laboratory<sup>1</sup> (NRTL) certification(s) to UL 9540<sup>2</sup>.
- c) Manufacturer's spec sheet(s) for all the requested model number(s).
- Additional supporting documentation, such as the UL 9540 test report, 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 UL 9540 Safety Certification

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

- Signed or stamped and dated by NRTL.
- Indicates the UL 9540 standard and Source Requirement Documents (SRDs) for the test.
- Specifies the requested model number(s) certified.
- Defines all the wildcards in model number(s).

## Instructions for Completing the Energy Storage System Request Form

Download the latest version of the <u>Energy Storage System Listing Request Form</u>. Complete all boxes and fields or explain in the Request Form Notes why a field is not applicable.

- a) List the 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) For "Maximum Continuous Discharge Rate", enter the value from the model number(s) spec sheet(s). The value must match the manufacturer's spec sheet(s); otherwise, this value will be defaulted to zero.

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

<sup>&</sup>lt;sup>2</sup> Per SB 1 Guidelines, only energy storage system that store energy via electrochemical means as defined in UL 9540 qualify for the Energy Storage System List.

c) 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 Energy Storage System Listing Request

The 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) Testing and certification to UL 1741 including Supplement SA.
- b) Test report summary for UL 1741 Supplement SA, sections SA17 and SA18.
- c) Certification to UL 1741 including Supplement SB.
- d) Certification of the ESS or integrated inverter to the Common Smart Inverter Profile (CSIP).
- e) NRTL report for the ESS or integrated inverter compatibility with CSIP-certified gateway.
- f) Attestation for Scheduling and Monitor Key Data functions (not needed if certified <u>only</u> to UL 1741 Supplement SB).

Documentation of advanced functionality that refers to an inverter component of the requested energy storage system(s), not the requested ESS model numbers, may also be accepted. However, the manufacturer must then provide a NRTL-issued document showing that the inverter model number is a component of the requested energy storage system(s).

**Note**: If the referenced inverter component is already on the Grid Support Inverter List, the documents outlined in bullets a) through f) above do not need to be submitted again.

#### 1. Minimum Criteria for Optional Document(s)

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

#### a) Certification to UL 1741 including Supplement SA

- The laboratory is recognized by the OSHA NRTL program
- The laboratory's OSHA Scope of Recognition includes UL 1741
- b) Test report summary for UL 1741 Supplement SA, sections SA17 and 18.
  - The laboratory is recognized by the OSHA NRTL program.
  - The laboratory's OSHA Scope of Recognition includes UL 1741.
- c) Certification to UL 1741 including Supplement SB

- The laboratory is recognized by the OSHA NRTL program
- o The laboratory's OSHA Scope of Recognition includes UL 1741
- d) Certification 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
- e) NRTL report for the ESS or integrated 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) Certification to UL 1741 including Supplement SA.
  - o Signed or stamped and dated by the NRTL.
  - Indicates the UL 1741 standard including Supplement SA, as well as Source Requirement Documents (SRDs) for the test.
  - Specifies the requested model number certified.
  - Specifies inverter type is "Grid Support Utility Interactive".
  - o <u>Submitted in conjunction:</u> a 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 model number tested.
    - Specifies the firmware version(s) tested for grid support functionality (SA8-SA15).
  - 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 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.

- b) Test report summary for UL 1741 Supplement SA, sections SA17 and SA18.
  - Signed or stamped and dated by the NRTL.

- Indicates testing completed according to UL 1741 Supplement SA (SA8-SA18).
- Specifies the model number tested.
- Specifies the firmware version(s) tested for grid support functionality (SA8-SA18).
- c) Certification to **UL 1741 including Supplement SB**.
  - Signed or stamped and dated by NRTL whose OSHA Scope of Recognition includes UL 1741.
  - Indicates the UL 1741 (3<sup>rd</sup> Edition) standard including Supplement SB, as well as Source
    Requirement Documents (SRDs) for the test (e.g., compliance with California Rule 21).
  - $\circ$   $\;$  Indicates compliance with IEEE 1547:2018 and IEEE 1547.1:2020.
  - Specifies the requested model number(s) certified.
  - Defines all the wildcards in model number(s).
  - Specifies inverter type is "Grid Support Utility Interactive".
- d) Certification to the Common Smart Inverter Profile (CSIP).
  - Signed or stamped and dated by the certifying entity.
  - Specifies the model number tested.
  - Indicates testing met the Common Smart Inverter Profile according to the SunSpec Common Smart Inverter Profile (CSIP) Conformance Test Procedures.
- e) NRTL report for the ESS or integrated inverter compatibility with CSIP-certified gateway.
  - Signed or stamped and dated by the NRTL.
  - Specifies the ESS or integrated inverter manufacturer name.
  - Specifies the ESS or integrated inverter model number tested with a CSIP-compliant gateway.
  - Specifies the ESS or integrated inverter was tested according to CPUC Resolution E-5000 approved testing pathway (as modified by Resolution E-5036).
- f) Attestation for Scheduling and Monitor Key Data functions (not needed if certified only to UL

#### 1741 Supplement SB).

- Signed and dated by an authorized manufacturer representative.
- Completed according to the approved template.
- Specifies all the model numbers.

## 2. Instructions for Submitting Optional Documentation for JA12

Joint Appendix 12 (JA12) of the 2022 Building Energy Efficiency Standards provides the requirements for a battery energy storage system, in combination with an on-site photovoltaic system, to qualify for compliance credit towards meeting the required energy budget. Please contact the Title 24 Hotline at (916) 654-5106 or <u>Title24@energy.ca.gov</u> for instructions on how to fill out the declaration form and for inquiries related to JA12.

**Note:** If submitting a request for JA12, your request must include all the required documents identified in the "Required Request Documents" section (located on page 2), in addition to the required JA12 documentation. All documentation must be submitted **in a single email**.

### 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. What is the definition of an energy storage system (ESS)?

The seventh edition of SB 1 Guidelines defines a battery energy storage system as an electric power system that receives electrical energy, and means to store that energy via electrochemical means as defined in UL 9540. These systems typically include batteries, inverter, energy management system, electrical circuits, and other electrical components, all together in one system.

# 3. Why is the Energy Commission including UL 1741 SA or UL 1741 SB information on the energy storage system list?

As a piece of interconnection equipment, energy storage systems are required to meet smart inverter functionality requirements in investor owned utilities' territories. Although submitting this information to the Energy Commission is optional, it helps the utilities to streamline interconnection applications by serving as a data source for this information.

## 4. How can I add another firmware version to the equipment which are already on the list? You must obtain a new test report for UL 1741 SA that includes the new firmware version tested. You also need to provide the currently active UL 1741 (including Supplement SA) and UL 9540 certificates for the related model numbers if any revision to the certificate(s) was needed based on NRTL's input. Please note that only firmware version(s) tested for UL 1741 Supplement SA sections SA8–SA15 will be reflected.

5. How can I demonstrate that my equipment has completed the testing for reactive power priority? You must send a listing request to revise the information on the list. The listing request must include a completed request form, the currently active UL 1741 Supplement SA certificate, the currently active UL 9540 certificate, and a document that meets the RPP requirements specified in Page 4 of this document. Please note this is only related to UL 1741 Supplement SA testing.

- 6. How can I demonstrate that my equipment has completed the testing for CPUC Rule 21, Phase 2? You must send a listing request to revise the information on the list. The listing request must include a completed request form, the currently active UL 9540 certificate, the currently active UL 1741 certificate including Supplement SA, and either 1) a certification of the energy storage system or the integrated inverter to the CSIP, or 2) a report demonstrating the energy storage system or integrated inverter is compatible with a CSIP-compliant gateway in accordance with CPUC Resolution E-5000.
- 7. How can I demonstrate that my equipment has completed the testing for CPUC Rule 21, Phase 3, functions 1 & 8, utilizing Supplement SA documents?

You must send a listing request to revise the information on the list. The listing request must include a completed request form, the currently active UL 1741 certificate including Supplement SA, and the completed attestation template, as instructed in this document. Please note if utilizing Supplement SB information to satisfy Rule 21 interconnection requirements, this attestation will not be required.

8. How can I demonstrate that my equipment has completed the testing for CPUC Rule 21, Phase 3, functions 2 & 3, utilizing Supplement SA documents?

You must send a listing request to revise the information on the list. The listing request must include a completed request form, the currently active UL 1741 certificate including Supplement SA, and a UL 1741 test report summary that shows the equipment has passed sections SA17 and SA18 testing.

9. How can I demonstrate that my equipment has completed the testing for CPUC Rule 21, Phase 3, functions 5 & 6, utilizing Supplement SA documents?

You must send a listing request to revise the information on the list. The listing request must include a completed request form, the currently active UL 1741 certificate including Supplement SA, and a UL 1741 test report summary that shows the equipment has passed sections SA14 and SA15 testing. Additionally, the currently active UL 9540 certificate must be provided.

# **10.** Can I submit documents to reflect information related to both UL 1741 Supplement SA and Supplement SB?

Yes, you can choose to reflect related information to either/both UL 1741 Supplement SA or/and UL 1741 Supplement SB. Please note that it is important you verify with the applicable utility, AHJ, or responsible entity whether a specific inverter contains the level of functionality required by their "smart inverter" definition.

### 11. 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.

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

You can contact the Solar Equipment Contact Center at (916) 654-4120 or <u>SolarEquipment@energy.ca.gov</u> 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 (acceptance, clarification needed, or rejection) are made.

#### 13. What if I have questions regarding the JA12?

You can contact the Title 24 Hotline at (916) 654-5106 or <u>Title24@energy.ca.gov</u> for any JA12 questions. Please reference your "R" number to help Energy Commission staff identify the specific request.

#### 14. 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.