



## Meter Socket Adapter Program Evaluation Process Guide

### Program Overview and Goals

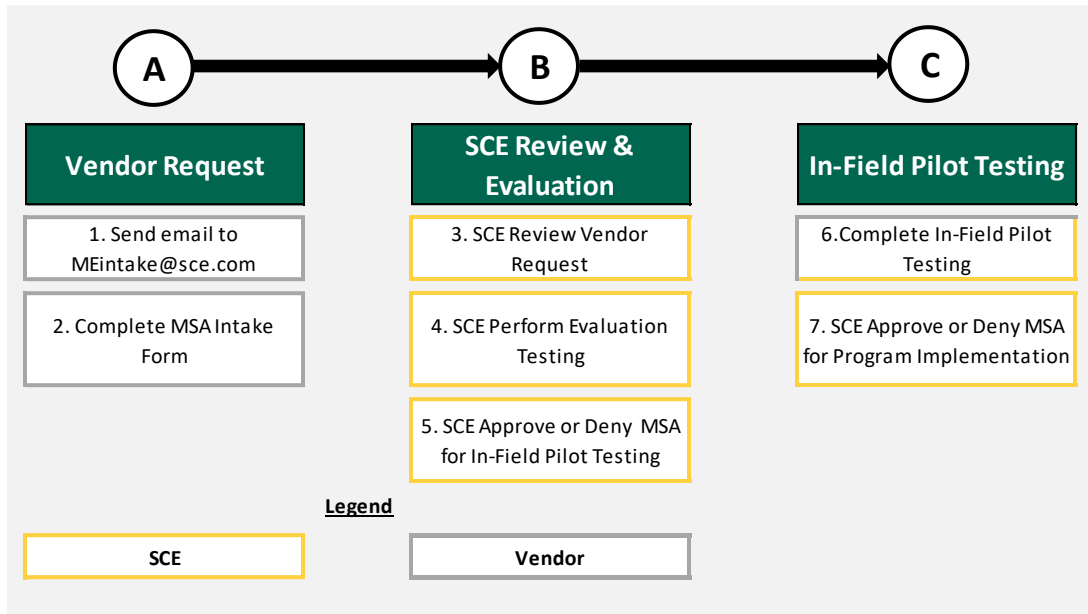
The Meter Socket Adapter (MSA) Program is designed to facilitate the installation and/or removal of customer-owned MSAs (which may or may not provide electrical isolation capabilities) without modification of the residential panel for eligible customers. The primary goal of the MSA Program is to support the transition to a more efficient and sustainable energy infrastructure by expanding customer access to energy products that make installation faster, easier, and more affordable. Traditional installation of distributed energy resources and electric vehicle (EV) charging equipment often requires re-wiring of the main panel, resulting in costly installation. Instead, the MSA Program offers an installation option that will help customers avoid rewiring of the panel or panel upgrades when adding loads, such as distributed energy resources and EV charging equipment. MSAs are installed as an extension of the customer's meter cabinet, providing a safer installation by eliminating the need to enter or modify the service panel and saving customers time and money compared to the traditional method. To participate, customers must choose to install an SCE approved product, a list of which can be found on [SCE's MSA Approved Product List \(APL\)](#).

### Adding a New Device to the Approved Product List

For a new MSA device (whether isolating or non-isolating) to be added to the MSA APL, manufacturers are required to have their device complete a SCE review, evaluation, and pilot testing period. This process is outlined in detail in the section below. In addition, [Frequently Asked Questions](#) are available at the end of the document.

# Detailed Process Flow for Device Approval

Process Diagram:



## A. Vendor Request

1. Send email to MEintake@sce.com	
<b>Description</b>	Vendor emails <b>MEintake@sce.com</b> to start evaluation process.
<b>Vendor Activities</b>	Email <b>MEintake@sce.com</b> to request MSA Intake Form
<b>Documents Required</b>	None.
<b>SCE Activities</b>	Provide vendor with MSA Intake Form.

Vendors should send an email to **MEintake@sce.com** requesting an MSA Intake Form. Once the MSA Intake Form has been filled out and submitted to SCE, the evaluation process may begin. SCE generally responds to requests within three to four business days of receipt.

<b>2. Complete MSA Intake Form</b>	
<b>Description</b>	Manufacturer/vendor completes the MSA Intake Form.
<b>Vendor Activities</b>	<ul style="list-style-type: none"> <li>• Fill out MSA Intake Form (including Product and Equipment Checklist)</li> <li>• Send physical items listed in the Product and Equipment Checklist to the Meter Engineering Supervisor at the specified address</li> </ul>
<b>Documents Required</b>	<ul style="list-style-type: none"> <li>• Technical Reference Guides for hardware</li> <li>• Technical Reference Guides for functionality</li> <li>• List of all standards the device adheres to</li> <li>• External Certification reports</li> <li>• All final internal testing reports</li> </ul>
<b>SCE Activities</b>	None.

During this stage, vendors should complete the MSA Intake Form (including the Product and Equipment Checklist) and submit it along with all supporting documents to [MEintake@sce.com](mailto:MEintake@sce.com). The Product and Equipment Checklist requires that the following items are included in the submission: eight production-ready samples, all associated software, and tools for operating the evaluation units. All items listed in the Product and Equipment Checklist of the Intake Form must be sent to the Meter Engineering Supervisor at the address below:

Meter Engineering Supervisor  
 Meter Shop, SSID Admin Building  
 7300 Fenwick Lane  
 Westminster, CA 92683

Please be aware that the items shipped to Meter Engineering may be returned damaged due to the destructive nature of the evaluation testing.

## B. SCE Review & Evaluation

<b>3. SCE Review Vendor Request</b>	
<b>Description</b>	SCE Meter Engineering department reviews request.
<b>Vendor Activities</b>	None.
<b>Documents Required</b>	None.
<b>SCE Activities</b>	SCE Meter Engineering department reviews request to ensure that all technical documents have been received from the vendor. Meter engineering identifies if the MSA device has an isolation switch, which requires additional levels of review.

SCE reviews device documentation and performs a preliminary technical assessment, ensuring the vendor delivers evaluation samples and necessary tools to complete the evaluation. SCE’s review of the vendor request generally takes one month to complete. After SCE’s review is complete, SCE will notify the vendor if their submission was accepted for evaluation testing.

If necessary, SCE will request additional documentation from the vendor.

<b>4. SCE Perform Evaluation Testing</b>	
<b>Description</b>	SCE performs evaluation testing.
<b>Vendor Activities</b>	None.
<b>Documents Required</b>	None.
<b>SCE Activities</b>	Conduct safety and functional testing, identify any gaps for additional testing, and create internal SCE field bulletins if minimum requirements are met.

Once SCE approves the vendor request, SCE’s Meter Engineering – Product Testing and Evaluation team will perform evaluation testing on the device. During this phase, SCE typically evaluates the device’s operational safety, compliance with industry standards, performance in extreme conditions specific to the service territory, and the reliability of the technology. Typically, evaluation testing takes approximately three months to complete. If the evaluation process is terminated by SCE without approving the device, or because the evaluation process extends beyond six months without approval, both SCE and the vendor must submit an informational filing to the California Public Utilities Commission (CPUC) detailing the progress and reasons for the delay.

For isolating devices that enable microgrid use case, SCE will require and witness additional functional testing at the vendor lab to evaluate compliance with Rule 21 Microgrid Operational Requirements as defined under Section Hh.1.h. SCE’s Generation and Microgrid Interconnection team will provide guidance on the functional testing of isolating devices that are intended for use with the specific distributed generation equipment. Vendors will be responsible for developing a detailed test plan based on their system configuration.

<b>5. SCE Approve or Deny MSA for In-Field Pilot Testing</b>	
<b>Description</b>	SCE notifies the vendor if the device has been approved or denied for In-Field Pilot Testing
<b>Vendor Activities</b>	None.
<b>Documents Required</b>	None.
<b>SCE Activities</b>	Notify vendor of device approval or denial.

SCE's Product Testing and Evaluation team will inform the vendor via email if the device has been approved to move forward with in-field pilot testing. If the device does not meet minimum requirements during the evaluation phase, it may be disapproved, and the vendor will be notified of the next steps.

### C. In-Field Pilot Testing

<b>6. Complete In-Field Pilot Testing</b>	
<b>Description</b>	Device enters the in-field pilot testing period.
<b>Vendor Activities</b>	<ul style="list-style-type: none"> <li>• Attend Pilot Kickoff meeting</li> <li>• Sign the Vendor Agreement</li> <li>• Provide list of sites to be used for pilot testing</li> <li>• Coordinate pilot site customers/contractors submitting a request in the <b>program enrollment portal</b></li> </ul>
<b>Documents Required</b>	<ul style="list-style-type: none"> <li>• Vendor Agreement</li> <li>• List of sites to use for pilot testing</li> <li>• Forecast of upcoming site installations</li> </ul>
<b>SCE Activities</b>	<ul style="list-style-type: none"> <li>• SCE program team schedules Pilot Kick-off meeting with vendor to go over vendor agreement &amp; site forecast</li> <li>• SCE Meter Operations coordinates any in-person training(s) with the vendor (if needed)</li> <li>• SCE Meter Operations completes in-field installations to test the device for approval</li> </ul>

Once a device is approved to begin in-field pilot testing, the SCE Customer Generation program team will schedule a Pilot Kick-Off call with the vendor to go over the vendor agreement, coordinate any installation training sessions (if needed), request a list of sites to be used for in-field testing, and educate the vendor on how to submit requests in the program enrollment portal. For pilot testing to begin, the vendor will first need to sign and execute the vendor agreement. SCE will then need to review a list of sites that can be used for pilot testing so SCE can ensure that a variety of field conditions are being tested across the various sites.

In addition, before in-field pilot testing may begin, SCE's Meter Operations team will work with the vendor to schedule training(s) on the device's installation process for SCE meter technicians (if needed).

Once training is complete and SCE has determined which sites to move forward with, the vendor will be responsible for coordinating with their customers/contractors to submit a request in the **online program enrollment portal** for these sites. The requests need to be submitted in the portal prior to any field installations as this is where the customer/contractor will sign the customer agreement and pay a fee for the meter technician site visit.

After the vendor agreement is signed, training(s) is completed, and the requests for the pilot sites are submitted and accepted in the program enrollment portal, the in-field installations may begin. For the in-field pilot for isolating devices that enable microgrid use case, SCE requires witnessing the commissioning of a minimum of two sites (along with any additional required distributed generation equipment) to verify that the system operates as intended in the field.

During the in-field installations, SCE will be checking the following:

- Open socket for tampering, loose socket jaws, loose connections, overheated socket, and any other hazardous condition
- Meter Base for melting, fading, discoloration, or any other signs of overheating
- Ensuring Meter Socket is compatible with MSA
- Inspecting the pull section if seals are missing. No foreign equipment such as Load survey devices must be present in the pull section or metering section.
- Ensuring the meter socket jaws are connected to a solid bus bar with bolts or rivets rather than attached to the bus bar with clips on both sides (an MSA cannot be installed on a meter socket where the jaws are connected with clips on both sides)
- MSA showing signs of damage
- External Panel Inspection
  - Panels rated above 200 amps
  - Instrument rated panels
  - Panels with existing adapters installed
  - Communication cable obstructing pull section or breaker opening
  - Multi Meter Panel
  - Damaged MSA
  - Non-outdoor rated communication cable
- Meter accuracy (for the first few MSAs installed during the in-field pilot)
- Any other safety hazard present deemed by the SCE technician

SCE requires the in-field pilot testing period to be a minimum of 3 months with a maximum of 15 MSA devices installed per week. After installation, SCE will continue to monitor the

devices for failure. The duration of in-field pilot testing may vary, depending on the device, before SCE will approve a device for full program implementation.

<b>7. SCE Approve or Deny MSA for Program Implementation</b>	
<b>Description</b>	SCE notifies the vendor if the device has been approved or denied for full program implementation.
<b>Vendor Activities</b>	None.
<b>Documents Required</b>	None.
<b>SCE Activities</b>	Notify vendor of device approval or denial.

SCE will inform the vendor via email if the device has been approved to move forward with full program implementation. If the device does not meet minimum requirements during the in-field testing phase, it may be disapproved, and the vendor will be notified of the next steps.

## **Frequently Asked Questions (FAQs)**

### **1. What is required to start a device evaluation?**

Customers are required to submit a completed MSA Intake Form and supporting documents to [MEintake@sce.com](mailto:MEintake@sce.com). In addition, physical items listed in the Product and Equipment Checklist on the Intake Form need to be sent to the Meter Engineering Supervisor at the specified address.

### **2. What is the process flow for device evaluation and how long does it typically take?**

The evaluation process consists of three main phases:

- a. SCE Reviews Vendor Request ~ 1 month
- b. SCE Performs Evaluation Testing ~ 3 months
- c. SCE Completes In-Field Testing ~ 6 months (or more, device dependent)

### **3. What if the device does not meet the minimum requirements during the evaluation?**

If the device does not meet the minimum requirements during any phase, it may be disapproved, and the vendor will be notified of the next steps.

### **4. Will I receive feedback after the initial vendor request?**

Yes, you will be informed if your device moves to the next phase based on the results of the initial SCE review.

**5. What should I do if my device is evaluated for longer than six months?**

If the evaluation testing phase extends beyond six months without approval, both SCE and the vendor must submit an informational filing to the CPUC, detailing the progress and reasons for the delay.

**6. Can I submit additional documents after the initial review?**

Yes, additional documentation may be submitted after the initial review as necessary.

**7. Who can I contact if I have questions during the submission process?**

For any questions, you may contact the Meter Engineering department through the email provided or reach out to your designated contact person within SCE.

**8. What types of devices are eligible for evaluation?**

Any new metering devices or technology relevant to SCE's operations can be submitted for evaluation, provided they meet the necessary criteria outlined in the Intake Form. SCE is required by the CPUC to priority devices that directly enable decarbonization and facilitate electrification efforts.

**9. Is there a specific format required for the documentation submitted?**

While there is no specific format mandated, all documents should be clear, concise, and organized according to the Product Documentation Checklist to facilitate efficient review.

**10. How can vendors ensure timely responses from SCE during the evaluation process?**

Vendors can ensure timely responses by providing complete and accurate documentation, addressing any requests for additional information promptly, and maintaining open communication with SCE contacts.

**11. Are there any fees associated with the evaluation process?**

There are no associated fees or costs involved in the evaluation process.

**12. What criteria does SCE use to assess the safety and functionality of the device?**

SCE typically evaluates devices based on operational safety, compliance with industry standards, performance in extreme conditions specific to the service territory, and the reliability of the technology.

**13. Can a vendor participate in the evaluation process if the device is still in development?**

Vendors should communicate with SCE regarding the device's development stage to determine eligibility; however, fully developed devices are generally preferred for evaluation.

**14. What actions should be taken if there are changes to the device during the evaluation process?**

Vendors must notify SCE immediately of any changes to the device specifications, technology, or functionality, as this may impact the evaluation process.

**15. Can vendors expect regular updates during the evaluation process?**

SCE will typically provide updates at key milestones in the evaluation process; however, vendors can inquire about the status at any time if they have concerns.