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| version: | 2023-3-31 |

# Instructions

The prompts in this self-inspection report are intended to collect key system installation characteristics, including photographs, which will allow Commerce Rhode Island staff and contractors to conduct a reasonable due diligence review, as a substitute for an onsite inspection. This report includes a self-inspection checklist and a descriptive photograph sheet. **Installers wishing to complete a self-inspection must fill out all applicable fields, including all photos.** **Forms with missing information will be returned to the installer.** In cases where multiple pieces of equipment (e.g., two different types of PV modules) are used, please copy/paste the relevant information into the table and fill it out for both sets of equipment. Installers are encouraged, but not required, to attach an as-built electrical design drawing to this report.

Once completed, please submit this form in PDF format via email to ref@commerceri.com.

For technical questions on completing this self-inspection report, contact QAInspections.RI@cadmusgroup.com.

# System Information

|  |  |
| --- | --- |
| **Grant Number** | #-### |
| **System Owner Last Name** |  |
| **Installation Company** |  |
| **Installer Last Name** |  |
| **Person Completing This Report** |  |
| **Phone** |  |
| **Email** |  |
| **Report Date** |  |

# Self-Inspection Checklist

## Array and PV Modules

|  |  |
| --- | --- |
| **Inspection Item** | **Value** |
| System Capacity (kWDC) |  |
| System Lifetime Energy Production (kWh) |  |
| Module Quantity |  |
| Module Manufacturer |  |
| Module Model Number |  |
| Modules per String (or per circuit for microinverters) |  |
| Number of Strings per Input Circuit |  |
| Conductor Size/Insulation Type |  |

## Racking

|  |  |
| --- | --- |
| **Inspection Item** | **Value** |
| PV Racking Manufacturer  |  |
| Model  |  |

## Microinverter

|  |  |
| --- | --- |
| **Inspection Item** | **Value** |
| Quantity  |  |
| Manufacturer |  |
| Model Number |  |

## Optimizer

|  |  |
| --- | --- |
| **Inspection Item** | **Value** |
| Quantity  |  |
| Manufacturer |  |
| Model Number |  |

## Standalone DC Disconnect

|  |  |
| --- | --- |
| **Inspection Item** | **Value** |
| Manufacturer |  |
| Model |  |

## Backup Power System

|  |  |
| --- | --- |
| **Inspection Item** | **Value** |
| System Type(Select All Applicable Configurations if Multiple are present) | Entire Facility |  |
| Partial Facility |  |
| Dedicated Backed upSubpanel |  |
| Dedicated Backed upSubpanel |  |
| Entire Facility |  |
|  Partial Facility |  |
| Location(s) |  |

## String Inverter

|  |  |
| --- | --- |
| **Inspection Item** | **Value** |
| Quantity  |  |
| Manufacturer |  |
| Model Number |  |

## AC Combiner

|  |  |
| --- | --- |
| **Inspection Item** | **Value** |
| Quantity  |  |
| Manufacturer |  |
| Model Number |  |

## AC Disconnect (Other than Interconnection) (Copy and Paste if Multiple)

|  |  |
| --- | --- |
| **Inspection Item** | **Value** |
| Quantity  |  |
| Manufacturer |  |
| Model Number |  |

## Energy Storage System

|  |  |
| --- | --- |
| **Inspection Item** | **Value** |
| Coupling | AC or DC |
| Manufacturer |  |
| Model |  |
| Quantity |  |
| Battery (If external how many units?) | Internal/External | Qty: |
| Total ESS Rating (kW and kWh) | Output Power kW: | Capacity kWh: |
| Gateway Model (enter N/A if not present) |  |  |
| Critical Load/Backed-Up Load Subpanel BusbarRating (A) (enter N/A if not present) |  |  |
| Critical Load /Backed-Up Load Subpanel Breaker Rating (A) (select MLO if main lug only or N/A ifnot present,) |  |  |  |
| Location (enter N/A for not present) |  |  |

## Interconnection (fill in one of the three sections below)

|  |  |  |
| --- | --- | --- |
|  | **Inspection Item** | **Value** |
| **SUPPLY SIDE CONNECTION** | **PV Service Disconnect**  |  |
| Manufacturer and Model |  |
| Fuse/Breaker Rating | Voltage: ###V | Current ###A |
| Conductor Size/Type | Line: #\_\_\_AWG | Load: #\_\_\_AWG |
| **Point of Interconnection** |  |
| Splice connector Location(Main Panel, Utility Meter, Combined Meter Pan) |  |
| **FEEDER TAP CONNECTION** | Grid Side Circuit Feeder Overcurrent Device Rating | ###A |
| Grid Side Existing Feeder Conductor Size | #\_\_\_AWG |
| Busbar Rating of Grid Side Panel  | \_\_\_A |
| Breaker Rating of Load Side Panel(enter MLO if main lug only) | \_\_\_A | MLO |
| (Only if MLO is selected above) Load side Busbar Rating |  | \_\_\_A |
| **PV Disconnect**  |  |
| Manufacturer and Model |  |
| Fuse/Breaker Rating | Voltage: ###V | Current ###A |
| Conductor Size/Type | Line: #\_\_\_AWG | Load: #\_\_\_AWG |
| **LOAD SIDE CONNECTION** | Main Breaker Rating  | \_\_\_A |
| Backfeed Breaker Rating  | \_\_\_A |
| Panel Busbar Rating |  |
| PV Conductor Size/Type |  |
|  |

## Photos Required (Multiple photos may be needed)

|  |
| --- |
| **Module Nameplate Photo** |
| Insert Photo(s) HereNotes: |
| **Full Array Image(s)** **Multiple photos** may be needed to include all modules for verifying system capacity |
|  Insert Photo(s) HereNotes: |
| **Horizon Profile Photos**Take photos from the roof of the surrounding terrain to the (East, South, and West) of the Array(s). These photos should show all trees and other obstructions surrounding the PV array. |
|  Insert Photo(s) HereNotes: |
| **Array Racking** Photo of the installed rails before modules are installed and after MLPE and ground wiring are completed  |
|  Insert Photo(s) HereNotes: |
| **Under-Array Wire Management** **Close up** photo showing the wire management under each array. Multiple photos may be necessary |
|  Insert Photo(s) HereNotes: |
| **Module Clamping** Show typical mid and end module clamp if applicable |
|  Insert Photo(s) HereNotes: |
| **MLPE Mounting- (Module Level Power Electronics-(Microinverters or Optimizers))****Show installed mounting bracket** |
| Insert Photo(s) Here, Notes: |
| **MLPE Nameplate Photo** |
|  Insert Photo(s) HereNotes: |
| **Standalone DC Disconnect Wiring**Show wiring details |
|  Insert Photo(s) HereNotes:  |
| **String Inverter Exterior**Show sufficient detail to verify labeling |
|  Insert Photo(s) HereNotes: |
| **String Inverter Nameplate Photo** |
|  Insert Photo(s) HereNotes: |
| **String Inverter Wiring**Show all wiring terminations |
|  Insert Photo(s) HereNotes: |
| **AC Combiner Exterior**Nameplate and labeling details |
|  Insert Photo(s) HereNotes: |
| **AC Combiner Front Panel**Show front panel unique descriptive breaker/circuit ID. labeling |
|  Insert Photo(s) HereNotes: |
| **AC Combiner Wiring**Show nameplate and all wiring details and terminations |
|  Insert Photo(s) HereNotes: |
| **ESS Gateway Exterior****Show gateway enclosure and proximity to disconnects.** |
|  Insert Photo(s) HereNotes: |
| **ESS Gateway Nameplate and Front Panel labeling photo(s)** |
|  Insert Photo(s) HereNotes: |
| **ESS Gateway Wiring****Show all wiring details and terminations. Multiple photos may be needed.** |
|  Insert Photo(s) HereNotes: |
| **ESS & PV AC Combiner Panel Exterior****Show Exterior and Front panel labeling. Multiple photos may be needed.** |
|  Insert Photo(s) HereNotes: |
| **ESS & PV AC Combiner Panel Nameplate and Wiring Photo(s)** **Show all wiring details and terminations. Multiple photos may be needed.** |
|  Insert Photo(s) HereNotes: |
| **Critical Loads/Backed-Up Loads Subpanel****Show labeling with door closed and open. Multiple photos may be needed.** |
|  Insert Photo(s) HereNotes: |
| **Critical Loads/Backed-Up Loads Subpanel Wiring****Nameplate photo ,Show wiring details and terminations. Multiple photos may be needed.** |
|  Insert Photo(s) HereNotes: |
| **ESS/Battery Exterior****Show enclosure and proximity to disconnects.** |
|  Insert Photo(s) HereNotes: |
| **ESS/Battery Nameplate** |
|  Insert Photo(s) HereNotes: |
| **Battery Pack/Bank (External)****Show all wiring details and terminations. Multiple photos may be needed.** |
|  Insert Photo(s) HereNotes: |
| **Battery Wiring****Show all wiring details and terminations. Multiple photos may be needed.** |
|  Insert Photo(s) HereNotes: |
| **Production Meter Exterior**Show production meter enclosure, nameplate ratings, and production reading**Multiple photos may be needed** |
|  Insert Photo(s) HereNotes: |
| **Production Meter Wiring**Show wiring of production meter enclosure**Multiple photos may be needed** |
|  Insert Photo(s) HereNotes: |
| **Standalone AC Disconnect Exterior**Show nameplate/labeling details |
|  Insert Photo(s) HereNotes: |
| **Standalone AC Disconnect Wiring**Show all wiring details, nameplate, and terminations |
|  Insert Photo(s) HereNotes: |
| **Load Side Connection Main Service Panel Exterior (Door Open and Closed)**Show labeling detail, Main breaker rating , System Backfeed Breaker |
|  Insert Photo(s) HereNotes: |
| **Load Side Connection Main Service Panel Wiring**Show full wiring detail inside panel |
|  Insert Photo(s) HereNotes: |
| **Feeder Tap Connection**Show feeder tap interconnection/splice connector detail |
|  Insert Photo(s) HereNotes: |
| **Feeder Tap Connection Disconnect Exterior**Show labeling/nameplate detail |
|  Insert Photo(s) HereNotes: |
| **Feeder Tap Connection Disconnect Wiring**Show all wiring, termination, nameplate, and fuse details |
|  Insert Photo(s) HereNotes: |
| **Feeder Tap Connection Load panel/Panel Disconnect** Show labeling, nameplate detail, main breaker |
|  Insert Photo(s) HereNotes: |
| **Supply Side Connection Disconnect Exterior**Show labeling/nameplate detail |
|  Insert Photo(s) HereNotes: |
| **Supply Side Connection Disconnect Wiring**Show all wiring, termination, nameplate, and fuse details. Ensure neutral terminal and green ground bonding screw are visible |
|  Insert Photo(s) HereNotes: |
| **Supply Side Connection Main Service Panel Exterior and Nameplate Photo(s)**Photo showing the busbar rating |
|  Insert Photo(s) HereNotes: |
| **Supply Side Connection**Show service entrance conductor interconnection/spice connector detail, main/service OCPD**Include images of genset / automatic transfer switches if present** |
|  Insert Photo(s) HereNotes: |
| **Interconnection Standalone Main Service Disconnect** |
|  Insert Photo(s) HereNotes: |
| **Balance of System (BOS) Overview Photos** Show general location/configuration of PV System Equipment and Associated Distribution Equipment**Multiple photos may be needed** |
|  Insert Photo(s) HereNotes: |
| **Balance of System (BOS) Utility Meter Photos**Show location and nameplate of utility meter |
|  Insert Photo(s) HereNotes: |
| **Additional Photos**  |
| Notes: |