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| version: | 2023-6-22 | |

# 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](mailto:xxxxxx@commerceri.com).

For technical questions on completing this self-inspection report, contact [QAInspections.RI@cadmusgroup.com](mailto:QAInspections.RI@cadmusgroup.com).

# System Information

|  |  |
| --- | --- |
| **Grant Number** | #-### |
| **System Owner Last Name** | Smith |
| **Installation Company** | PV Installers Inc. |
| **Installer Last Name** | Jefferson |
| **Person Completing This Report** | Rogers |
| **Phone** | (###) ###-#### |
| **Email** | email@address.com |
| **Report Date** | 1/1/2023 |

# Self-Inspection Checklist

## Array and PV Modules

|  |  |
| --- | --- |
| **Inspection Item** | **Value** |
| System Capacity (kWDC) | 10.0 |
| System Lifetime Energy Production (kWh) | 12345 |
| Module Quantity | 12 |
| Module Manufacturer | Panels |
| Module Model Number | PV400 |
| Modules per String (or per circuit for microinverters) | 10 |
| Number of Strings per Input Circuit | 2 |
| Conductor Size/Insulation Type | #10 AWG PV wire |

## Racking

|  |  |
| --- | --- |
| **Inspection Item** | **Value** |
| PV Racking Manufacturer | PV Mount |
| Model | 12345 |

## Microinverter

|  |  |
| --- | --- |
| **Inspection Item** | **Value** |
| Quantity | 20 |
| Manufacturer | MI’s R Us |
| Model Number | 12345 |

## Optimizer

|  |  |
| --- | --- |
| **Inspection Item** | **Value** |
| Quantity | 20 |
| Manufacturer | Opti’s R Us |
| Model Number | 12345 |

## Standalone DC Disconnect

|  |  |
| --- | --- |
| **Inspection Item** | **Value** |
| Manufacturer | DC Disco’s R Us |
| Model | 12345 |

## Backup Power System

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

## String Inverter

|  |  |
| --- | --- |
| **Inspection Item** | **Value** |
| Quantity | 1 |
| Manufacturer | Inverters Depot |
| Model Number | 12345 |

## AC Combiner

|  |  |  |
| --- | --- | --- |
| **Inspection Item** | **Value** | |
| Quantity | | 1 |
| Manufacturer | | Combiner Depot |
| Model Number | | 12345 |

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

|  |  |  |
| --- | --- | --- |
| **Inspection Item** | **Value** | |
| Quantity | | 2 |
| Manufacturer | | AC Disco Depot |
| Model Number | | 12345 |

## Energy Storage System

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Inspection Item** | **Value** | | | |
| Coupling | AC or DC | | | |
| Manufacturer | ESS Inc | | | |
| Model | 123 | | | |
| Quantity | 2 | | | |
| Battery (If external how many units?) | Internal/External | | Qty: 2 | |
| Total ESS Rating (kW and kWh) | Output Power kW: | | Capacity kWh: | |
| Gateway Model (enter N/A if not present) |  | | | N/A |
| Critical Load/Backed-Up Load Subpanel Busbar  Rating (A) (enter N/A if not present) | 125A | | |  |
| Critical Load /Backed-Up Load Subpanel Breaker Rating (A) (select MLO if main lug only or N/A if  not present,) | 25A |  | |  |
| Location (enter N/A for not present) | Basement | | |  |

## 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 | \_200\_A | | |
| Backfeed Breaker Rating | \_30\_A | | |
| Panel Busbar Rating | 200 | | |
| PV Conductor Size/Type | 10-3 NB Cable | | |
|  | | | |

## Photos Required (Multiple photos may be needed)

|  |
| --- |
| **Module Nameplate Photo** |
| Insert Photo(s) Here    Notes: |
| **Full Array Image(s)**  **Multiple photos** may be needed to include all modules for verifying system capacity |
| Insert Photo(s) Here    Notes: |
| **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) Here      Notes: |
| **Array Racking**  Photo of the installed rails before modules are installed and after MLPE and ground wiring are completed |
| Insert Photo(s) Here  Notes: |
| **Under-Array Wire Management**  **Close up** photo showing the wire management under each array. Multiple photos may be necessary |
| Insert Photo(s) Here  Notes: |
| **Module Clamping**  Show typical mid and end module clamp if applicable |
| Insert Photo(s) Here      Notes: |
| **MLPE Mounting- (Module Level Power Electronics-(Microinverters or Optimizers))**  **Show installed mounting bracket** |
| Insert Photo(s) Here  Notes: |
| **MLPE Nameplate Photo** |
| Insert Photo(s) Here  Notes: |
| **Standalone DC Disconnect Wiring**  Show wiring details |
| Insert Photo(s) Here    Notes: |
| **String Inverter Exterior**  Show sufficient detail to verify labeling |
| Insert Photo(s) Here    Notes: |
| **String Inverter Nameplate Photo** |
| Insert Photo(s) Here    Notes: |
| **String Inverter Wiring**  Show all wiring terminations |
| Insert Photo(s) Here    Notes: |
| **AC Combiner Exterior**  Nameplate and labeling details |
| Insert Photo(s) Here    Notes: |
| **AC Combiner Front Panel**  Show front panel unique descriptive breaker/circuit ID. labeling |
| Insert Photo(s) Here    Notes: |
| **AC Combiner Wiring**  Show nameplate and all wiring details and terminations |
| Insert Photo(s) Here    Notes: |
| **ESS Gateway Exterior**  **Show gateway enclosure and proximity to disconnects.** |
| Insert Photo(s) Here    Notes: |
| **ESS Gateway Nameplate and Front Panel labeling photo(s)** |
| Insert Photo(s) Here    Notes: |
| **ESS Gateway Wiring**  **Show all wiring details and terminations. Multiple photos may be needed.** |
| Insert Photo(s) Here    Notes: |
| **ESS & PV AC Combiner Panel Exterior**  **Show Exterior and Front panel labeling. Multiple photos may be needed.** |
| Insert Photo(s) Here  Notes: |
| **ESS & PV AC Combiner Panel Nameplate and Wiring Photo(s)**  **Show all wiring details and terminations. Multiple photos may be needed.** |
| Insert Photo(s) Here  Notes: |
| **Critical Loads/Backed-Up Loads Subpanel**  **Show labeling with door closed and open. Multiple photos may be needed.** |
| Insert Photo(s) Here    Notes: |
| **Critical Loads/Backed-Up Loads Subpanel Wiring**  **Nameplate photo ,Show wiring details and terminations. Multiple photos may be needed.** |
| Insert Photo(s) Here    Notes: |
| **ESS/Battery Exterior**  **Show enclosure and proximity to disconnects.** |
| Insert Photo(s) Here    Notes: |
| **ESS/Battery Nameplate** |
| Insert Photo(s) Here    Notes: |
| **Battery Pack/Bank (External)**  **Show all wiring details and terminations. Multiple photos may be needed.** |
| Insert Photo(s) Here      Notes: |
| **Battery Wiring**  **Show all wiring details and terminations. Multiple photos may be needed.** |
| Insert Photo(s) Here      Notes: |
| **Production Meter Exterior**  Show production meter enclosure, nameplate ratings, and production reading  **Multiple photos may be needed** |
| Insert Photo(s) Here    Notes: |
| **Production Meter Wiring**  Show wiring of production meter enclosure  **Multiple photos may be needed** |
| Insert Photo(s) Here    Notes: |
| **Standalone AC Disconnect Exterior**  Show nameplate/labeling details |
| Insert Photo(s) Here    Notes: |
| **Standalone AC Disconnect Wiring**  Show all wiring details, nameplate, and terminations |
| Insert Photo(s) Here    Notes: |
| **Load Side Connection Main Service Panel Exterior (Door Open and Closed)**  Show labeling detail, Main breaker rating , System Backfeed Breaker |
| Insert Photo(s) Here    Notes: |
| **Load Side Connection Main Service Panel Wiring**  Show full wiring detail inside panel |
| Insert Photo(s) Here    Notes: |
| **Feeder Tap Connection**  Show feeder tap interconnection/splice connector detail |
| Insert Photo(s) Here    Notes: |
| **Feeder Tap Connection Disconnect Exterior**  Show labeling/nameplate detail |
| Insert Photo(s) Here    Notes: |
| **Feeder Tap Connection Disconnect Wiring**  Show all wiring, termination, nameplate, and fuse details |
| Insert Photo(s) Here    Notes: |
| **Feeder Tap Connection Load panel/Panel Disconnect**  Show labeling, nameplate detail, main breaker |
| Insert Photo(s) Here    Notes: |
| **Supply Side Connection Disconnect Exterior**  Show labeling/nameplate detail |
| Insert Photo(s) Here    Notes: |
| **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) Here    Notes: |
| **Supply Side Connection Main Service Panel Exterior and Nameplate Photo(s)**  Photo showing the busbar rating |
| Insert Photo(s) Here    Notes: |
| **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) Here    Notes: |
| **Interconnection Standalone Main Service Disconnect** |
| Insert Photo(s) Here  Notes: |
| **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) Here    Notes: |
| **Balance of System (BOS) Utility Meter Photos**  Show location and nameplate of utility meter |
| Insert Photo(s) Here    Notes: |
| **Additional Photos** |
| Notes: |