



Vermont Small Scale Renewable Energy Incentive Program Solar Electric System Project Documentation and Final Incentive Request

Incomplete documentation will be returned to the Installer

Please read carefully and complete all sections. Incomplete or incorrectly completed forms will cause delay, may be returned to the applicant, and may not be approved for incentive payment.

Incentive Reservation Information

Incentive Reservation Number: _____ (From Approval Letter)

If a Residential system, Customer Name: _____

If a Non-Residential system, Company/Organization Name: _____

Installer Company: _____

Commissioned by (must be a REV Partner): _____

Installed by (individual must be under direct contract, or an employee with the REV Partner listed above):

Incentive Reservation Expiration Date: _____ (From Approval Letter)

Documentation Checklist

All items MUST be checked (included) or marked N/A

_____ Documentation Checklist (this page)

_____ Project Change Information Sheet (filled out even if there are no changes)

_____ Final Incentive Calculation and System Cost Worksheet

_____ Copy of Final Customer Invoice

- A copy of the final invoice (dated and itemized) for the system as installed must be included. **The originally approved Vermont Small Scale Renewable Energy Incentive amount must be listed as a line item on the final invoice, unless the installed system is smaller than that approved, in which case the calculation from the Final Incentive Calculation Form should be listed.**

_____ Copy of Approved Certificate of Public Good (all pages)

_____ Project Technical Documentation Worksheet

_____ One-line Diagram – following all instructions in the Project Technical Documentation Worksheet

- Cut or specification sheets for major components are strongly recommended but not required

RERC USE ONLY:

Date Rec'd: _____

Res. Number _____

Date Apprvd: _____

_____ System Photographs as Installed – following all instructions in the Project Technical Documentation Worksheet. Photographs may be submitted electronically.

_____ Signatures/ Certifications Page

- All customer certification items must be checked off by the customer
- Customer and Installer must sign

_____ **For non-residential projects** - Davis-Bacon Act required reporting forms for laborers and merchants working onsite (can be found at <http://www.dol.gov/whd/forms/wh347.pdf>) **These forms may not be included with the Project Documentation and Final Incentive Request form if completion of the Project Documentation and Final Incentive Request form occurs several weeks after the project has been installed.**

_____ **For all projects** - American Recovery and Reinvestment Act of 2009 required reporting information:

Employee Role (e.g. admin staff)	Subcontractor Role (e.g. mason)	# of hours spent on project	Pay rate per hour

_____ **Copy of Letter of Compliance with Section 106 (project complies with the National Environmental Policy Act).**

_____ **Property Certification – provide serial numbers for individual equipment components valued at more than \$5,000:**

Component description	Serial Number

Project Documentation and Final Incentive Request Form Instructions

1. Fill out the form entirely. All information is necessary for processing.
2. Mail the complete incentive packet to:

Vermont Small Scale Renewable Energy Incentive Program
255 South Champlain Street, Suite 7
Burlington, VT 05401

Information on renewable energy and the Vermont Small Scale Renewable Energy Incentive Program is available through the Renewable Energy Resource Center at www.erc-vt.org or by calling 1-877-888-7372.

Project Change Information Sheet

Identify and explain any differences between the project **AS INSTALLED** and the information provided on the incentive reservation application form. If there have been changes, you must identify them below.

Incentive Reservation Form Section	CIRCLE THE CORRECT RESPONSE TO EACH
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Section A: Customer Information	NO CHANGES	CHANGE TO:

Section B: Contractor /Installer Information	NO CHANGES	CHANGE TO:

Section C: Equipment Information	NO CHANGES	CHANGE DOCUMENTED BELOW
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Changes to equipment require a full description of the equipment installed. Please give full information on all changes below: Manufacturer, model #s, power ratings, number of modules and/or inverters.

NOTE: Incentive reservations are based on the ORIGINAL equipment configuration unless approved AFTER review

Final Incentive Calculation and System Cost Worksheet

Total Array Output (as installed): _____ DC Watts

Solar Electric Incentive Calculation:

Any changes between the system as proposed under the original, approved incentive reservation and the system as installed must be fully documented when the project documentation forms are submitted. Any such changes are subject to review and approval with respect to system eligibility and final incentive amount.

Multi-family Low-income Project Applicants:

Original approved incentive reservation amount: _____

Total Array Output in Watts (as installed) x \$3.50 = _____

Final Requested Incentive amount: _____

Must be the lesser of:

- The amount calculated above
- \$35,000
- 50% of the total installed system costs, as calculated according to final invoice (included)

Other Applicants:

Original approved incentive reservation amount: _____

Total Array Output in Watts (as installed) x \$1.75 = _____

Final Requested Incentive amount: _____

Must be the lesser of:

- The amount calculated above
- \$8,750

Total Installed System Cost (before incentive amount is removed): _____

Project Technical Documentation Worksheet

The following items are required and should be included with the final documentation:

1. All systems must be net-metered, utility-interconnected systems and must include a copy of their **Certificate of Public Good (CPG)**.
2. The installation and documentation must meet all of the requirements outlined in **Section E: Eligibility Requirements** of the **Solar Electric Incentive Reservation Form**.
3. One-line diagram(s) and/or schematic showing system details **as installed** – including the following:
 - All major field-installed electrical components, including inverter make and model
 - Detailed module information and series/parallel configuration of modules
 - Wire type, all wire run lengths and wire size to all major system components, including grounding details
 - Conduit type and size
 - Ratings for all circuit breakers and fuses
 - For battery systems; charge controllers and non-PV generators where applicable
 - Details of Photovoltaic Output Circuit as posted on DC disconnect
 - Locations of junction or combiner boxes
 - The utility disconnect type and location
 - Means and location of connecting to the building electrical system.
4. Photographs showing all major field-installed structural, mechanical and electrical components including:
 - PV array
 - Balance of the system: all equipment necessary to integrate the PV with the site load (i.e. array circuit wiring and management of wiring, fusing, disconnects, power processing equipment, batteries, charge controllers, location where solar-electric system interconnects to the utility)
 - Attachment points and mechanical penetration points
 - All labeling associated with NEC posting requirements.
5. Information as posted on PV Power Source Sign (permanently located on site at DC disconnect, as required by the NEC) NOTE: Please follow formulae included here. Deviations, errors and creative math will result in incentive payment delays.

Operating Current:

$$\frac{\text{_____} \times}{\text{Module operating current (Ip)}} \quad \text{_____} \quad \text{Qty. strings or modules connected in } \mathbf{parallel} \quad = \text{_____}$$

Operating Voltage:

$$\frac{\text{_____} \times}{\text{Module operating voltage (Vp)}} \quad \text{_____} \quad \text{Qty. modules connected in } \mathbf{series} \quad = \text{_____}$$

Maximum System Voltage:

$$\frac{\text{_____} \times}{\text{Module open circuit voltage (Voc) min.})} \quad \text{_____} \quad \text{Qty. modules connected in } \mathbf{series} \quad \times \quad \frac{125\%}{(-20^{\circ}\text{F to } -40^{\circ}\text{F})} \quad = \text{_____}$$

Short Circuit Current:

$$\frac{\text{_____} \times}{\text{Module short-circuit currents (Isc)}} \quad \text{_____} \quad \text{Qty. of modules in parallel} \quad = \text{_____}$$

It is not necessary to multiply short circuit current by 125% except for sizing purposes.

Project Technical Documentation Worksheet (cont.)

6. Information as posted on sign identifying AC point of connection (permanently located on site at AC point of connection, as required by NEC)

Maximum Operating Current:

 Inverter continuous output current rating

Operating AC Voltage:

 Nominal AC voltage at interconnect

7. Can the system operate independent of the grid as a stand-alone power source and in parallel with the grid?

_____ **Yes.** If so, there must be a sign at the main service disconnect notifying the type and location of the optional standby system – indicate on one-line schematic.

_____ **No,** the system is grid connected but is not capable of operating independently of grid power.

_____ **No,** the system is off-grid. **Off-grid systems are not eligible for incentive.**

8. Solar Electric Array Location: Rooftop Pole Ground Mount

9. Solar Electric Module Orientation: _____ **degrees** (indicate if magnetic or true)

10. Solar Electric Module Tilt: _____ (0 degrees horizontal, 90 degrees vertical)

11. Solar Module Tracking: Fixed Single Axis Double Axis
 If fixed with adjustable tilt, please check fixed

12. Estimated Annual Output of the system as installed: _____ kWh/year
 Note: We will be checking this figure against PVWatts Version 1. Please adjust for shading.

13. Cut or specification sheets for major components (Strongly recommended, but not required)

14. Warranty Information:

Module: _____ years at _____ % of rated power output
 (minimum of 5 yrs required)

Inverter: _____ years **(minimum of 5 yrs required)**

Installation: _____ years **(minimum of 5 yrs required)**

15. The submission of digital or standard photographs of the installation is required.
 Please sign here if we may use your photographs for program promotion.

Signatures/Certifications

Residential Customer Certification

I certify that I meet the participant eligibility requirements as listed on the Incentive Reservation Form. I have also purchased the solar electric system described in this application and it has been installed and is operating at the location indicated above. I further certify that (all items must be checked off by the customer):

- I am a residential customer, and am aware that the incentive payment will be made by check directly to me *only after* the installer has submitted the Final Project Documentation paperwork and received final approval, including any necessary site visits.
- I have been provided with a copy of a user's manual for this system and I am familiar with recommendations for the system's safe operation and maintenance.
- I have received and reviewed warranty information.
- I have received an estimate of the system's annual output.
- I am aware that the incentive program will be conducting limited site visits. If requested, I am willing to schedule and allow a site visit of the system for program verification.

I understand that any deliberate attempt to misrepresent information in this application will disqualify me from participation and all claims to incentives offered through Vermont's Small Scale Renewable Energy Incentive Program.

Customer's Signature

____/____/____
Date

Non-Residential Customer Certification

I certify that I meet the participant eligibility requirements as listed on the Incentive Reservation Form. I have also purchased the solar electric system described in this application and it has been installed and is operating at the location indicated above. I further certify that (all items must be checked off by the customer):

- I am a non-residential customer, and am aware that the incentive payment will be made by check directly to my installer *only after* the installer has submitted the Final Project Documentation paperwork and received final approval, including any necessary site visits.
- I have been provided with a copy of a user's manual for this system and I am familiar with recommendations for the system's safe operation and maintenance.
- I have received and reviewed warranty information.
- I have received an estimate of the system's annual output.
- I am aware that the incentive program will be conducting limited site visits. If requested, I am willing to schedule and allow a site visit of the system for program verification.

I understand that any deliberate attempt to misrepresent information in this application will disqualify me from participation and all claims to incentives offered through Vermont's Small Scale Renewable Energy Incentive Program.

Customer's Signature

____/____/____
Date

Installer Certification

I certify that I have worked with the customer referenced above to install the solar electric system described above. The system is now fully installed and operational. It has been installed in accordance with the program's eligibility requirements, the Vermont Interconnection Safety and Technological Requirements (VT Public Service Board Order of April 21, 1999), and the National Electric Code®. I have also provided the customer with information on the warranty, safe operation, and maintenance of their system, including a copy of a user's manual for this system.

I understand that if I am installing a renewable energy system for a residential customer, the incentive payment will be made by check directly to the homeowner only after the installer has submitted the Final Project Documentation paperwork and received final approval, including any necessary site visits.

I understand that if I am installing a renewable energy system for a non-residential entity that I must abide by the reporting requirements set forth by the Davis-Bacon Act in order to receive the incentive payment, made by check directly to me.

I certify that this installation complies with all requirements set forth by the American Recovery and Reinvestment Act of 2009.

I understand that any deliberate attempt to misrepresent information in this application will disqualify me from participation in the program and all claims to incentives offered through Vermont's Small Scale Renewable Energy Incentive Program.

Installer's Signature

____/____/____

Date