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Vermont Small Scale Renewable Energy Partnership Program

Program Guidelines & Rules
Last Updated May 2013

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Vermont Renewable Energy Partnership Program

Program Criteria

The Vermont Renewable Energy Partnership Program is a program for businesses that install commercial and residential renewable energy systems. This program connects approved installers to the Vermont Small Scale Renewable Energy Incentive Program, run by the Vermont Energy Investment Corporation (VEIC).

The Vermont Renewable Energy Partnership Program has four technology review committees. These committees are comprised of volunteers who are experienced members of the renewable energy industry in Vermont.

Partnership Types

- Solar Photovoltaic (PV)
- Solar Hot Water (SHW)
- Wind
- Micro-Hydro

Partnership Levels

There are currently two levels of partnership in the Partnership Program:

- **Full** | Businesses that qualify for Full Partnership are experienced installers committed to high-quality, safe, installations. Full Partners are often NABCEP certified, though this is not a requirement of the Partnership Program. Full Partners may reserve more than one incentive at a time, and do not require any site visits by the Small Scale Renewable Energy Incentive Program. A list of full partners is available on this website.
- **Provisional** | Businesses new to the solar, micro-hydro, or small-wind industry are eligible for Provisional Partnership. Provisional Partnership is designed to provide a pathway for businesses to become full partners. Such businesses have met the minimum requirements and demonstrated a basic knowledge for the industry best practices. Provisional Partners are not listed in Partnership Program promotional materials. Provisional Partnership may not be renewed; it can only be upgraded to full partnership. After two years, Provisional Partners are required to renew their partnership status. Businesses that do not upgrade to full partnership will be removed from the program. Provisional partners can reserve one incentive at a time. Provisional Partner installations will be inspected by a representative of the Vermont Small Scale Renewable Energy Incentive Program.

Applying for Partnership

To become a partner, companies must demonstrate basic skills in designing, siting, and installing solar photovoltaic, solar hot water, micro-hydro, or small-wind projects for paying customers.

Applicants for Full or Provisional Partnership must submit the following:

- I. A completed application form with the following information:
 - a. Business name
 - b. Main Contact/Installer¹
 - c. Contact Information: Mailing Address, Phone number, Email, Website
 - d. Type of Business (LLC, corporation, sole proprietor, co-op, partnership etc.)
 - e. Primary installer
 - f. VT Electrical or Plumbing license (if applicable, required for all solar hot water applicants)
 - g. Documentation of General Liability Insurance: provide proof of at least \$1 million per incident and \$2 million aggregate.
 - h. Signed and Dated Installation Agreements Standard* (see application forms- p.9)
 - i. Completed Project Technical Documentation Worksheet

- II. Documentation of Professional Experience
 - a. FULL PARTNER APPLICANTS: *Choose the **one** option that best reflects your company's professional experience. Details of requirements can be found on technology-specific application forms².*
 - i. Provide all required details** of **three** installations completed for paying customers within the past two years³.
 - ii. ⁴Provide proof that the main installer employed by your business is certified by the North American Board of Certified Energy Practitioners (NABCEP) **AND** all required details** of one installation completed for a paying customer in the past year⁵.

 - b. PROVISIONAL PARTNER APPLICANTS: *Choose the **one** option that best reflects your company's professional experience. Details of requirements can be found on technology-specific application forms².*
 - i. Provide details** of **one** installation that has been completed for paying customers within the past year³.

¹ Please refer to Partnership Program Rules (p. 7) for details on the responsibilities & expectations of the Main Contact.

² Applications can be found here: <http://www.vermont.org/main/partnership-program/become-a-partner-installer/>

³ For Solar Photovoltaic installations, at least two out of the three submitted must be grid-tied. For full partnership applicants, one of three installations submitted can be a project built on the applicant's own property. This installation cannot be the only installation reference submitted.

⁴ NABCEP Certification is not to be confused with the completion of the NABCEP entry-level certification exam.

⁵ For Solar Photovoltaic installations, this must be a grid-tied system.

- ii. Provide proof that a company employee has successfully completed an Institute for Sustainable Power (ISPQ) accredited training program within the last year⁶.
 - iii. Provide a copy of the VT Plumbing (for Solar Hot Water Applicants) or Electrical license (for Solar Photovoltaic Applicants) and proof that this employee has completed an approved training course within the last year⁶.
- III. Completed Project Technical Documentation Worksheet
- a. One line drawing and photos (see page 11 for comprehensive checklist).
- IV. Certificate of Public Good (CPG), if applicable.
- V. Application fee: \$150

Using Coursework as proof of professional experience:

Provisional partner applicants may submit proof of training coursework as a means of entering the program⁷. In order to qualify the applicant for provisional status, the coursework must be accredited by the Institute for Sustainable Power Quality (ISPQ) or approved by the Partnership Program. The ISPQ is the accrediting body of the Interstate Renewable Energy Council (IREC). The Partnership Program approves additional training courses based on their content. Courses must be submitted for approval at least four weeks prior to the applicant begins coursework. Courses are approved depending on whether the applicant is a licensed electrician. The general credit requirements are as follows:

- **Licensed (electricians)** - 8 credit hours. Must cover industry fundamentals and best practices
- **Non-licensed professionals**- 32 credit hours. Course work must cover industry fundamentals, best practices and related codes/laws, and must have a hands-on component.

*****Installation Reference Criteria & Requirements:***

- I. When submitting proof of professional experience through installation references, applicants must provide the following information for **each** installation reference.
 - a. A completed Project Technical Documentation Worksheet, including a one-line diagram with details as specified by the worksheet and detailed photos of the system components. Project technical documentation worksheets can be downloaded from: <http://www.vermont.org/main/partnership-program/become-a-partner-installer/>.
Note: Technical information is reviewed electronically, therefore we require that each worksheet be submitted either via email to vtpartnershipprogram@gmail.com or copied onto a CD-ROM and mailed via US post to the address listed on page 1. These forms can be completed electronically, saved, and mailed.
 - b. A copy of the Certificate of Public Good (CPG) number for any grid-tied system (if applicable)
 - c. Solar Hot Water applicants only: List the name and license number of the plumber used during the installation.
 - d. If your business employs a NABCEP Certified Solar Hot Water Installer, please submit proof of certification

⁶ In order to get a course approved, it must meet the Partnership Program’s requirements for using Coursework as proof of professional experience. Course syllabus must be submitted at least 4 weeks prior to the course start date. The technology-specific review committee will then review the course to determine if it is sufficient enough to qualify an individual for partnership.

⁷ As of October 2012, non-licensed plumbers can take the 8-hour Sunward Systems Pre-Engineered Installation course and qualify for provisional partnership.

- II. Installation References for full or provisional partnership must meet the following criteria:
- a. Match the technology type of partnership applied for. Please note: applicants that approve Sunward installation references will be approved for Sunward installations only.
 - b. Project must have been completed under direct contract with the applicant.
- OR**
- c. Project must have been completed by a subcontractor or under direct contract with the applicant. The applicant must have been substantially involved in the project and at minimum have had a supervisory role in the project, including conducting the site visit and analysis, producing the system design, and being present for final system inspection and commissioning.
 - d. Project must have the net metering application (if any) filed under the partnership applicant's name.
 - e. Project must have had any incentive grants applied for by the applicant (not by another business or separate franchise of the business).

Signed application forms and application fees can be sent to:

Vermont Partnership Program
c/o Renewable Energy Vermont
PO Box 1036
Montpelier, VT 05601-1036

Partnership Renewals

As of May 5, 2008, each independent business or franchise in a network must separately apply for renewal of Full Partnership. A business cannot apply for renewal for another independent business or franchise that uses the same business name.

Renewing Full Partnerships

To ensure that the Vermont Small Scale Renewable Energy Partnership Program continues to provide Vermonters with the highest quality service in the renewable energy industry, the partnerships need to be renewed every two years. Partners need to be renewed every two years. Partners that do not renew will be moved to provisional partner status.

To renew full partnerships, applicants must:

1. Complete and submit a renewal application form for each type of partnership being renewed.
2. Submit proof of **two installation examples** (that have not been previously submitted) or one hour continuing education course. If the submitted installations examples are insufficient, the Partnership Program Technical Review Committee *may* request one additional installation example.
 - a. The installation references must match the type of partnership being applied for.
 - b. Installation references must be grid-tied.
 - c. A qualifying continuing education course will qualify the partner for renewal. The course must be 8-hours for licensed professionals or 32-hours for unlicensed professionals. The course must be an ISPQ accredited course OR Partnership Program-approved course.
3. \$150 re-application fee

Upgrading Provisional Partnerships to Full Partnership

To ensure that the Vermont Small Scale Renewable Energy Partnership Program continues to provide Vermonters with the highest quality, and safest service in the renewable energy industry, provisional partnerships must be upgraded to full partnership after two years. Businesses may not renew Provisional status. If Provisional Partners are not approved for full partnership upon re-application review, they will be removed from the Partnership Program. If Provisional Partners are denied full partnership upon upgrading, they may retain Provisional status until the end of their two-year provisional period. Once that two year period is up, they can re-apply for full partnership or will be removed from the program.

To Upgrade From Provisional To Full Partnership, Applicants Must:

1. Complete and submit a renewal application form for each type of partnership being renewed.
2. Submit proof of **three installation examples** (that have not been previously submitted or reviewed by the partnership program committee) OR proof of NABCEP certification and one installation example. Please refer to page 1, Applying for Partnership, for detailed information. Please note the following information:
 - a. The installation references must match the type of partnership being applied for.
 - b. Installation references must be grid-tied.
 - c. A qualifying continuing education course will qualify the partner for renewal. The course must be 8-hours for licensed professionals or 32-hours for unlicensed professionals. The course must be an ISPQ accredited course OR Partnership Program-approved.
3. \$150 re-application fee

Partnership Program Rules

1. Partnership status pertains to a qualified individual under the business name, unless otherwise determined by the Partnership Technical Sub-Committee. This individual should be listed as the **main contact** on the Application Form.
 - a. The individual listed as the main contact on the Application Form is required to sign off on all project contracts and incentive form applications.
 - b. This individual must have been **substantially** involved in, and at minimum, have had a supervisory role in the project, including conducting the site visit and analysis, producing the system design, and being present for final system inspection and commissioning.
 - c. This individual must be substantially involved in each project completed by the business upon acceptance into the program.
2. Full Partnerships must be renewed every two years.
3. Partners with no installations in their partnership type in the past two years will be moved to provisional status for a period of one year. If no additional projects have been installed during this one year provisional period, the partner will be removed from the program.
4. Provisional Partnerships must be upgraded to full partnership after two years. Businesses may not renew Provisional status.
5. Provisional Partners that attempt to upgrade to full partnership status but are denied will be allowed to sustain their provisional partnership until the end of their two-year provisional term. After the two year provisional term is over, provisional partners that do not upgrade to full partnership status will be removed from the program. In order to be accepted back to the partnership program, an applicant must reapply with proof of professional experience that has not yet been submitted to, or reviewed by, the committee for provisional or full partnership.
6. Full Partners who have not installed a project in their partnership type in two years will be moved to provisional status for a period of one year. In order to move back to full partnership status,

this partner may submit proof of one installation that has been completed in the past year for a paying customer. If this partner does not install any projects during the 1-year provisional term, this partner will be removed from the program.

7. Companies may only hold one partnership level per technology. Once a partnership level is upgraded or changed, any previous partnership level in that technology will be nullified.
8. As of October 2012, non-licensed plumbers can take the 8-hour Sunward Systems Pre-Engineered Installation course and qualify for provisional partnership.
9. For Solar Photovoltaic installations, at least two out of the three submitted must be grid-tied. For full partnership applicants, one of three installations submitted can be a project built on the applicant's own property. This installation cannot be the only installation reference submitted.
10. In order to get a course approved, it must meet the Partnership Program's requirements for using Coursework as proof of professional experience. Course syllabus must be submitted at least 4 weeks prior to the course start date. The technology-specific review committee will then review the course to determine if it is sufficient enough to qualify an individual for partnership.

Application Review Timeline

- Once an application is submitted, the Partnership Program Administrator has 5 days to review the application, request more information, and submit the application to the appropriate Technical Subcommittee
- Upon receipt of a *complete* application, the Technical Subcommittee has 14 days to complete an initial review of the application. During this review, the sub-committee may request additional information, pictures, line drawings, etc.
- The Partnership Program Administrator will relay the completed, Initial Review to the Applicant.
- The applicant has three weeks to respond to the subcommittee's comments and provide additional documentation, clarifying information, etc.
- When satisfactory responses to the subcommittee's requests are submitted, the sub-committee has 7 days to submit final comments and vote.
- Please note, if the Partnership Program does not receive a response from the applicant within 60 days, the application will be considered closed and the applicant will need to re-apply to the program.

Process for Revoking Partnership Status

Customers may file complaints against Full or Provisional Partners by submitting a written letter to the Partnership Oversight Committee. The committee will then complete a full review the complaint and decide a course of action.

The committee may take one of the following courses of action:

1. Issue a warning
2. Downgrade a Full Partner to Provisional status
3. Suspend the installer's Partnership status
4. Remove the Partner from the Partnership Program (indefinitely, for a specified period of time, or until other conditions are met).

Partnership Program Committees

Partnership Oversight Committee

The Vermont Small Scale Renewable Energy Partnership Program is governed by the Partnership Oversight Committee. The Partnership Committee is comprised of five industry representatives. Members serve one-year terms. The committee shall include at least one REV Board member and at least one representative of the four partnership types. A simple majority (3 out of 5) is required for the Partnership Committee to make decisions regarding the Partnership Program.

The Partnership Technical Subcommittees

Applications are reviewed electronically and voted for by the appropriate technical subcommittee. There are four Technical Subcommittees, one for each technology in the Vermont Small Scale Renewable Energy Incentive Program: Solar Hot Water, Solar Photovoltaic, Wind and Hydro. A simple majority (3 out of 5) is required for the Technical Subcommittee to decide on an applicant's Partnership status.

The Partnership Committee also appoints a Partnership Program Administrator to oversee the Program. The administrator reviews all incoming applications and forwards the application to the appropriate subcommittee for review.

Small Scale Renewable Energy Partnership Program Forms

Photovoltaic Application Checklist

Please read thoroughly and submit your application with all items listed below.

- Application Form**
*Installer Agreements Standard signed, dated.
List Vermont Electrical License (if applicable) or Vermont Plumbing License (required on all SHW installations)*
- Application Fee**
\$150.00
- Proof of Insurance**
\$1 Million per incident, \$2 Million aggregate
- Project Technical Documentation Worksheet**
Completed with photos listed below & detailed one line drawing
- Photos**
Include all photos listed below, as though you are conducting a site visit for each installation example submitted. Label photos as: ProjectName_PhotoDescription.jpg.
 - PV Array
 - Mechanical Attachment Points
 - Conduit roof penetration points
 - Wire junction boxes/combiner boxes, open so we can see wiring details
 - All labeling as required by NEC posting requirements
 - Array Circuit wiring
 - Fusing, open so we can see wiring details
 - Disconnects, open so we can see wiring details
 - Power Processing Equipment (inverter), open so we can see wiring details
 - Batteries
 - Charge Controllers, open so we can see wiring details
 - Location where PV system connects to the utility, open so we can see wiring details
 - Location where PV system connects to the utility, closed so we can see NEC labeling.
 - Main load center photo to clearly show main breaker
 - System Grounding/Grounding Electrode Conductor including connection to grounding electrodes
- One line diagram**
The one line diagram should include the following information:
 - All major field-installed electrical components
 - Inverter Type
 - Detailed module information
 - Series/parallel configuration of modules

- wire type, all wire run lengths, wire size to all major system components, including grounding details
- Conduit type & size
- Ratings for all circuit breakers and fuses
- PV power source
- Details of PV output circuit as posted on the DC disconnect
- Location of junction or combiner boxes
- Interconnecting utility (if applicable)
- Disconnect type, location (if applicable)
- Means and location of connecting the building to the electrical system
- Main load center bus bar rating and main breaker rating and location of main breaker (in load center or at meter)
- If connecting in a sub panel: bus rating of sub panel and main panel, breaker ratings for sub feed and main load center

For Battery systems, please include:

- Battery make & type
- Voltage
- Amp. hours
- system battery voltage
- battery cables
- cables to the inverter system
- charge controllers
- non-PV generators (where applicable)

Provisional Photovoltaic Partner Application

Vermont Small Scale Renewable Energy Partnership Program (SSREPP)

Read first: Please print, read, complete, and sign this two-page application form and send via US mail along with the \$150 application fee to the following address:

**Renewable Energy Vermont
PO Box 1036
Montpelier, VT 05601**

If you are submitting installation references as proof of your business' professional experience, you will need to complete a Project Technical Documentation Worksheet for each additional reference and submit via email to: vtpartnershipprogram@gmail.com. Alternatively, you may save the worksheets as electronic files on a CD-ROM and post via US Mail to the address listed above.

I. General Information

Name of Business _____

Main Installer/Contact _____ Type of Business _____
(Sole Proprietor, LLC, partnership, etc)

Mailing Address _____

Phone Number _____ Website _____

E-mail _____

VT Electrical license _____

II. Documentation of Insurance

Provide proof of insurance of at least \$1 million per incident, and a \$2 million aggregate.

III. Installation Agreements Standard

When installing photovoltaic systems in Vermont, _____ certifies that all the company's photovoltaic systems will: *(company name)*

- a. Meet all State of Vermont requirements
- b. Be completed according to Vermont Public Service Board Technical/Interconnection Standards
- c. Use only UL-listed electrical components (or equivalent) if available
- d. Include a written contract with the customer
- e. Include at least a one-year warranty on parts and labor
- f. Include a utility-grade kWh meter so performance can be tracked
- g. Be completed under direct contract with the above listed company. As a Vermont Partner Installer, the applicant company is required to be significantly involved in the siting, design, installation, and commissioning of all installations.

Signature & Title

Date

IV. Documentation of Professional Experience

Please choose one of the following options for providing proof of your company's professional experience.

1. Provide REV with details* of **one** grid-tied photovoltaic systems (at least 1kW), that your business has installed for paying customers within the past year.
OR
2. Provide REV with proof that a company employee(s) who will be installing systems has successfully completed a Institute for Sustainable Power (ISPQ) accredited solar photovoltaic training program within the last year. If no ISPQ accredited courses are available, a REV approved course is acceptable⁸.
OR
3. Provide a copy of the VT electrical license of at least one company employee and proof of completion within the last year of a REV approved solar photovoltaic course.

*Installation Reference Requirements⁹:

When submitting proof of professional experience through installation references, applicants must provide the following information for **each** installation reference.

- a. A completed Project Technical Documentation Worksheet, including a one-line diagram as specified by the worksheet and detailed photos of the system components.
Note: Technical information is reviewed electronically, therefore we require that each worksheet be submitted either via email to vtpartnershipprogram@gmail.com or copied onto a CD-ROM and mailed via US post to the address listed on page 1. These forms can be completed electronically, saved, and mailed.
- b. A copy of the Certificate of Public Good (CPG) number for any grid-tied system.

Using Coursework as proof of professional experience:

Provisional partner applicants may submit proof of training coursework as a means of entering the program. In order to qualify the applicant for provisional status, the coursework must be accredited by the Institute for Sustainable Power Quality (ISPQ) or approved by REV. The ISPQ is the accrediting body of the Interstate Renewable Energy Council (IREC). REV also approves training courses based on their content. Courses must be submitted for approval at least four weeks prior to the applicant begins coursework. For Photovoltaic (PV) applicants, REV approves courses depending on whether the applicant is a licensed electrician. The general credit requirements are as follows:

- **Licensed (electricians)** - 8 credit hours. Must cover industry fundamentals and best practices
- **Non-licensed professionals**- 32 credit hours. Course work must cover industry fundamentals, best practices and related codes/laws, and must have a hands-on component.

⁸ For details on how to submit a course for approval, or to determine whether or not a course has been approved by REV, please contact the partnership program administrator at (802) 229-0099.

⁹ Note: Installation references for full partner or provisional partner status must meet the following criteria:

1. Match the technology type of partnership applied for
2. Project must have been completed under direct contract with the applicant
OR
Project must have been completed by a subcontractor or under direct contract with the applicant. The applicant must have been substantially involved in the project and at minimum have had a supervisory role in the project, including conducting the site visit and analysis, producing the system design, and being present for final system inspection and commissioning.
3. Project must have the net metering application (if any) filed under the partnership applicants name
4. Project must have had any incentive grants applied for by the applicant (not by another business or separate franchise of the business)

Full Photovoltaic Partner Application

Vermont Small Scale Renewable Energy Inventive Program

Read first: Please print, read, complete, and sign this two-page application form and send via US mail along with the \$150 application fee to the following address:

Renewable Energy Vermont
PO Box 1036
Montpelier, VT 05601

If you are submitting installation references as proof of your business' professional experience, you will need to complete a Project Technical Documentation Worksheet for each additional reference and submit via email to: vtpartnershipprogram@gmail.com. Alternatively, you may save the worksheets as electronic files on a CD-ROM and post via US Mail to the address listed above.

I. General Information

Name of Business _____

Main Contact _____ Type of Business _____
(Sole Proprietor, LLC, partnership, etc)

Mailing Address _____

Phone Number _____ Website _____

E-mail _____

Name of Installer(s) (if different from contact) _____

VT Electrical license _____

II. Documentation of Insurance

Provide proof of insurance of at least \$1 million per incident, and a \$2 million aggregate.

III. Installation Agreements Standard

When installing photovoltaic systems in Vermont, _____ certifies that all the company's photovoltaic systems will: *(company name)*

- a. Meet all State of Vermont requirements
- b. Be completed according to Vermont Public Service Board Technical/Interconnection Standards
- c. Use only UL-listed electrical components (or equivalent) if available
- d. Include a written contract with the customer
- e. Include at least a one-year warranty on parts and labor
- f. Include a utility-grade kWh meter so performance can be tracked
- g. Be completed under direct contract with the above listed company. As a Vermont Partner Installer, the applicant company is required to be significantly involved in the siting, design, installation, and commissioning of all installations.

Signature & Title

Date

IV. Documentation of Professional Experience

Please choose one of the following options for providing proof of your company's professional experience.

1. Provide REV with details* of **three** photovoltaic systems (at least 1kW each), at least two of which are grid-tied, that your business has installed for paying customers within the past year.

OR

2. Provide REV with proof that a company employee(s) who will be installing systems have been certified by the North American Board of Certified Energy Practitioners (NABCEP). If certified by NABCEP, provide REV with details* of **one** grid-tied photovoltaic system (at least 1kWh) that your business has installed for a paying customer within the past year.

*Installation Reference Requirements¹⁰:

When submitting proof of professional experience through installation references, applicants must provide the following information for **each** installation reference.

- a. A completed Project Technical Documentation Worksheet, including a one-line diagram as specified by the technical documentation worksheet and detailed photos of the system components. **Note:** Technical information is reviewed electronically, therefore we require that each worksheet be submitted either via email to vtpartnershipprogram@gmail.com or copied onto a CD-ROM and mailed via US post to the address listed on page 1. These forms can be completed electronically, saved, and mailed.
- b. A copy of the Certificate of Public Good (CPG) number for any grid-tied system.
- c. If your business employs a NAPCEP Certified Photovoltaic Installer, please submit proof of certification.

¹⁰ Note: Installation references for full partner or provisional partner status must meet the following criteria:

5. Match the technology type of partnership applied for
6. Project must have been completed under direct contract with the applicant

OR

Project must have been completed by a subcontractor or under direct contract with the applicant. The applicant must have been substantially involved in the project and at minimum have had a supervisory role in the project, including conducting the site visit and analysis, producing the system design, and being present for final system inspection and commissioning.

7. Project must have the net metering application (if any) filed under the partnership applicants name
8. Project must have had any incentive grants applied for by the applicant (not by another business or separate franchise of the business)

Photovoltaic Project Technical Documentation Worksheet

Please complete both pages of this form with all required information. Technical information is reviewed electronically, therefore we require that each worksheet as well as supplemental information (photos and one-line diagrams) be submitted either via email to vtpartnershipprogram@gmail.com or copied onto a CD-ROM and mailed via post to the address listed below.

Customer Name(s): _____ Phone: _____

Location of Installation: _____ Date of Installation: _____

Solar Electric Array Location: Rooftop Pole Ground Mount

Solar Electric Module Orientation: _____ degrees (magnetic or true)

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

Solar Module Tracking: fixed single axis double axis
If fixed with adjustable tilt, please check fixed

Estimated Annual Output of the system as installed: _____ kWh/year

Warranty Information:

Modules: _____ years at _____% rated power output (minimum of 1 yr required)

Inverter: _____ years (minimum of 1 yr required)

Installation: _____ years (minimum of 1 yr required)

PV Power Source: Information as posted on PV Power Source Sign (permanently located on site at DC disconnect, as required by the NEC).

Operating Current

_____ x _____ = _____
Module operating current (Ip) Qty strings or modules connected in parallel

Operating Voltage

_____ x _____ = _____
Module operating voltage (Vp) Qty modules connected in series

Maximum System Voltage

_____ x _____ x 125% = _____
Module open circuit voltage (Voc) Qty modules connected in series (-20°F to -40°F min.)

Short Circuit Current

_____ x _____ = _____
Module short circuit currents (Isc) Qty of modules in parallel

AC Point of Connection: 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

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. Only one off-grid system per application can be submitted as proof of professional experience.

One-line diagram(s)* and/or schematic for system as installed – showing all major field-installed structural, mechanical, and electrical components **including** those listed below. The one-line diagram can be either hand drawn or computer generation, but must be submitted electronically.

- | | |
|---|--|
| <input type="checkbox"/> All major field-installed electrical components | <input type="checkbox"/> Main load center bus bar rating and main breaker rating and location of main breaker (in load center or at meter) |
| <input type="checkbox"/> Inverter Type | <input type="checkbox"/> If connecting in a sub panel: bus rating of sub panel and main panel, breaker ratings for sub feed and main load center |
| <input type="checkbox"/> Detailed module information | |
| <input type="checkbox"/> Series/parallel configuration of modules | |
| <input type="checkbox"/> wire type, all wire run lengths, wire size to all major system components, including grounding details | |
| <input type="checkbox"/> Conduit type & size | <i>For Battery systems, please include:</i> |
| <input type="checkbox"/> Ratings for all circuit breakers and fuses | <input type="checkbox"/> Battery make & type |
| <input type="checkbox"/> PV power source | <input type="checkbox"/> Voltage |
| <input type="checkbox"/> Details of PV output circuit as posted on the DC disconnect | <input type="checkbox"/> Amp. hours |
| <input type="checkbox"/> Location of junction or combiner boxes | <input type="checkbox"/> system battery voltage |
| <input type="checkbox"/> Interconnecting utility (if applicable) | <input type="checkbox"/> battery cables |
| <input type="checkbox"/> Disconnect type, location (if applicable) | <input type="checkbox"/> cables to the inverter system |
| <input type="checkbox"/> Means and location of connecting the building to the electrical system | <input type="checkbox"/> charge controllers |
| <input type="checkbox"/> non-PV generators (where applicable) | |

Digital photographs showing all major field-installed structural, mechanical and electrical components listed below. Photos must be submitted electronically. They can be sent as email attachments to vtpartnershipprogram@gmail.com or copied onto a CD-ROM and mailed via post to the address listed at the bottom on this page. **Label photos as: *ProjectName_PhotoDescription.jpg***

- PV Array
- Mechanical Attachment Points
- Conduit roof penetration points
- Wire junction boxes/combiner boxes, open so we can see wiring details
- All labeling as required by NEC posting requirements
- Array Circuit wiring
- Fusing, open so we can see wiring details
- Disconnects, open so we can see wiring details
- Power Processing Equipment (inverter), open so we can see wiring details
- Batteries
- Charge Controllers, open so we can see wiring details
- Location where PV system connects to the utility, open so we can see wiring details
- Location where PV system connects to the utility, closed so we can see NEC labeling.
- Main load center photo to clearly show main breaker
- System Grounding/Grounding Electrode Conductor including connection to grounding electrodes

Solar Hot Water Application Checklist

Please read thoroughly and submit your application with all items listed below.

- Application Form**
*Installer Agreements Standard signed, dated.
Vermont Plumbing License (required on all SHW installations)*
- Application Fee**
\$150.00
- Proof of Insurance**
\$1 Million per incident, \$2 Million aggregate
- Project Technical Documentation Worksheet**
Completed with photos listed below & detailed one line drawing
- Photos**
Include all photos listed below, as though you are conducting a site visit for each installation example submitted. Label photos as: ProjectName_PhotoDescription.jpg
 - Solar collectors
 - Hot water storage tank(s)
 - Heat exchanger
 - Backup hot water source
 - Controller
 - Circulating pumps
 - Gauges
 - Tempering valve
 - Expansion tank
 - Collector attachment points and all building penetration points
- One line diagram**
The one line diagram should include the following information:
 - Solar collectors, quantity & model
 - Mounting racks
 - Approximate plumbing line runs
 - Pipe material & insulation type
 - Hot water storage tanks, size and model
 - Heat exchanger, type and manufacturer
 - Temperature and/or pump controller
 - Heat transfer fluid type
 - Expansion tank
 - Circulating pump
 - Pressure and temperature gauges
 - Backup hot water heating source
 - Tempering valve or water temp control valve

Provisional Solar Hot Water Partner Application

Vermont Small Scale Renewable Energy Partnership Program

Read first: Please print, read, complete, and sign this two-page application form and send via US mail along with the \$150 application fee to the following address:

**Renewable Energy Vermont
PO Box 1036
Montpelier, VT 05601**

If you are submitting installation references as proof of your business' professional experience, you will need to complete a Project Technical Documentation Worksheet for each additional reference and submit via email to: vtpartnershipprogram@gmail.com. Alternatively, you may save the worksheets as electronic files on a CD-ROM and post via US Mail to the address listed above.

I. General Information

Name of Business _____

Main Contact _____ Type of Business _____
(Sole Proprietor, LLC, partnership, etc)

Mailing Address _____

Phone Number _____ Website _____

E-mail _____

Name of Installer(s) (if different from contact) _____

VT plumbing licensed plumber (incl. license number) _____

II. Documentation of Insurance

Provide proof of insurance of at least \$1 million per incident, and a \$2 million aggregate. Can be submitted electronically or via post to address listed above.

III. Installation Agreements Standard

When installing solar thermal systems in Vermont, _____ certifies that all the company's solar thermal systems will: *(company name)*

- a. Meet all State of Vermont requirements
- b. Comply with state plumbing and/or local plumbing codes and regulations
- c. Use a licensed installer as required by Vermont Law
- d. Include a written contract with the customer
- e. Include at least a one-year warranty on parts and labor
- f. Use only SRCC listed collectors
- g. Be completed under direct contract with the above listed company. As a Vermont Partner Installer, the applicant company is required to be significantly involved in the siting, design, installation, and commissioning of all installations.

Signature & Title

Date

IV. Documentation of Professional Experience

Please choose one of the following options for providing proof of your company's professional experience.

- Provide REV with details* of **one** solar thermal system that your business has installed for paying customers within the past year.

OR

- Provide proof that a company employee has successfully completed an Institute for Sustainable Power (ISPQ) accredited solar hot water training program within the last year.

OR

- Provide REV with a copy of the VT plumbing license of at least one company employee (Type S specialty license is sufficient) and proof that this employee has completed a REV approved solar thermal training course within the last year.

*Installation Reference Requirements¹¹:

When submitting proof of professional experience through installation references, applicants must provide the following information for **each** installation reference.

- c. A completed Project Technical Documentation Worksheet, including a one-line diagram as specified by the technical documentation worksheet and detailed photos of the system components.
Note: Technical information is reviewed electronically, therefore we require that each worksheet be submitted either via email to vtpartnershipprogram@gmail.com or copied onto a CD-ROM and mailed via US post to the address listed on page 1. These forms can be completed electronically, saved, and mailed.
- d. On all Solar Thermal (ST) references, the name and license of the plumber used during the installation
- e. If your business employs a NAPCEP Certified Solar Thermal Installer, please submit proof of certification.

Using Coursework as proof of professional experience:

Provisional partner applicants may submit proof of training coursework as a means of entering the program. In order to qualify the applicant for provisional status, the coursework must be accredited by the Institute for Sustainable Power Quality (ISPQ) or approved by REV. The ISPQ is the accrediting body of the Interstate Renewable Energy Council (IREC). REV also approves training courses based on their content. Courses must be submitted for approval at least four weeks prior to the applicant begins coursework. For Photovoltaic (PV) applicants, REV approves courses depending on whether the applicant is a licensed electrician. The general credit requirements are as follows:

- **Licensed (plumbers)** - 8 credit hours. Must cover industry fundamentals and best practices
- **Non-licensed professionals**- 32 credit hours. Course work must cover industry fundamentals, best practices and related codes/laws, and must have a hands-on component.

¹¹ Note: Installation references for full partner or provisional partner status must meet the following criteria:

- 9. Match the technology type of partnership applied for. Please note, if installation references are Sunward installations, applicant will only be approved to install Sunward systems.
- 10. Project must have been completed under direct contract with the applicant
OR
Project must have been completed by a subcontractor or under direct contract with the applicant. The applicant must have been substantially involved in the project and at minimum have had a supervisory role in the project, including conducting the site visit and analysis, producing the system design, and being present for final system inspection and commissioning.
- 11. Project must have the net metering application (if applicable) filed under the partnership applicants name
- 12. Project must have had any incentive grants applied for by the applicant (i.e.: not by another business or separate franchise of the business)

Full Solar Hot Water Partnership Application

Vermont Small Scale Renewable Energy Partnership Program

Read first: Please print, read, complete, and sign this two-page application form and send via US mail along with the \$150 application fee to the following address:

**Renewable Energy Vermont
PO Box 1036
Montpelier, VT 05601**

If you are submitting installation references as proof of your business' professional experience, you will need to complete a Project Technical Documentation Worksheet for each additional reference and submit via email to: vtpartnershipprogram@gmail.com. Alternatively, you may save the worksheets as electronic files on a CD-ROM and post via US Mail to the address listed above.

I. General Information

Name of Business _____

Main Contact _____ Type of Business _____
(Sole Proprietor, LLC, partnership, etc)

Mailing Address _____

Phone Number _____ Website _____

E-mail _____

Name of Installer(s) (if different from contact) _____

VT plumbing licensed plumber (incl. license number) _____

II. Documentation of Insurance

Provide proof of insurance of at least \$1 million per incident, and a \$2 million aggregate. Can be submitted electronically or via post to address listed above.

III. Installation Agreements Standard

When installing solar thermal systems in Vermont, _____ certifies that all the company's solar thermal systems will: *(company name)*

- a. Meet all State of Vermont requirements
- b. Comply with state plumbing and/or local plumbing codes and regulations
- c. Use a licensed installer as required by Vermont Law
- d. Include a written contract with the customer
- e. Include at least a one-year warranty on parts and labor
- f. Use only SRCC listed collectors
- g. Be completed under direct contract with the above listed company. As a Vermont Partner Installer, the applicant company is required to be significantly involved in the siting, design, installation, and commissioning of all installations.

Signature & Title

Date

IV. Documentation of Professional Experience

Please choose one of the following options for providing proof of your company's professional experience.

1. Provide REV with details* of **three** solar thermal system that your business has installed for paying customers within the past year.

OR

2. Provide REV with proof that the company employee(s) who will be installing systems have been certified by the North American Board of Certified Energy Practitioners (NABCEP). If certified by NABCEP, provide REV with details* of **one** solar thermal system that your business has installed for a paying customer within the past year.

*Installation Reference Requirements¹²:

When submitting proof of professional experience through installation references, applicants must provide the following information for **each** installation reference.

- a. A completed Project Technical Documentation Worksheet, including a one-line diagram as specified by the technical documentation worksheet and detailed photos of the system components.
Note: Technical information is reviewed electronically, therefore we require that each worksheet be submitted either via email to vtpartnershipprogram@gmail.com or copied onto a CD-ROM and mailed via US post to the address listed on page 1. These forms can be completed electronically, saved, and mailed.
- b. On all Solar Thermal (ST) references, the name and license of the plumber used during the installation
- c. If your business employs a NAPCEP Certified Solar Thermal Installer, please submit proof of certification.

¹² Note: Installation references for full partner or provisional partner status must meet the following criteria:

13. Match the technology type of partnership applied for. Please note, if installation references are Sunward installations, applicant will only be approved to install Sunward systems.
14. Project must have been completed under direct contract with the applicant
OR
Project must have been completed by a subcontractor or under direct contract with the applicant. The applicant must have been substantially involved in the project and at minimum have had a supervisory role in the project, including conducting the site visit and analysis, producing the system design, and being present for final system inspection and commissioning.
15. Project must have the net metering application (if applicable) filed under the partnership applicants name
16. Project must have had any incentive grants applied for by the applicant (i.e.: not by another business or separate franchise of the business)

Solar Hot Water Project Technical Documentation Worksheet

Please complete both pages of this form with all required information. Technical information is reviewed electronically, therefore we require that each worksheet as well as supplemental information (photos and one-line diagrams) be submitted either via email to vtpartnershipprogram@gmail.com or copied onto a CD-ROM and mailed via post to the address listed below.

Customer Name(s): _____ Phone: _____
Location of Installation: _____ Date of Installation: _____

Collector Location: rooftop ground mount other (specify): _____

Collector Orientation: _____ degrees (magnetic or true) Collector Tilt: _____
(0 degrees horizontal, 90 degrees vertical)

Total collector area: _____ (square ft) Estimated Annual Output: _____
Calculated as kWh/yr or percent annual hot water consumption

Warranty Information:

Collectors: _____ years (minimum of 1 yr required)
Balance of system (not including tank): _____ years (minimum of 1 yr required)
Tank: _____ years (minimum of 1 yr required)
Installation: _____ years (minimum of 1 yr required)

One-line diagram(s)* and/or schematic for system as installed – showing all major field-installed structural, mechanical, and electrical components including:

- Solar collectors
- Hot water storage tank(s)
- Heat exchanger
- Backup hot water source
- Controller
- Circulating pumps
- Gauges
- Tempering valve
- Expansion tank
- Collector attachment points and all building penetration points

Labeled digital photographs showing all major field-installed structural, mechanical and electrical components listed below. Photos must be submitted electronically. They can be sent as email attachments to vtpartnershipprogram@gmail.com or copied onto a CD-ROM and mailed via post to the address listed at the bottom on this page. **Label photos as: *ProjectName_PhotoDescription.jpg***

- Solar collectors, quantity & model
- Mounting racks
- Approximate plumbing line runs
- Pipe material & insulation type
- Hot water storage tanks, size and model
- Heat exchanger, type and manufacturer
- Temperature and/or pump controller
- Heat transfer fluid type
- Expansion tank
- Circulating pump
- Pressure and temperature gauges
- Backup hot water heating source
- Tempering valve or water temp control valve

Wind Application Checklist

Please read thoroughly and submit your application with all items listed below.

- Application Form**
Installer Agreements Standard signed, dated.
- Application Fee**
\$150.00
- Proof of Insurance**
\$1 Million per incident, \$2 Million aggregate
- Project Technical Documentation Worksheet**
Completed with photos listed below & detailed one line drawing
- Photos**
Include all photos listed below, as though you are conducting a site visit for each installation example submitted. Label photos as: ProjectName_PhotoDescription.jpg
 - Turbine from two different perspectives
 - Attachment points and mechanical penetration points
 - All labeling required by NEC posting requirements
 - Dated** photo of meter with numbered tag visible on start up
 - Turbine circuit wiring
 - Management of wiring
 - Fusing
 - Disconnects
 - Power processing equipment
 - Batteries
 - Charge controllers
 - Location where system interconnects to the utility
 - System grounding
- One Line Diagram**
All major structural and mechanical components of the system including:
 - Base and anchor assemblies
 - Tower height
 - Guy support
 - Turbine-to-tower attachment*All major field-installed electrical components including:*
 - Inverter make & model
 - Power conditioning equipment
 - Wiring in and out of the inverter
 - Wind System Output Circuit details
 - Wire type & sizing
 - All DC and AC wire run lengths and wire size to all major system components, including grounding details
 - Conduit Type & Size (where needed)
 - Number of conductors and generation lead-to-tower conductor connections

- Wind power source disconnecting means
- Ratings for all circuit breakers and fuses
- Locations of junction or combiner boxes
- Utility disconnect type and location
- Means and location of connecting to the building electrical system
- For battery systems: charge controllers and non-wind generators (where applicable)

Provisional Wind Partnership Application

Vermont Small Scale Renewable Energy Partnership Program

Read first: Please print, read, complete, and sign this two-page application form and send via US mail along with the \$150 application fee to the following address:

Renewable Energy Vermont
PO Box 1036
Montpelier, VT 05601

*If you are submitting installation references as proof of your business' professional experience, you will need to complete a Project Technical Documentation Worksheet for **each reference** and submit via email to: vtpartnershipprogram@gmail.com. Alternatively, you may save the worksheets as electronic files on a CD-ROM and post via US Mail to the address listed above.*

I. General Information

Name of Business _____

Main Contact _____ Type of Business _____
(Sole Proprietor, LLC, partnership, etc)

Mailing Address _____

Phone Number _____ Website _____

E-mail _____

II. Documentation of Insurance

Provide proof of insurance of at least \$1 million per incident, and a \$2 million aggregate.

III. Installation Agreements Standard

When installing wind systems in Vermont, _____ certifies that all the company's wind systems will: *(company name)*

- a. Meet all State of Vermont requirements
- b. Comply with Vermont Public Service Board Technical Interconnection Standards
- c. Provide a utility-grade kWh meter so performance can be tracked
- d. Include a written contract with the customer
- e. Include at least a one-year warranty on parts and labor
- f. Use only UL-listed electrical components (or equivalent) if available
- g. Be completed under direct contract with the above listed company. As a Vermont Partner Installer, the applicant company is required to be significantly involved in the siting, design, installation, and commissioning of all installations.

Signature & Title

Date

IV. Documentation of Professional Experience

Please choose one of the following options for providing proof of your company's professional experience.

1. Provide REV with details* of **one** grid-tied wind systems (at least 1kW each) that your business has installed for paying customers within the past year.

OR

2. Provide REV with proof that a company employee has successfully completed an ISPQ accredited or REV approved wind installation program within the last year¹³.

*Installation Reference Requirements¹⁴:

When submitting proof of professional experience through installation references, applicants must provide the following information for **each** installation reference:

- a. A completed Project Technical Documentation Worksheet, including a one-line diagram as specified by worksheet requirements and detailed photos of the system components. **Note:** Technical information is reviewed electronically, therefore we require that each worksheet be submitted either via email to ytpartnershipprogram@gmail.com or copied onto a CD-ROM and mailed via US post to the address listed on page 1. These forms can be completed electronically, saved, and mailed.
- b. A copy of the Certificate of Public Good (CPG) number for any grid-tied system.

Using coursework as proof of professional experience:

Provisional Partner Applicants may submit proof of training coursework as a means of entering the program. In order to qualify the applicant for provisional status, the coursework must be either approved by REV or accredited by the Institute for Sustainable Power Quality (ISPQ). The ISPQ is the accredited body of the Interstate Renewable Energy Council (IREC). REV also approves training courses based on their content. Courses must be submitted for approval before the applicant begins the coursework.

*For details on how to submit a course for approval, or to determine whether or not a course has been approved by REV, please contact the Partnership Program at (802) 229-0099.

¹³ For details on how to submit a course for approval, or to determine whether a course has been approved by REV, please contact the Partnership Program at (802) 229-0099.

¹⁴ Note: Installation references for full partner or provisional partner status must meet the following criteria:

17. Match the technology type of partnership applied for
18. Project must have been completed under direct contract with the applicant

OR

Project must have been completed by a subcontractor or under direct contract with the applicant. The applicant must have been substantially involved in the project and at minimum have had a supervisory role in the project, including conducting the site visit and analysis, producing the system design, and being present for final system inspection and commissioning.

19. Project must have the net metering application (if any) filed under the partnership applicants name
20. Project must have had any incentive grants applied for by the applicant (not by another business or separate franchise of the business)

Wind Full Partnership Application

Vermont Small Scale Renewable Energy Partnership Program

Read first: Please print, read, complete, and sign this two-page application form and send via US mail along with the \$150 application fee to the following address:

**Renewable Energy Vermont
PO Box 1036
Montpelier, VT 05601**

If you are submitting installation references as proof of your business' professional experience, you will need to complete a Project Technical Documentation Worksheet for each additional reference and submit via email to: vtpartnershipprogram@gmail.com. Alternatively, you may save the worksheets as electronic files on a CD-ROM and post via US Mail to the address listed above. Project Technical Documentation Worksheets can be downloaded at <http://www.revermont.org/main/partnership-program/become-a-partner-installer/>.

I. General Information

Name of Business _____

Main Contact _____ Type of Business _____
(Sole Proprietor, LLC, partnership, etc)

Mailing Address _____

Phone Number _____ Website _____

E-mail _____

II. Documentation of Insurance

Provide proof of insurance of at least \$1 million per incident, and a \$2 million aggregate.

III. Installation Agreements Standard

When installing wind systems in Vermont, _____ certifies that all the company's wind systems will: *(company name)*

- a. Meet all State of Vermont requirements
- b. Comply with Vermont Public Service Board Technical Interconnection Standards
- c. Provide a utility-grade kWh meter so performance can be tracked
- d. Include a written contract with the customer
- e. Include at least a one-year warranty on parts and labor
- f. Use only UL-listed electrical components (or equivalent) if available
- g. Be completed under direct contract with the above listed company. As a Vermont Partner Installer, the applicant company is required to be significantly involved in the siting, design, installation, and commissioning of all installations.

Signature & Title

Date

IV. Documentation of Professional Experience

Please choose one of the following options for providing proof of your company's professional experience.

4. Provide REV with details* of **three** wind systems (at least 1kW each), at least two of which are grid-tied, that your business has installed for paying customers within the past year.

*Installation Reference Requirements¹⁵:

When submitting proof of professional experience through installation references, applicants must provide the following information for **each** installation reference:

- f. A completed Project Technical Documentation Worksheet, including a one-line diagram as specified by worksheet requirements and detailed photos of the system components.
Note: Technical information is reviewed electronically, therefore we require that each worksheet be submitted either via email to vtpartnershipprogram@gmail.com or copied onto a CD-ROM and mailed via US post to the address listed on page 1. These forms can be completed electronically, saved, and mailed.
- g. A copy of the Certificate of Public Good (CPG) number for any grid-tied system.

¹⁵ Note: Installation references for full partner or provisional partner status must meet the following criteria:

21. Match the technology type of partnership applied for
22. Project must have been completed under direct contract with the applicant
OR
Project must have been completed by a subcontractor or under direct contract with the applicant. The applicant must have been substantially involved in the project and at minimum have had a supervisory role in the project, including conducting the site visit and analysis, producing the system design, and being present for final system inspection and commissioning.
23. Project must have the net metering application (if any) filed under the partnership applicants name
24. Project must have had any incentive grants applied for by the applicant (not by another business or separate franchise of the business)

Wind Project Technical Documentation Worksheet

Please complete both pages of this form with all required information. Technical information is reviewed electronically, therefore we require that each worksheet as well as supplemental information (photos and one-line diagrams) be submitted either via email to vtpartnershipprogram@gmail.com or copied onto a CD-ROM and mailed via post to the address listed below.

Customer Name(s): _____ Phone: _____

Location of Installation: _____ Date of Installation: _____

Turbine Location: Tower mount (roof mount not eligible for Vermont State Incentive Rebate Program)

Tower Height: _____ feet (hub height)

Rotor Diameter: _____

Estimated Average Annual Wind Speed at hub height: _____ (m/sec or mph)

Estimated Annual Output of the system as installed: _____ kWh/year

Warranty Information:

Turbine: _____ years at _____ % rated power output (minimum of 1 yr required)

Inverter (power conditioning center): _____ years (minimum of 1 yr required)

Installation: _____ years (minimum of 1 yr required)

Wind Power Source: Information as posted on Wind Power Source Sign (permanently located on site at DC disconnect, as required by the NEC).

Operating Current

Manufacturer's operating current range

Operating Voltage

Manufacturer's operating current range

Maximum System Voltage

Short Circuit Current

AC Point of Connection: 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

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. Only one off-grid system per application can be submitted as proof of professional experience.

One-line diagram(s)* and/or schematic for system as installed – showing all major field-installed structural, mechanical, and electrical components including:

- Base and anchor assemblies
- Tower height
- Guy support
- Turbine-to-tower attachment
- Inverter make & model
- Power conditioning equipment
- Wiring in and out of the inverter
- Wind System Output Circuit details
- Wire type & sizing
- All DC and AC wire run lengths and wire size to all major system components, including grounding details
- Conduit Type & Size (where needed)
- Number of conductors and generation lead-to-tower conductor connections
- Wind power source disconnecting means
- Ratings for all circuit breakers and fuses
- Locations of junction or combiner boxes
- Utility disconnect type and location
- Means and location of connecting to the building electrical system
- For battery systems: charge controllers and non-wind generators (where applicable)

Labeled digital photographs showing all major field-installed structural, mechanical and electrical components listed below. Photos must be submitted electronically. They can be sent as email attachments to vtpartnershipprogram@gmail.com or copied onto a CD-ROM and mailed via post to the address listed at the bottom on this page. **Label photos as: *ProjectName_PhotoDescription.jpg***

- Turbine from two different perspectives
- Attachment points and mechanical penetration points
- All labeling required by NEC posting requirements
- Dated** photo of meter with numbered tag visible on start up
- Turbine circuit wiring
- Management of wiring
- Fusing
- Disconnects
- Power processing equipment
- Batteries
- Charge controllers
- Location where system interconnects to the utility
- System grounding