



State of New Hampshire  
Public Utilities Commission  
21 S. Fruit Street, Suite 10, Concord, NH 03301-2429



**STEP 1**

**INCENTIVE PRE-APPROVAL APPLICATION**

**FOR RESIDENTIAL SMALL RENEWABLE ELECTRICAL GENERATION SYSTEMS  
10 KILOWATTS (DC) or smaller**

Any New Hampshire homeowner seeking an incentive payment from the Commission for an interconnected (on-grid) small renewable generation facility (or "renewable energy system"), that begins operation after September 30, 2009 is required to obtain the Commission's pre-approval of the installation. Pre-approval will reserve your place in the funding queue. Once the facility has been installed at the owner's residence, the homeowner must then complete the process by submitting a Step 2: Final Incentive Request form. The incentive pre-approval expires 12 months from the date the application is approved. Applicants who choose to install systems prior to Commission approval may still apply for the incentive, but the application is subject to Commission approval and availability of funds.

Because the application requires an original notarized signature, it will not be accepted if submitted electronically.

**Please submit application and all associated documents to:**

Sustainable Energy Division  
New Hampshire Public Utilities Commission  
Sustainable Energy Division  
21 S. Fruit Street, Suite 10  
Concord, NH 03301-2429

**TERMS AND CONDITIONS**

Please read the Terms and Conditions carefully prior to completing the form.

1. This program is administered in accordance with RSA 362-F:10. Any applicant requesting an incentive payment for any renewable energy system is responsible for meeting all terms and conditions of the program.
2. Applicants must complete a Step 2: Final Incentive Request Form to receive an incentive payment.
3. To be eligible for a one-time incentive payment, the renewable energy systems must qualify as Class I or Class II sources of electricity in accordance with RSA 362-F. Qualifying systems include solar photovoltaic (PV) systems and wind turbines, but not solar hot water systems, geothermal heating and cooling systems or any other renewable energy system that does not generate electricity. Off-grid installations are not eligible for this incentive **because such installations are not eligible to produce renewable energy certificates in New Hampshire.**
4. The renewable energy system must be located on or at the applicant's New Hampshire residence, which may include a second home that the residential owner occupies at least part of the year.
5. An addition to an existing renewable energy system may qualify for an incentive payment only if the renewable energy system has not previously qualified for an incentive under this program. Replacement of an existing facility will not qualify for an incentive. Used parts or self-installer labor cannot be included in the cost of the facility.
6. Residents who choose to install systems, in whole or in part, prior to approval by the Commission may still apply for this incentive payment by submitting both the Step 1 and Step 2 forms.
7. Solar PV systems must have a manufacturer's rated panel output under standard test conditions (STC) of 10 kilowatts (DC) or less and must be certified by a nationally-recognized testing laboratory as meeting the requirements of UL 1703.
8. Wind turbines must have a manufacturer's rated maximum output of 10 kilowatts or less measured at a wind speed of 11 meters per second or 24.6 miles per hour (mph).

9. Wind turbines must be mounted at least 30 feet above any physical wind barriers within a 500 foot radius. Roof-mounted wind turbines are not eligible for an incentive payment at this time.
10. Any renewable energy system must comply with all manufacturers' requirements and meet all applicable requirements of the State Building Code pursuant to RSA 155-A:1, IV including the National Electric Code 2014 or its successor.
11. Interconnection of the renewable energy system with the applicant's utility must comply with the terms of the Interconnection Agreement, the Puc 900 Net Metering Rules (if applicable), as well as any applicable tariffs governing interconnection.
12. Any renewable energy system is subject to inspection and monitoring by the Commission, the State Fire Marshal and local code authorities or their agents for safety and performance in addition to any monitoring prescribed in the interconnection agreement between the electric utility and the owner of the facility.
13. The incentive payment is **\$0.50** per Watt (DC) and is capped at a maximum of **\$2500.00** or 30% of the total cost of the facility, whichever is less.
14. The Step 2: Final Incentive Request form must be submitted after the installation is complete and within 12 months of the date that the incentive pre-approval form is approved. Applicants may submit both forms together if the installation is already operational but the incentive payment is conditioned on meeting the requirements listed herein.
15. Incentives are subject to the availability of funds received by the Commission under RSA 362-F; complete applications will be processed in the order in which they are received.
16. All program requirements and documentation must be complete and submitted in order to receive approval for an incentive payment. Payment of the incentive may be subject to Commission inspection of the facility to confirm that the system is operational and consistent with the application.
17. Certain information, including applicants' names, addresses, system details and total installed costs of systems installed with program support, may be available to the public and may be publicly posted. Additional information may be released upon official request. Additional specific personal information including Social Security Number, telephone numbers and email addresses, will remain confidential to the extent permitted under state law.
18. The Commission reserves the right to request system performance data for a period of ten (10) years after issuing the incentive. The incentive recipient is strongly encouraged to install a utility grade electric production meter to monitor and record system output. Installation of a utility grade electric production meter also qualifies the system for renewable energy certificates pursuant to Puc 2500, the PUC Administrative Rules for the Electric Renewable Portfolio Standard (RSA 362-F).
19. The incentive recipient may be liable to the State of New Hampshire for the entire amount if it is obtained fraudulently.
20. Any incentive received under this program may be treated as taxable income by the IRS. It is the responsibility of the recipient of this incentive to consult with his or her tax advisor to determine the correct tax treatment of these payments. Applicants who do not provide their Social Security Number on the Step 2: Final Incentive Request form will not be eligible for reimbursement.

## APPLICANT INFORMATION

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Town/City: \_\_\_\_\_ State: \_\_\_\_ Zip Code: \_\_\_\_\_

Installation Address (if different): \_\_\_\_\_

Town/City: \_\_\_\_\_ State: \_\_\_\_ Zip Code: \_\_\_\_\_

Telephone: \_\_\_\_\_ Cell: \_\_\_\_\_

Email: \_\_\_\_\_ Site Electric Utility: \_\_\_\_\_ Off Grid systems are not eligible

Has applicant performed an energy audit of the home and undertaken energy efficiency

measures? **YES**  **NO**  If yes, please summarize activities: \_\_\_\_\_

\_\_\_\_\_

If you would like to learn more about improving energy efficiency, please visit [www.nhsaves.com](http://www.nhsaves.com) and [www.energystar.gov](http://www.energystar.gov).

## INSTALLATION INFORMATION

Anticipated start date: \_\_\_\_\_ Anticipated date of completion: \_\_\_\_\_

Is this an expansion of an existing system? **YES**  **NO**

Note: An expansion is only eligible for an incentive if the existing system has not already received an incentive through this program. Replacement of any or all of an existing system is not eligible for an incentive.

## INSTALLER (if not self-installed)

Installer Name: \_\_\_\_\_ Company: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Town/City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone: (\_\_\_\_) \_\_\_\_-\_\_\_\_ Email address: \_\_\_\_\_

NH Electrician license number (if applicable): \_\_\_\_\_

## ELECTRICIAN

Electrician Name (if different than installer): \_\_\_\_\_

Company: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Town/City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone: (\_\_\_\_) \_\_\_\_-\_\_\_\_ Email address: \_\_\_\_\_

NH Electrician license number: \_\_\_\_\_

## SYSTEM INFORMATION **Photovoltaic** **Wind**

### PHOTOVOLTAIC SYSTEM INFORMATION

Panel Manufacturer: \_\_\_\_\_ Model Number(s): \_\_\_\_\_

Are the panels UL 1703 listed? **YES**  **NO**  (if No, you are not eligible for an incentive payment.)

FOR TOTAL FACILITY WATTAGE (POWER) MULTIPLY NUMBER OF PANELS TIMES THE POWER RATING OF EACH AND SUM		
Number of Panels		
Panel Wattage (DC)		
Total Wattage		
Sum of Facility Wattage (DC)		

Inverter Manufacturer: \_\_\_\_\_ Model Number: \_\_\_\_\_

Number of Inverters: \_\_\_\_\_

Will the inverters comply with IEEE 1547 and UL 1741? **YES**  **NO**  (if No, the facility is not eligible for an incentive payment.)

The system will be mounted on: **Roof**  **Ground**  **Pole**

## PERCENT OF OPTIMAL PV PRODUCTION

Note: The applicant must provide panoramic photos of the horizon taken from the installation location from due east through south to due west. A shading analysis must also be provided if the applicant cannot claim 0% shading below.

Azimuth (add 15 to compass reading): \_\_\_\_\_ degrees      Tilt (horizontal=0°) = \_\_\_\_\_ degrees

1. Optimal Annual Production (kWh): \_\_\_\_\_

Go to <http://pvwatts.nrel.gov/> and use **Concord, NH** as the location. Use total array size, optimal azimuth (180°) and tilt (35°), no shading, and the appropriate description under "Array Type" with other default parameters.

2. Projected Actual Annual Production without Shading (kWh): \_\_\_\_\_

Use total facility size, actual tilt and azimuth, the settings above and no shading.

3. Percent loss from shading: \_\_\_\_\_%

Use a Solmetric SunEye, Solar Pathfinder, or other similar device to quantify the percent loss from shading. You may enter 0% loss from shading if no obstruction is closer than 3 times the height that the obstruction extends above the PV panels or there is a clear view of the sky above 18° of the horizon from due east through south to due west.

4. Projected Actual Annual Production with Shading (#2 above x (1-#3 above)): \_\_\_\_\_ kWh

5. Ratio of Actual Production to Optimal Annual Production (#4 above/#1above) x 100): \_\_\_\_%

6. Is this percentage greater than 80%?      **YES**       **NO**       If NO, please explain in an attachment why the facility cannot meet this performance threshold.

## WIND SYSTEM INFORMATION

Turbine Manufacturer: \_\_\_\_\_ Model Number: \_\_\_\_\_

Manufacturer's Power Rating of Turbine at 11m/s or 24.6 mph: \_\_\_\_\_watts

Inverter Manufacturer: \_\_\_\_\_ Model Number: \_\_\_\_\_

Will the inverter be compliant with IEEE 1547 and UL 1741?      **YES**       **NO**

Number of Inverters: \_\_\_\_\_

Tower Manufacturer: \_\_\_\_\_ Model Number: \_\_\_\_\_

Tower Height: \_\_\_\_\_ Height above tree line: \_\_\_\_\_

Tower Type:                      **Single Pole**                       **Guyed**

Average wind speed at installation site (if known): \_\_\_\_\_ mph

Please describe method of assessing wind resources: \_\_\_\_\_

Note: To minimize turbulence, all wind turbines must be mounted on the ground and at least 30 feet above any physical wind barrier within a 500 foot radius. The average wind speed at the installation site should be at least 10 mph. The Commission strongly recommends that the applicant evaluate the wind resources at the proposed installation site using a source other than a wind map. Small wind turbines have encountered difficulties in New England and New Hampshire partly due to misjudged and highly variable wind speeds and turbulence. See the Wind Resource Assessment Handbook by AWS Scientific, Inc. at [www.nrel.gov/wind/pdfs/22223.pdf](http://www.nrel.gov/wind/pdfs/22223.pdf).

## REQUIRED ATTACHMENTS

These items (copies) must be attached to the application:

- |   | Attached                 |
|---|--------------------------|
| 1. Signed contract with installer or evidence of intent (if applicable)   | <input type="checkbox"/> |
| 2. Panoramic photos of the installation site  | <input type="checkbox"/> |
| 3. Quantified shading analysis if applicant cannot enter 0% shading (See note in Percent of Optimal PV Production.) | <input type="checkbox"/> |
| 4. Professional wind analysis, wind study or other method of assessing wind speed (if available and applicable)     | <input type="checkbox"/> |

Documentation that the facility meets local zoning regulations must be provided with the Step 2 Final Incentive Request form in the form of a copy of the electrical or building permit where available.

Note: In the *Step 2 Final Incentive Request* form you will be expected to provide paid invoices, an interconnection agreement with your electric utility, pictures of the installation, and documentation that the system is UL certified and has been inspected by a local building code official or NH licensed electrician, unless the installation company includes a NH licensed electrician.

## INCENTIVE CALCULATION

1. Total Facility Cost (less any self-installer labor costs or used equipment): \_\_\_\_\_
  2. System Size (Total Array Output or Manufacturer's Power Rating at 11m/s): \_\_\_\_\_
  3. System Size X \$0.50/Watt = \_\_\_\_\_
  4. Total Requested Incentive: \_\_\_\_\_
- For Line 4 enter **30% of line 1, or 100 % of line 3, or \$2500.00**, whichever is less (\$2,500.00 maximum).

## DECLARATION

The Undersigned applicant declares under penalty of perjury that:

- 1) the applicant intends to purchase and install the renewable energy system described in this application;
- 2) the applicant has read and understands the terms and conditions set forth in this application with attachments and has agreed to abide by those requirements;
- 3) the information provided in this form is true and correct to the best of his or her knowledge; and
- 4) the applicant agrees that the system and documents supporting the application may be audited and inspected by the Commission.

Applicant's Signature \_\_\_\_\_ Date: \_\_\_\_\_

Only one signature needed per household.

For questions regarding this incentive program, see the incentive program FAQ website at <http://www.puc.nh.gov/Sustainable%20Energy/RenewableEnergyRebates-SREG.html> or contact Jon Osgood at [jon.osgood@puc.nh.gov](mailto:jon.osgood@puc.nh.gov).