Print Form

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 LESS THAN 5 KILOWATTS

Any New Hampshire homeowner seeking an incentive payment from the Commission for a 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 Step 2 by submitting a **final incentive request form.** The incentive pre-approval expires 12 months from the date this application is approved. Residents who choose to install systems prior to Commission pre-approval may still apply for this rebate, 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 and Puc 2500. Any applicant requesting an incentive payment for any renewable energy system is responsible for meeting all terms and conditions of the program.
2. You must complete a Final Incentive Request Form (Step 2) to receive your 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 and Puc 2500. 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.
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. 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 less than 5 kilowatts 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 less than 5 kilowatts 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 2008.
11. Any interconnection of the renewable energy system with your utility must comply with your 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 any interconnection agreement between the electric utility and the owner of the facility.
13. The incentive payment is $3.00 per watt and is capped at a maximum of $6,000.00 or 50% of the total cost of the facility, whichever is less.
14. The final incentive request form must be submitted after the installation is complete and within 12 months of the date that this incentive pre-approval form is approved. Applicants may submit both forms together if the installation is already complete 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 system details, zip code, 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. Specific personal information including Social Security number, name, telephone numbers, and email, street and mailing addresses (but not town or zip code) 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 meter to monitor and record system output. Installation of a utility grade electric 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 of the incentive if the incentive 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 payment 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 address: _____

Your Electric Utility: _____

Have you performed an energy audit of your home and undertaken energy efficiency measures? **YES** ☐ **NO** ☐ If yes, please summarize your activities: _____

_____

If you would like to learn more about improving energy efficiency, please visit www.nhsaves.com and www.energystar.gov.

INSTALLATION INFORMATION

Anticipated start date: _____ Anticipated date of completion: _____

Will you install the system yourself? **YES** ☐ **NO** ☐

If **Yes**, please initial here indicating that you are requesting a waiver of the requirements that you must provide a signed contract with a primary installer or vendor. **Initial:** _____

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.

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** ☐ **Other** ☐

For other renewable energy systems, please contact Jon Osgood at jon.osgood@puc.nh.gov or (603) 271-2431.

PHOTOVOLTAIC SYSTEM INFORMATION

Panel Manufacturer: _____ Model Numbers: _____

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

FOR TOTAL FACILITY POWER MULTIPLY NUMBER OF PANELS TIMES THE POWER RATING OF EACH AND ADD					
# of Panels					
Power of Panel					
Total Power					
				Total Facility Power	

Inverter Manufacturer: _____ Model Number: _____

Number of Inverters: _____

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

The system will be mounted on: **a Roof** ☐ **the Ground** ☐ **a Pole** ☐

PERCENT OF OPTIMAL PV PRODUCTION

Note: The applicant must provide a detailed site map that clearly illustrates all obstructions and their respective heights and distances from the system as well as 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 (180°=true south): _____ degrees Tilt (horizontal=0°) = _____ degrees

1. Optimal Annual Production (kWh): _____
Go to www.nrel.gov/rredc/pvwatts or use Concord, NH as a default at: http://rredc.nrel.gov/solar/codes_algs/PVWATTS/version1/US/New_Hampshire/Concord.html. Use total array output, optimal azimuth (180°) and tilt (43.2° for Concord or actual latitude), no shading, and .77 derating factor.

2. Actual Annual Production without Shading (kWh): _____
Use total facility output, actual tilt and azimuth, .77 derating factor, 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. Actual Annual Production with Shading (#2 x (1-#3)): _____ kWh

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

6. Is this percentage greater than 80%? **YES** ☐ **NO** ☐ If NO, please explain in an attachment why you don't 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 partly due to misjudged wind speed and turbulence. Please see www.masstech.org/renewableenergy/sm_renew/Small%20Wind%20Progress%20Report%20061208.pdf for more information on the issues that have contributed to their poor performance results. See also the Wind Resource Assessment Handbook by AWS Scientific, Inc. at 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)	☐
2. Detailed site map and panoramic photos of the installation site	☐
3. Quantified shading analysis if applicant cannot enter 0% shading (See note in Percent Optimal Production.)	☐
4. Professional wind analysis, wind study or other method of assessing wind speed (if available)	☐
5. Building permit or other documentation that the facility meets local zoning regulations. (if none, please explain) _____	☐

Note: In the final incentive request form you will be expected to provide paid invoices, an interconnection agreement with your electric utility (unless the system is off-grid), 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 team includes a NH licensed electrician.

INCENTIVE CALCULATION

1. Total Facility Cost (less any self-installer labor costs or used equipment): _____
2. System Output (Total Array Output or Manufacturer's Power Rating at 11m/s): _____
3. System Output X $3.00/watt = _____
4. Total Requested Incentive: _____

For Line 4 enter **50% of line 1** *or* **100 % of line 3** *or* **$6,000**, whichever is less ($6,000 max).

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.

Subscribed and sworn before me this ___(day) of _____ (month) in the year ____

County of _____

State of _____

_____
Notary Public/Justice of the Peace
My Commission expires _____

For questions regarding this rebate program, see the incentive program FAQ website at www.puc.state.nh.us/Sustainable%20Energy/RenewableEnergyRebatesQAs-residential.htm, or contact Jon Osgood at jon.osgood@puc.nh.gov or (603)271-6306.