



DE 13-025

579 Tenney Mountain Highway
Plymouth, NH 03264-3154
www.nhec.coop
603-536-1800 / 800-698-2007

Ms. Debra A. Howland
Executive Director and Secretary
State of New Hampshire
Public Utilities Commission
21 S. Fruit St, Suite 10
Concord, NH 03301-2429



January 23, 2013

RE: Puc 2505.08 Certification of Certain Customer-Sited Sources

Dear Ms Howland:

In accordance with Puc 2505.08 we are submitting the attached application for your review. Please note that this installation is an 18,360 watt DC solar photovoltaic installation. This installation is located at the NHEC Sunapee District Office at 604 Sunapee Street, Newport NH. This location is within the PSNH franchise service area and the electricity to this location is provided by PSNH. NHEC has followed the PSNH "Simplified Process Interconnection Application and Service Agreement" and received approval by PSNH for the interconnection to their distribution system as a NET metered account. This documentation is included as part of this application.

In a letter dated January 16, 2009 NHEC made application to the NHPUC to be a designated "Independent Monitor" and indicated it "may seek to offer these services to non-members at a later date." On May 12, 2009 in a letter referencing DE 09-006 the NHPUC approved NHEC's application to be an "Independent Monitor". The NHEC Sunapee District Office is a NHEC owned facility which is a distribution customer of PSNH. PSNH does not offer "Independent Monitoring" services. This is a non-member location and we believe it is logical for us to be the independent monitor for our own facility. NHEC is planning on being the independent monitor for this installation and has installed a REC meter for this purpose. At this time we do not have plans to offer the "Independent Monitoring" services to non-members beyond our own facilities. We plan to utilize the REC's produced by this facility to help meet NHEC Renewable Portfolio Standard requirements.

If you have any questions or concerns please contact me.

Gary S. Lemay PE
NHEC Renewable Energy Engineer

e-mail – lemayg@nhec.com
W - 603-536-8828
C - 603-254-7518
F - 603-536-8698

NHPUC JAN23'13 PM 3:32

- (City) (State) (Zip Code)
9. Telephone number: 603-284-6618
10. Facsimile number: _____
11. Email address: kfrase@hughes.net
12. Equipment
Vendor's Name: Frase Electric LLC
13. Business Address: (1) 789 Whittier Highway
(2) _____
(3) _____
South Tamworth NH 03883
(City) (State) (Zip Code)
14. Telephone number: 603-284-6618
15. Facsimile number: _____
16. Email address: kfrase@hughes.net
17. Independent Monitor's
Name: New Hampshire Electric Cooperative, Inc.
18. Business Address: (1) 579 Tenney Mountain Highway
(2) _____
(3) _____
Plymouth NH 03264
(City) (State) (Zip Code)
19. Telephone number: 800-698-2007
20. Facsimile number: 603-536-8698
21. Email address: _____
22. The ISO-New England asset identification number, if applicable: _____ or N/A: ☒
23. The GIS facility code, if applicable: pending or N/A: ☐


24. If Class I, please identify type of source below:
☐ wind generation ☐ solar hot water ☐ other generation.
If other type of generation, provide a description. (Attach as "Exhibit A")
25. A list and description of the equipment used at the facility, including the REC meter and, if applicable, the inverter (Attach as "Exhibit B") **ATTACHED**
26. A copy of the interconnection agreement pursuant to Puc 307.06, if applicable, between the applicant and the distribution utility. (Attach as "Exhibit C" or N/A ☐) **ATTACHED**
27. An attestation by the applicant that the project is installed and operating in conformance with any applicable building codes. (Attach as "Exhibit D" or N/A ☐) **ATTACHED**
28. For an installation with electric output, documentation of the applicable distribution utility's approval of the installation. (Attach as "Exhibit E" or N/A ☐) **ATTACHED**
29. This application and all future correspondence should be sent to:
Ms. Debra A. Howland
Executive Director and Secretary
State of New Hampshire
Public Utilities Commission
21 S. Fruit St, Suite 10
Concord, NH 03301-2429
30. Preparer's Information:
Name: Scott C. McNeil
Title: Program Administrator
Company: New Hampshire Electric Cooperative, Inc.
Address: 579 Tenney Mountain Highway, Plymouth, NH 03264
Phone Number: 603-536-8608
Email Address: mcneils@nhec.com
31. Preparer's Signature:  Scott C. McNeil 1-23-13

EXHIBIT B

NH Electric Cooperative, Inc., Sunapee District
604 Sunapee Street
Newport, NH 03773

Equipment:	72	Suniva OPT 255 watt solar panels
	3	SMA Sunny Boy 6000US inverters
	2	remote mounting racks
	1	Siemens 200 amp fused disconnect for inverters
	1	400 amp meter enclosure for REC meter

REC meter:	1	Elster Type R2S hour meter
		# 693445 serial# 15441545 start read 00000

Exhibit C & Exhibit E

Lemay, Gary

From: katherine.roberge@nu.com
Sent: Thursday, January 10, 2013 1:58 PM
To: Lemay, Gary
Cc: michael.motta@nu.com; richard.labrecque@nu.com
Subject: #N2610 NHEC PV (Newport) - Certificate of Completion, On Line
Attachments: N2610 NHEC Sunapee PV - Certificate of Completion.pdf; N2610 NHEC Sunapee PV - Processed Application.pdf

Dear Mr. Lemay,

We have processed the "Exhibit B - Certificate of Completion" for project #N2610 NHEC PV (Newport) located at 604 Sunapee Street, Newport, NH. The Certificate of Completion has been reviewed and processed. Enrollment into the Net Metering program is complete and you may interconnect your project to the PSNH electrical distribution system in accordance with the *New Hampshire Code of Administrative Rules Chapter Puc 900 Net Metering For Customer-Owned Renewable Energy Generation Resources of 1000 Kilowatts or Less*, and the *Terms and Conditions for Simplified Process Interconnections*. Attached for your records is a copy of the "Certificate of Completion" and the "Simplified Process Interconnection Application and Service Agreement."

Please contact Michael D. Motta, Supplemental Energy Sources, at Michael.Motta@nu.com or by calling (603) 634-2920 should you have any questions or require additional information.

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Exhibit C & Exhibit E

RECEIVED
NOV 26 2012

BY: _____

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE INTERCONNECTION STANDARDS FOR INVERTERS SIZED UP TO 100 KVA

Simplified Process Interconnection Application and Service Agreement

Date Prepared: 11-20-12

Contact Information:

Legal Name and Address of Interconnecting Customer (or, Company name, if appropriate)

Customer or Company Name (print): NH ELECTRIC COOPERATIVE

Contact Person, if Company: GARY S. LEMAY

Mailing Address: 579 TENNY MOUNTAIN HIGHWAY

City: PLYMOUTH State: NH Zip Code: 03264

Telephone (Daytime): 536-8828 (Evening): _____

Facsimile Number: 536-8678 E-Mail Address: LEMAY@NHREC.COM

CELL 254-7518

Alternative Contact Information (e.g., System installation contractor or coordinating company, if appropriate):

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Evening): _____

Facsimile Number: _____ E-Mail Address: _____

Electrical Contractor Contact Information (if appropriate):

Name: FRASE ELECTRIC

Mailing Address: 789 WHITTIER HIGHWAY

City: SANDWICH State: NH Zip Code: 03883

Telephone (Daytime): 284-6617 (Evening): _____

Facsimile Number: 284-6343 E-Mail Address: KFRASE@HUGHES.NET

Facility Site Information:

Facility (Site) Address: 604 SUNAPEE STREET

City: NELSON State: NH Zip Code: 03773

Electric _____

Service Company: PSNH Account Number: [REDACTED] Meter Number: G 16585319V

Non-Default Service Customers Only:

Competitive Electric _____

Energy Supply Company: _____ Account Number: _____

(Customer's with a Competitive Energy Supply Company should verify the Terms & Conditions of their contract with their Energy Supply Company.)

Facility Machine Information:

Generator/ _____ Model Name & SUNNYBOY

Inverter Manufacturer: SMA Number: 6000 Quantity: 3

Nameplate Rating: 6000 WATT (KVA) (AC Volts) 120/240 Phase: Single ☒ Three ☐

System Design Capacity: 18.36 (kW) (kVA) Battery Backup: Yes ☐ No ☒

Net Metering: If Renewably Fueled, will the account be Net Metered? Yes ☒ No ☐

Prime Mover: Photovoltaic ☒ Reciprocating Engine ☐ Fuel Cell ☐ Turbine ☐ Other _____

Energy Source: Solar ☒ Wind ☐ Hydro ☐ Diesel ☐ Natural Gas ☐ Fuel Oil ☐ Other _____

GARY - THE APPLICATION IS APPROVED WITH THE UNDERSTANDING THERE IS TO BE NO CONNECTION MADE (LINE TAP) WITHIN THE METER SOCKET. AS WE DISCUSSED, YOU WILL WORK WITH FRASE ELECTRIC TO MODIFY YOUR CONNECTION. PLEASE CALL ME SHOULD YOU

HAVE ANY QUESTIONS. THANK YOU.

Exhibit C & Exhibit E

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE INTERCONNECTION STANDARDS FOR INVERTERS SIZED UP TO 100 KVA

Simplified Process Interconnection Application and Service Agreement

Inverter-based Generating Facilities:

✓ ☒ UL 1741 / IEEE 1547.1 Compliant (Refer To Part Puc 906 Compliance Path For Inverter Units, Part Puc 906.01 Inverter Requirements)
Yes ☒ No ☐

The standard UL 1741.1 dated May, 2007 or later, "Inverters, Converters, and Controllers for Use in Independent Power Systems," addresses the electrical interconnection design of various forms of generating equipment. Many manufacturers choose to submit their equipment to a Nationally Recognized Testing Laboratory (NRTL) that verifies compliance with UL 1741.1. This term "Listed" is then marked on the equipment and supporting documentation. *Please include, any documentation provided by the inverter manufacturer describing the inverter's UL 1741/IEEE 1547.1 listing.*

External Manual Disconnect Switch:

An External Manual Disconnect Switch shall be installed in accordance with 'Part Puc 905 Technical Requirements For Interconnections For Facilities, Puc 905.01 Requirements For Disconnect Switches and 905.02 Disconnect Switch.'

✓ ☒ Yes ☐ No

Location of External Manual Disconnect Switch: NEXT TO PSNH ELECTRIC METER.

Project Estimated Install Date: 11-26-12

Project Estimated In-Service Date: 12-15-12 TO 12-30-12.

Interconnecting Customer Signature:

I hereby certify that, to the best of my knowledge, all of the information provided in this application is true and I agree to the Terms and Conditions for Simplified Process Interconnections attached hereto: NHPS

Customer Signature: [Signature] Title: REVENABLE Date: 11-20-12
Please include, a one-line and/or three-line drawing of proposed installation

For PSNH Use Only

Approval to Install Facility:

Installation of the Facility is approved contingent upon the Terms and Conditions For Simplified Process Interconnections of this Agreement, and agreement to any system modifications, if required.

Are system modifications required? Yes ☐ No ☒ To be Determined ☐

Company Signature: [Signature] Title: SE ENGINEER Date: 11-26-12

PSNH Application Project ID#: _____

NEWPORT AZH1 P. 30/B MAP A 25 KVA PH C
NORTH ROAD S/E - ATF

Exhibit C & Exhibit E

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE INTERCONNECTION STANDARDS FOR INVERTERS SIZED UP TO 100 KVA

Terms and Conditions for Simplified Process Interconnections

Company waives inspection/Witness Test: Yes ☐ No ☒

Date of inspection/Witness Test: PLEASE CALL TO SCHEDULE

1. Construction of the Facility. The Interconnecting Customer may proceed to construct the Facility in compliance with the specifications of its Application once the Approval to Install the Facility has been signed by the Company.
2. Interconnection and operation. The Interconnecting Customer may operate Facility and interconnect with the Company's system once the all of the following has occurred:
 - 2.1. Municipal Inspection. Upon completing construction, the Interconnecting Customer will cause the Facility to be inspected or otherwise certified by the local electrical wiring inspector with jurisdiction.
 - 2.2. Certificate of Completion. The Interconnecting Customer returns the Certificate of Completion to the Agreement to the Company at address noted.
 - 2.3. Company has completed or waived the right to inspection.
3. Company Right of Inspection. The Company will make every attempt within ten (10) business days after receipt of the Certificate of Completion, and upon reasonable notice and at a mutually convenient time, conduct an inspection of the Facility to ensure that all equipment has been appropriately installed and that all electrical connections have been made in accordance with the Interconnection Standard. The Company has the right to disconnect the Facility in the event of improper installation or failure to return Certificate of Completion. All projects larger than 10 kVA will be witness tested, unless waived by the Company.
4. Safe Operations and Maintenance. The Interconnecting Customer shall be fully responsible to operate, maintain, and repair the Facility.
5. Disconnection. The Company may temporarily disconnect the Facility to facilitate planned or emergency Company work.
6. Metering and Billing. All renewable Facilities approved under this Agreement that qualify for net metering, as approved by the Commission from time to time, and the following is necessary to implement the net metering provisions:
 - 6.1. Interconnecting Customer Provides: The Interconnecting Customer shall furnish and install, if not already in place, the necessary meter socket and wiring in accordance with accepted electrical standards. In some cases the Interconnecting Customer may be required to install a separate telephone line.
 - 6.2. Company Installs Meter. The Company will make every attempt to furnish and install a meter capable of net metering within ten (10) business days after receipt of the Certificate of Completion if inspection is waived, or within 10 business days after the inspection is completed, if such meter is not already in place.
7. Indemnification. Interconnecting Customer and Company shall each indemnify, defend and hold the other, its directors, officers, employees and agents (including, but not limited to, Affiliates and contractors and their employees), harmless from and against all liabilities, damages, losses, penalties, claims, demands, suits and proceedings of any nature whatsoever for personal injury (including death) or property damages to unaffiliated third parties that arise out of, or are in any manner connected with, the performance of this Agreement by that party, except to the extent that such injury or damages to unaffiliated third parties may be attributable to the negligence or willful misconduct of the party seeking indemnification.
8. Limitation of Liability. Each party's liability to the other party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either party be liable to the other party for any indirect, incidental, special, consequential, or punitive damages of any kind whatsoever.
9. Termination. This Agreement may be terminated under the following conditions:
 - 9.1. By Mutual Agreement. The Parties agree in writing to terminate the Agreement.
 - 9.2. By Interconnecting Customer. The Interconnecting Customer may terminate this Agreement by providing written notice to Company.
 - 9.3. By Company. The Company may terminate this Agreement (1) if the Facility fails to operate for any consecutive 12 month period, or (2) in the event that the Facility impairs or, in the good faith judgment of the Company, may imminently impair the operation of the electric distribution system or service to other customers or materially impairs the local circuit and the Interconnecting Customer does not cure the impairment.
10. Assignment/Transfer of Ownership of the Facility. This Agreement shall survive the transfer of ownership of the Facility to a new owner when the new owner agrees in writing to comply with the terms of this Agreement and so notifies the Company.
11. Interconnection Standard. These Terms and Conditions are pursuant to the Company's "Interconnection Standards for Inverters Sized Up to 100 kVA" for the Interconnection of Customer-Owned Generating Facilities, as approved by the Commission and as the same may be amended from time to time ("Interconnection Standard"). All defined terms set forth in these Terms and Conditions are as defined in the Interconnection Standard (see Company's website for the complete document).

Exhibit C & Exhibit E

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE INTERCONNECTION STANDARDS FOR INVERTERS SIZED UP TO 100 KVA (Continued)

JAN 09 2013 RCL

Exhibit B - Certificate of Completion for Simplified Process Interconnections

Installation Information:

☐ Check if owner-installed

Customer or Company Name (print): NHEC
Contact Person, if Company: GARY LEMAY
Mailing Address: 579 TENNEY MOUNTAIN HIGHWAY
City: PLYMOUTH State: NH Zip Code: 03264
Telephone (Daytime): 603-536-9822 (Evening):
Facsimile Number: 603-536-8698 E-Mail Address: LEMAYG@NHEC.COM

Address of Facility (if different from above): 60A SUNAPEE STREET
City: NEWPORT State: NH Zip Code: 03773
Generation Vendor: FRASE ELECTRIC Contact Person: KIM FRASE
I hereby certify that the system hardware is in compliance with Psc 900.

Vendor Signature: [Signature]

Date: 1/7/13

Electrical Contractor's Name (if appropriate): FRASE ELECTRIC
Mailing Address: 789 WHITTIER HIGHWAY
City: So. TOWNSHIRE State: NH Zip Code: 03883
Telephone (Daytime): 603-284-6618 (Evening):
Facsimile Number: 603-284-6343 E-Mail Address: K.FRASE@HUGHES.NET
License number: 4146M

Date of approval to install Facility granted by the Company: 11-26-12 Installation Date:

Application ID number: AN 2609

Inspection:

The system has been installed and inspected in compliance with the local Building/Electrical Code of

NEWPORT NH.
(City/County)

Signed (Local Electrical Wiring Inspector, or attach signed electrical inspection): Wayne Conroy

Name (printed): WAYNE CONROY

Date: 1-9-2013

Customer Certification:

I hereby certify that, to the best of my knowledge, all the information contained in this Interconnection Notice is true and correct. This system has been installed and shall be operated in compliance with applicable electrical standards. Also, the initial start up test required by Psc 905.04 has been successfully completed.

Customer Signature: [Signature]

Date: 1-9-13



579 Tenney Mountain Highway
Plymouth, NH 03264-3154
www.nhec.coop
603-536-1800 / 800-698-2007

Exhibit D

January 23, 2013

To: NH Public Utilities Commission

RE: NHEC REC Meter
604 Sunapee Street
Newport, NH

NHEC Solar Photovoltaic Installation - 18,360 watts DC

The under signed NHEC employee attests that the solar photovoltaic installation at 604 Sunapee Street in Newport, NH was installed and is operating in conformance with the local building codes. This location is the NHEC Sunapee District Office.

Please direct any questions regarding this installation to Gary S. Lemay.

Gary S. Lemay PE
Renewable Energy Engineer

e-mail - lemayg@nhec.com

W - 603-536-8828

C - 603-254-7518

F - 603-536-8698