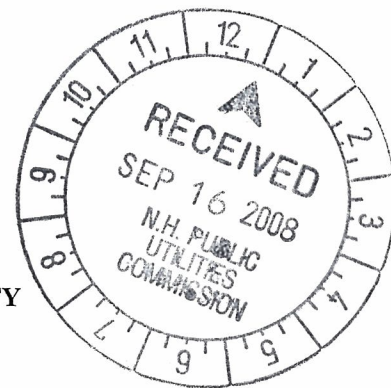


DE08-118

**STATE OF NEW HAMPSHIRE  
PUBLIC UTILITIES COMMISSION  
SAMPLE APPLICATION FORM**

**FOR CUSTOMER-SITED RENEWABLE ENERGY SOURCE ELIGIBILITY**

Pursuant to New Hampshire Admin. Code Puc 2500 Rules



Pursuant to Puc 202, the signed application shall be filed with the Executive Director and Secretary of the New Hampshire Public Utilities Commission (Commission). To ensure that your submitted application is complete, please read RSA 362-F and N.H. Code Admin. Rules Puc 2500 before filling out this application. It is the burden of the applicant to provide timely, accurate and complete information as part of the application process. Any failure by the applicant to provide information in a timely manner may result in the Commission dismissing this application without prejudice.

NOTE: When completing this application electronically, using the "tab" key after completing each answer will move the cursor to the next blank to be filled in. If a question is not applicable to your facility, then check the box next to N/A.

1. **ELIGIBILITY CLASS APPLIED FOR:** ☒ I ☐ II
2. Applicant's legal name: JOHN G. HAVEN
3. Residential or (1) 87 MARVIN ROAD  
 Business Address: (2) \_\_\_\_\_  
 (as applicable to  
 the site of the (3) \_\_\_\_\_  
 renewable energy  
 facility) MOULTONBOROUGH NH 03254  
 (City) (State) (Zip Code)
4. Telephone number: 603 253 7446
5. Facsimile number: \_\_\_\_\_
6. Email address: \_\_\_\_\_
7. Installer's Name: HTS - HAVEN ELECTRIC
8. Business Address: (1) 87 MARVIN ROAD  
 (2) MOULTONBOROUGH, NH 03254  
 (3) \_\_\_\_\_

(City)

(State)

(Zip Code)

9. Telephone number: 603 253 7446

10. Facsimile number: \_\_\_\_\_

11. Email address: \_\_\_\_\_

12. Equipment  
Vendor's Name: \_\_\_\_\_

13. Business Address: (1) 87 MARVIN ROAD

(2) \_\_\_\_\_

(3) \_\_\_\_\_

MOULTONBOROUGH NH 03254  
(City) (State) (Zip Code)

14. Telephone number: \_\_\_\_\_

15. Facsimile number: \_\_\_\_\_

16. Email address: \_\_\_\_\_

17. Independent Monitor's  
Name: \_\_\_\_\_

18. Business Address: (1) \_\_\_\_\_

(2) \_\_\_\_\_

(3) \_\_\_\_\_

\_\_\_\_\_  
(City) (State) (Zip Code)

19. Telephone number: \_\_\_\_\_

20. Facsimile number: \_\_\_\_\_

21. Email address: \_\_\_\_\_

22. The ISO-New England asset identification number, if applicable: \_\_\_\_\_ or N/A: ☐

23. The GIS facility code, if applicable: \_\_\_\_\_ or N/A: ☐

24. If Class I, please identify type of source below:  
☐ solar hot water heating, ☒ solar generation, ☐ wind generation and/or ☐ 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 meter and, if applicable, the inverter (Attach as "Exhibit B")

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 ☐)

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 ☐)

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 ☒)

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: JOHN E. HAVEN HTS

Title: OWNER

Address: (1) 87 MARVIN ROAD

(2) \_\_\_\_\_

(3) \_\_\_\_\_

MAULTONBOROUGH

(City)

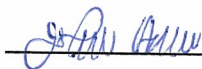
NH,

(State)

03254

(Zip Code)

31. Preparer's Signature:



Tom Palma  
will inspect  
on 8.22-08

NEW HAMPSHIRE  
ELECTRIC CO-OP

4/9/01

INTERCONNECTION APPLICATION-RENEWABLE GENERATION UP TO 25  
KW

PURSUANT TO NEW HAMPSHIRE ADMINISTRATIVE RULE PUC 900,  
APPLICANT HEREBY GIVES NOTICE OF INTENT TO INSTALL AND OPERATE  
A GENERATING FACILITY

Section 1. Applicant Information

Name: JOHN HAVEN

Mail Address: 87 MARVIN ROAD

City: MOULTONBOROUGH State: NH

Zip Code: 03254

Facility Location (if different from above):

SAME

Daytime Phone #: 603 253 7446

Distribution Utility: New Hampshire Electric Co-Op

Account #: 5352111610

(if applicable)

Electricity Supplier (ES) SAME

Account #: SAME

Section 2. Generating Facility Information

Generator Type (check one): Solar, Wind \_\_\_\_\_, Hydro \_\_\_\_\_

Generator Manufacturer, Model Name & Number:

Number of Phases of Unit: Single, Three or Other: SINGLE PHASE 120/240

File  
# 14408/10



Generation output rating in Kilowatts: 1800 WATTS

Inverter Manufacturer, Model Name & Number:  
XANTHAX 4024 UL1741

Battery Backup? (yes or no) YES

If  $\leq 10$  kw, will a generator Disconnect Switch accessible to the utility be installed?  
(yes or no) YES

Proposed location of Disconnect Switch, if applicable: BELOW ELECTRICAL  
METER "OUTSIDE"

### Section 3. Installation Information & Certification

☐ Check if owner-installed

Installation Date: 6-08 7-08

Interconnection Date: 7-30-08

Installing Electrician: JOHN HAYEN NH #3234

License #: 3234 MASTERS ELECTRICAL

Mail Address: 87 MARVIN ROAD

City: MOLLYBROOK BOROUGH NJ

State: NH Zip Code: 03226 03254

Daytime Phone #: 603 253 7446

1. The system hardware is listed to Underwriters Laboratories standards to be in compliance with UL 1741 and IEEE 929-2000:

Signed (Vendor/Supplier): [Signature]

Date: 7-21-08

Name (printed): JOHN HAYEN

Company: HAYEN ELECTRIC HTS

2. The system has been installed in compliance with the local Building/Electrical Code of

MOULTONBOROUGH NEW HAMPSHIRE 03257 (City/County)

Signed (Inspector): [Signature]

Date: 7-21-08

In lieu of signature by inspector, a copy of final inspection certificate may be attached.

3. Utility and Electricity Supplier signatures signify only receipt of this form, in compliance with the Commission's net metering rules Puc 900.

Signed (NHEC):

Larry H Hutchison

Date:

9-3-08

Signed (Electricity Supplier Representative):

Larry H Hutchison

Date:

9-3-08

4. The initial start-up test required by Puc 905.04 has been successfully completed.

Completed on 8-22-08 Witnessed By \_\_\_\_\_

Applicant agrees to install and operate the system in accordance with Puc 900.

I hereby certify that, to the best of my knowledge, all of the information provided in this Application is true and correct.

Signature of Applicant

[Signature]

Date: 7-21-08

THE ELIGIBLE CUSTOMER-GENERATOR SHALL PROVIDE NEW HAMPSHIRE ELECTRIC CO-OP WITH A WRITTEN UPDATE OF THE INFORMATION ON THIS FORM AS ANY CHANGES OCCUR.

C:\My Documents\CO-GENERATION\INTERCONNECTION APPLICATION.doc

**Table A-2 XW Series Inverter/Charger Mechanical Specifications**

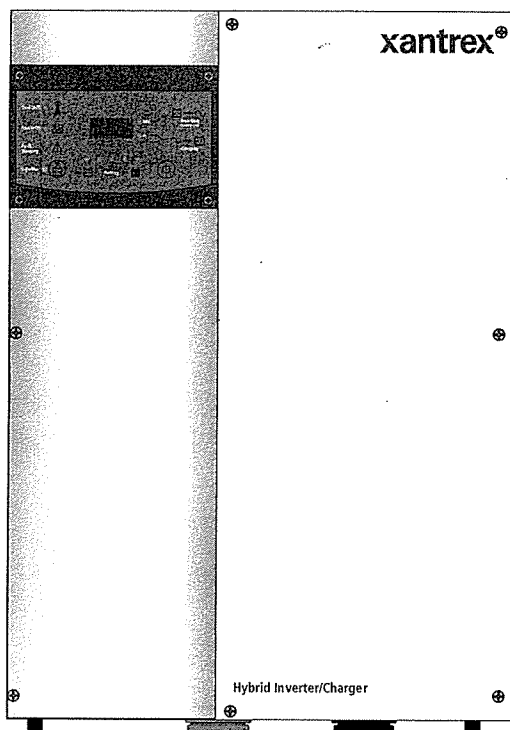
Model	XW6048-120/240-60	XW4548-120/240-60	XW4024-120/240-60
System Network	Xanbus (publish-subscribe network, no need for hubs or special cards)		
Emissions	FCC Class B		
Regulatory approvals	UL 1741 1st Edition: 2005 Version, CSA 107.1-01		
Enclosure Type	NEMA Type 1—Indoor		
Rated Temperature Range (meets all specifications)	32–104 °F (0–40 °C)		
Operational Temperature Range	-13–158 °F (-25–70 °C)		
Storage Temperature Range	-40–185 °F (-40–85 °C)		
Inverter Dimensions (H × W × D)	23 × 16 × 9" (580 × 410 × 230 mm)		
Shipping Dimensions (H × W × D)	28 × 22 ¼ × 10 ½" (711 × 565 × 267 mm)		
Inverter Weight	125 lb (57 kg)	115 lb (52 kg)	115 lb (52 kg)
Shipping Weight	132 lb (60 kg)	122 lb (55 kg)	122 lb (55 kg)

## Accessories

Accessory	Part Number
Power Distribution Panel ✓	865-1015
Conduit Box ✓	865-1025
Inverter #2 Connection Kit ✓	865-1020
XW-MPPT60-150 Solar Charge Controller ✓	865-1030
XW System Control Panel (System Control Panel II) ✓	865-1050
XW Automatic Generator Start ✓	865-1060
Network cables	3 ft (0.9 m): 809-0935 5 ft (1.5 m): 809-0936 7 ft (2.0 m): 809-0937 10 ft (3.0 m): 809-0938 14 ft (4.3 m): 809-0939 25 ft (7.6 m): 809-0940 50 ft (15.2 m): 809-0941 75 ft (22.9 m): 809-0942
Network terminators	Male (2 per pack): 809-0901 Female (2 per pack): 809-0905

Smart choice for power

**xantrex**



XW4024-120/240-60  
XW4548-120/240-60  
XW6048-120/240-60

**Operation Guide**

# **XW Series Hybrid Inverter/Charger**

[www.xantrex.com](http://www.xantrex.com)



HTS 87 Marvin Road, Moultonborough, New Hampshire 03254

July 1, 2008

John Haven  
87 Marvin Road  
Moultonborough, New Hampshire 03254  
603-253-7446

---

Solar Photovoltaic System:

2000 Watt System

1 Xantrex 4024 Hybrid charger/inverter system, charge controller, distribution panel

10 Sanyo HIT 200watt collectors, D/C disconnects, grounding

Aluminum Roof rack mount system

A/C Disconnects, wiring, grounding system, lightning system, batteries

Total labor and

Material.....\$17,000

System installed and inspected by NH electric Co-op (photocopies inclosed)

the **alternative energy store**

43 Broad Street, Suite A408

Hudson, MA • 01749 • USA

Toll Free: 1(877) 878-4060 • Tel: 1(978) 562-5858 • Fax: 1(877) 242-6718

'Making Renewable Do-Able' • www.AltEnergyStore.com

**SALES ORDER**

SO-50146

6/25/2008

<b>Customer</b>		<b>Contact</b>		<b>Ship To</b>					
HTS John Haven 87 Marvin Rd MOULTONBORO NH 03254 Tel: (603)-253-7446				Customer Pick up John Haven 1 Chestnut St NASHUA NH 03060 Tel: (603)-253-7446					
<b>Account</b>		<b>Terms</b>		<b>Due Date</b>		<b>Account Rep</b>		<b>Schedule Date</b>	
29778		CREDIT CARD		6/25/2008		Chris Brown		6/24/2008	
<b>Quotation</b>		<b>PO #</b>		<b>Reference</b>		<b>Ship VIA</b>		<b>Page</b>	<b>Printed</b>
SQ-65335						Ground Service		2	6/25/2008 12:57:08PM
<b>L</b>	<b>Item</b>	<b>Description</b>	<b>Order</b>	<b>Ship</b>	<b>Price</b>	<b>UM</b>	<b>Discount</b>	<b>Amount</b>	
1	SAN200BA3	Sanyo HIP-200BA3 200W Solar Panel	6		\$1,104.00	EA		\$6,624.00	
2	TWCUNI-GR,10H	UNI-GR/10H GR/RF LOW PROFILE W/225" SPPT	1		\$433.30	EA		\$433.30	
3	GENKC-MF-30PM	30' MCI Connector #10 AWG Male/Female	6		\$30.84	EA		\$185.04	
4	MIDMNEV6	MNPV6 Combiner Box	6		\$91.56	EA		\$549.36	
5	GENBRKDIN-15	15 Amp Din Rail Mount Breaker	6		\$12.37	EA		\$74.22	
6	DELLA-DC	LA302 DC LIGHTNING ARRESTOR	1		\$47.60	EA		\$47.60	
7	ALR-SR-1HOLE1/2	1/2" Threaded Strain Relief 1 Round Hole	1		\$1.62	EA		\$1.62	
8	ALR-SR-2HOLES	1/2" Strain Relief with 2 Round Holes	6		\$3.51	EA		\$21.06	
9									
10	XANXW4024	XW4024 Inverter/Charger 865-1010	1		\$2,598.38	EA		\$2,598.38	
11	XANXWMPPT60-150	XW Solar Charge Controller MPPT 865-1030	1		\$524.16	EA		\$524.16	
12	XANBR60	60A 160VDC Panel Mount Breaker for XW	2		\$21.45	EA		\$42.90	
13	XANXWSSYSCNTR	XW System Control Panel 865-1050	1		\$236.25	EA		\$236.25	
14	XANXWPOWDISTPAN	XW Power Distribution Panel 865-1015	1		\$1,181.25	EA		\$1,181.25	
15	XANXWAUTOGENST	XW Auto Generator Start 865-1060	1		\$160.16	EA		\$160.16	
16									
17	SH	SHIPPING	1		\$225.00	EA		\$225.00	
18									
If your order hasn't arrived in 2 weeks/by given delivery date, contact us at: support@altenergystore.com. Note that products in your order will likely arrive at different times. We work with several warehouses in N. America to optimize both delivery & availability of the products we offer. Upon receipt, inspect for damage. When you sign the bill of lading for truck shipments, you're signing that you have received the product in good condition. If you notice damage, sign the bill of lading indicating damaged goods or refuse the shipment. If you can't verify the condition of the shipment, sign the bill of lading "concealed damage possible" - you have 10 days to file a claim. Please see our website for further details or call us.			<b>Tax Details</b> EXMPT \$0.000  <b>Payment Details</b>			<b>Taxable</b>  Total Tax \$0.00 Exempt \$12,904.30 Total \$12,904.30  Paid \$0.00 Balance \$12,904.30 Dep. Avail \$0.00			



NEW HAMPSHIRE  
Electric Co-op

579 Tenney Mountain Hwy  
Plymouth, NH 03264-3154

Phone: 1-800-698-2007  
Outage: 1-800-343-6432

Fax: 1-603-536-8687  
[www.nhec.coop](http://www.nhec.coop)

ENERGY USAGE INFORMATION				
MONTH	DAYS	USAGE	AVERAGE	DEMAND
SEP 08	31	0	0	0
AUG 08	33	174	5	0
JUL 08	29	141	5	0
JUN 08	30	119	4	0
MAY 08	32	139	4	0
APR 08	29	181	6	0
MAR 08	29	217	7	0
FEB 08	32	226	7	0
JAN 08	31	237	8	0
DEC 07	32	226	7	0
NOV 07	30	158	5	0
OCT 07	28	126	5	0
SEP 07	33	223	7	0

Page 1 of 1

JOHN G HAVEN  
87 MARVIN RD  
MOULTONBORO NH 03254-3205

1 3

POWER SUPPLIED BY: NHEC



Account Number	Cycle	Service Location		Billing Date		Next Scheduled Read Date			
5352111610	3	MARVIN RD 87		09/08/2008		10/03/2008			
Meter Information		MOULTONBORO					RESIDENTIAL		
Rate	Meter #	Reading Dates		Meter Readings		Multiplier	Kwh Used	Demand	Comment
		Prev	Pres	Prev	Pres				
BC	65477	08/05/08	08/29/08	96229	96229	1	0	.000	OUT METER
BC	106824	08/29/08	09/05/08	499976	499976	1	0	.000	IN METER

CURRENT ELECTRIC CHARGES	AMOUNT	STATEMENT OF ACCOUNT	AMOUNT
MEMBER SERVICE CHARGE	20.00	PREVIOUS BALANCE	45.35
		AMOUNT PAID	70.00CR
		ADJUSTMENTS	0.00
		BALANCE FORWARD	24.65CR
TOTAL CURRENT ELECTRIC CHARGES	20.00	CURRENT ELECTRIC CHARGES	20.00
		TOTAL CURRENT MONTH CHARGES	20.00
		TOTAL BALANCE DUE	4.65CR

YOU CURRENTLY HAVE 53 KWHs IN YOUR "BANK" OF KWHs.

Please detach and return this portion with your payment...

#### IMPORTANT INFORMATION

BUY AND SELL ONLINE WITH THE CO-OP CLASSIFIEDS! ADS ARE FREE FOR CO-OP MEMBERS, NO LIMIT TO NUMBER OF ADS, RENEW AFTER 30 DAYS. TO POST YOUR FREE AD, SIGN UP ONLINE AT [WWW.NHEC.COOP](http://WWW.NHEC.COOP).

TAKE THE CO-OP FOOD BANK CHALLENGE! FROM NOW UNTIL OCTOBER 31ST, NHEC FOUNDATION WILL MATCH DONATIONS TO SUPPORT NH FOOD BANK. SEE DONATION CARD IN AUGUST NEWSLETTER.

TO OPT IN OR OPT OUT OF THE TAX DEDUCTIBLE (501C3) OPTIONAL NHEC FOUNDATION ROUND-UP PROGRAM, YOU MAY DO SO 24 HOURS A DAY BY CALLING 1-800-698-2007, FOLLOW THE PROMPTS AND ENTER YOUR 10 DIGIT ACCOUNT NUMBER.

Payments must be posted by  
the due date to avoid a 1.5% late charge.

JOHN G HAVEN

Account Number	5352111610
Amount Due	\$4.65 CR
Due Date	10/02/2008
Amount Paid	CREDIT BILL

NEW HAMPSHIRE ELECTRIC COOPERATIVE  
PO BOX 9612  
MANCHESTER, NH 03108-9612







579 Tenney Mountain Highway  
Plymouth, NH 03264-3154  
Phone: (800) 698-2007

PLEASE DETACH AND RETAIN

No. 112292

DATE	INVOICE #	DESCRIPTION	GROSS	NET
08/26/2008	HAVEN	SOLAR ELECTRIC REBATE	5,000.00	5,000.00
Totals:			5,000.00	5,000.00

ORIGINAL CHECK HAS A COLORED BACKGROUND PRINTED ON CHEMICAL REACTIVE PAPER - SEE BACK FOR DETAILS



579 Tenney Mountain Highway  
Plymouth, NH 03264-3154  
Phone: (800) 698-2007

Accounts Payable

No. 112292

CITIZENS BANK  
PLYMOUTH, NH

53-7513  
113

Five Thousand and no/100\*\*\*\*\*

PAY  
TO THE  
ORDER  
OF

JOHN HAVEN  
87 MARVIN ROAD  
MOULTONBOROUGH NH 03254-

COPY 112292 CO-OP

Void after 180 days

DATE	CHECK NO.	AMOUNT
09/01/2008	112292	\$*****5,000.00

*[Signature]*  
C. C. Anderson

112292 011375135 3399000040



If this card is lost, stolen or destroyed, notify the  
NEW HAMPSHIRE BUREAU OF ELECTRICAL SAFETY AND LICENSING  
33 Hazen Drive  
CONCORD NH 03305  
Tel: 603-271-3748

Please be advised that the minimum standards of installation shall  
conform to the **National Electrical Code, 2005 edition**

Please be advised that Bureau Technical Bulletins and Policies are  
posted at [www.nh.gov/electrician](http://www.nh.gov/electrician). It is **your responsibility** as a licensee  
to keep updated on this information by **periodically checking the website.**

JOHN G HAVEN  
87 MARVIN ROAD  
MOULTONBOROUGH NH 03254-3205



STATE OF NEW HAMPSHIRE  
BUREAU OF ELECTRICAL SAFETY  
AND LICENSING CERTIFIES THAT

NAME: **JOHN G HAVEN**

IS LICENSED AS A **MASTER ELECTRICIAN** PER RSA 319-C

LIC# **3424 M** EXPIRES: **August 31, 2009**

THIS CARD MUST BE PRESENTED TO THE  
INSPECTOR UPON REQUEST

Peel card from form. Turn card over and place front of card face down  
into clear panel. Push card through clear panel, breaking through perforation.