

DE10-177



Conservation Services Group

June 23, 2010

Debra A. Howland
Executive Director & Secretary
New Hampshire Public Utilities Commission
21 South Fruit Street, Suite 10
Concord, NH 03301-2429



RE: Facility Application to qualify for Class II New Hampshire RPS certificate acquisition

Dear Ms. Howland,

I am writing on behalf of our client Plainville Board of Education, to apply for New Hampshire renewable portfolio certificate acquisition. Please find attached a completed application including all necessary documentation as required under order PUC 2500 to establish the Toffolon Elementary School solar unit as an eligible Class II facility under RSA 362-F.

Please submit any questions, concerns or further documentation requests directly to Mrs. Stephanie Lovejoy Hamilton at the contact information listed below. Thank you for your time and attention to this matter.

Conservation Services Group
Legal Affairs and Compliance
Clean Energy Markets
40 Washington Street
Westborough, MA 01581
Tel: 508-836-9500 ext 13285
Cell: 508-439-0417
Fax: 508-836-3181
stephanie.hamilton@csgrp.com

Sincerely,

Conservation Services Group

STEPHANIE HAMILTON

THE STATE of NEW HAMPSHIRE

Public Utilities Commission

*Facility Application to qualify for certificate acquisition under PUC
2500 of the New Hampshire Electric Renewable Portfolio Standard*

SECTION I: IDENTIFICATION INFORMATION

(1). Applicant:

Conservation Services Group
40 Washington Street, Westborough MA 01581
Patricia Stanton,
Senior Vice President of Policy and Advocacy
40 Washington Street
Westborough MA, 01581
Phone: 508-836-9500
Fax: 508-836-3181
Email: pat.stanton@csgroup.com

(A) Prohibit Relationships:

There is no prohibited relation ship between Conservation Services Group (Applicant), Plainville Board of Education (Facility Owner) and Peregrine (Independent Monitor).

(2). Facility Owner:

Plainville Board of Education
47 Robert Holcomb Way
Plainville, CT 06062
860-793-3200-Phone
860-747-6790-FAX
binkowskik@plainvilleschools.org

(3). Independent Monitor

(A) Contact Information

Peregrine Energy Group, Inc.
45 School Street • Boston, Massachusetts 02108
phone: 617.367.0777 • fax: 617.367.6299 • e-mail: info@peregrinegroup.com

(B) Qualification

Peregrine is offering Third Party Meter Reader (TPMR) services to owners and operators of customer site units that qualify for Massachusetts Renewable Portfolio Standard (RPS) and Alternative Portfolio Standard (APS).

(C) Independence

There are no circumstances in which Peregrine Energy Group, Inc., would not be considered sufficiently independent.

(E) Compensation:

Peregrine Energy Group, Inc., compensation for TPMR services will be on a fixed fee or billable hour basis and will never be based, in any way, on the quantity of attributes reported to the NEPOOL Generation Information Service (GIS).

(D) Reporting:

At least once a quarter, Peregrine Energy Group Inc., will directly enter into the NEPOOL GIS, using the NEPOOL GIS reporting interface in accordance with the NEPOOL GIS Rules, and enter the quantity of energy production for the unit from the applicable time period. Conservation Services Group will not have access to the reporting interface used by Peregrine Energy Inc., to make their report. Peregrine Energy Group Inc., will measure the electricity production and report that production to the Owner, Applicant and the New Hampshire Public Utility Commission, as well as providing all inspections as required by NH Puc 2507.04 (h).

(4) Installer:

Kevin McGrath, Manager
Silktown Roofing
27 Pleasant St.
Manchester, CT 06040
860-647-0198

(5) Seller
 Tim Kraft
 United Solar Ovonic
 2705 Commerce Pkwy
 Auburn Hills, MI 48326

SECTION II: FACILITY DESCRIPTION

(1) Facility Name:

Toffolon Elementary School

(2) Facility Information:

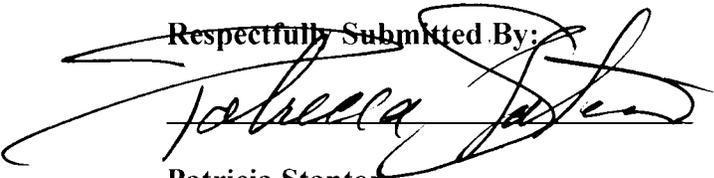
Toffolon Elementary School is a photovoltaic installation, detailed directly below:

Name	Project Site Address	Name Plate	Commercial Operation Date	Meter	Inverter	Solar Panels	GIS Number
Toffolon Elementary School	145 Northwest Drive Plainville, CT 06062	.06339MW	03/20/2009	Square D Power logic ION 8600	Stat-con Power Systems PVS-75	SI680G1	NON32811

ATTACHED DOCUMENTATION

- 1) Attestation signed and executed by the owner attesting that the was properly installed
- 2) Certificate of Authorization
- 3) Interconnection Agreement for each site.
- 4) Unit RPS approval as a Class I asset in Connecticut

Respectfully Submitted By:



Patricia Stanton
 Conservation Services Group

Attestation

June 3, 2010
Debra A. Howland
Executive Director & Secretary
New Hampshire Public Utilities Commission
21 South Fruit Street, Suite 10
Concord, NH 03301-2429

I, Richard E. Carmelich III (name), Director of Finance + Op. (position), of Plainville Board of Education, do hereby certify and affirm that the solar site named Toffolon Elementary School, based on my personal knowledge, were all installed and are operating in conformance with applicable building codes. In addition all the information contained within the New Hampshire facility application for certificate acquisition submitted for the Toffolon Elementary School are true and correct to the best of my knowledge.

Signature:

Richard E. Carmelich III

Date:

6-4-10

Certification of Authorized Representative

June 3, 2010
Debra A. Howland
Executive Director & Secretary
New Hampshire Public Utilities Commission
21 South Fruit Street, Suite 10
Concord, NH 03301-2429

I, Richard E. Carmelich III (name), Director of Finance + Ops (position), of Plainville Board of Education, certify that Patricia Stanton, Senior Vice President of Policy and Advocacy Conservation Services Group, is authorized to execute and submit the New Hampshire Electric Renewable Portfolio Standard Application for the Toffolon Elementary School solar unit, pursuant to Chapter PUC 2500.

Signature:

Richard E. Carmelich III

Date:

6.4.10

ATTACHMENT I INTERCONNECTION REQUEST

EDC: The Connecticut Light & Power Company

Designated Contact Person: Liz Jimenez- Solar Integrated Technologies

Address: 1797 E. Martin Luther King Jr. Blvd, Los Angeles, CA 90058

Telephone Number: 323.231.0411 or 562.299.0133

Fax: 323.231.0517

E-Mail Address: ljimenez@solarintegrated.com

An Interconnection Request is considered complete when it provides all applicable and correct information required below. Documentation of site control must be submitted with the Interconnection Request.

Preamble and Instructions

A Generator which requests Interconnection must submit this Interconnection Request by hand delivery, mail, e-mail, or fax to the EDC.

Processing Fee or Payment:

Process	Generator Applicability*	Application Fee	Each Study Fee
Fast Track	0-2MW	\$500	Actual Cost Based
Study	(1) is larger than 2 MW but no larger than 20 MW, (2) is 2 MW or less and is not certified, or (3) is 2 MW or less and is certified but did not pass the Fast Track Process or the 10 kW Inverter Process.	\$1000	Actual Cost Based

ATTACHMENT I INTERCONNECTION REQUEST

Each Generating Facility will have a One Line Diagram submitted and secured as an Attachment to the Interconnection Request (Attachment I). A one line electrical schematic is a diagram, drawing, or sketch that details the elements of a generating system, such as the elements of an electrical or electronic circuit or the elements of a logic diagram for a generator.

Generating Facility Information

Legal Name of the Generator (or, if an individual, individual's name)

Name: Toffolon School

Contact Person: Robert E. Lee

Mailing Address: 1 Central Square

City: Plainville

State: CT

Zip: 06062

Facility Location (if different from above): 145 Northwest Drive, Toffolon, CT 06062

Telephone (Day): 860.793.0221 Telephone (Evening): _____

Fax: _____

E-Mail Address: relee@plainville-ct.gov

Alternative Contact Information (if different from the Generator)

Contact Name: _____

Title: _____

Address: _____

Telephone (Day): _____

Telephone (Evening): _____

Fax: _____

E-Mail Address: _____

APPLICATION IS FOR:

New Generating Facility?

Yes No

Capacity addition to or Material Modification of an existing Generating Facility:

Yes No

ATTACHMENT I INTERCONNECTION REQUEST

Commencement of participation in the wholesale markets by an existing Generating Facility:

Yes No

If capacity addition to or Material Modification of an existing facility, please describe: _____

Will the Generating Facility be used for any of the following?

To Net Meter? Yes No

To Supply Power to the Generating Facility? Yes No

To Supply Power to Others? Yes No

Is the Interconnection Request for::

A retail customer interconnecting a new Generating Facility that will produce electric energy to be consumed only on the retail customer's site? Yes No

If onsite use of power, describe the mode of operation: (Please Check all that Apply)

- Peak Shaving
- Demand Management
- Primary Power/Base Load
- Combined Heat and Power or Cogeneration
- Stand By/Emergency/Back-up

Paralleling:

Will the Generating Facility operate in parallel with the EDC for any amount of time?

Yes No

If No: Then Generator is operating as Open Transition

If Yes: Will the Generating Facility operate in parallel with EDC for longer than 100 milliseconds

Yes No

If No: Then Generator is operating as Closed Transition

If Yes: Then Generator is operating as Parallel Operation

Will it vary by season? (please describe) _____

A Qualifying Facility where 100% of the output will be sold to its host utility?

Yes No

A Generator interconnecting a new Generating Facility that plans to participate in the wholesale markets?

Yes No

An existing Generating Facility commencing participation in the wholesale markets?

Yes No

ATTACHMENT I INTERCONNECTION REQUEST

For installations at locations with existing electric service to which the proposed Generating Facility will interconnect, provide:

(Local Electric Service Provider): Connecticut Light & Power

(Existing Account Number): 823518321

Contact Name: Robert E. Lee

Title: Town Manager

Address: 1 Central Square Plainville, CT 06062

Telephone (Day): 860.793.0221 Telephone (Evening): _____

Fax: _____ E-Mail Address: relee@plainville-ct.gov

Requested Point of Interconnection: Main Service

Generating Facility's Requested In-Service Date: _____

EDC Account #: 823518321

EDC Meter #: 89040430

Will there be a new service request / or new construction associated with this generation project?

Generating Facility Information (For each Generator if there are than one)

Data apply only to the Generating Facility, not the Interconnection Facilities.

Energy Source: Solar Wind Hydro Hydro Type (e.g. Run-of-River): _____

Diesel Natural Gas Fuel Oil

Other (state type): _____

Prime Mover: Fuel Cell Reciprocating Engine Gas Turbine
 Steam Turbine Micro-turbine PV Other: _____

Type of Generator: Synchronous Induction Inverter: SatCon Inverter- One (1)
PVS-75 (480).

Generator Nameplate Rating: 75 kW (Typical)

Generator Nameplate kVAR: _____

ATTACHMENT I INTERCONNECTION REQUEST

Generator Nameplate BIL Rating: _____kV

Generating Facility or Customer-Site Load: _____kW (if none, so state)

Typical Reactive Load (if known): _____

Maximum Physical Export Capability Requested: 70.560kW

List components of the Generating Facility equipment package that are currently certified:

Equipment Type	Certifying Entity
1. <u>Solar Panels- SI680G1</u>	<u>UL1703</u>
2. <u>SatCon Invert- PVS-75</u>	<u>UL1741</u>
3. _____	_____
4. _____	_____
5. _____	_____

Is the prime mover compatible with the certified protective relay package? Yes No

Generator: _____

Manufacturer, Model Name & Number: _____

Version Number: _____

Nameplate Output Power Rating in kW:
(Summer): _____ (Winter): _____

Nameplate Output Power Rating in kVA:
(Summer): _____ (Winter): _____

Individual Generator Power Factor
Rated Power Factor: Leading: _____ Lagging: _____

Total Number of Generators in wind farm to be interconnected pursuant to this
Interconnection Request: _____ Elevation: _____ Single phase Three phase

Inverter Manufacturer, Model Name & Number (if used): _____

List of adjustable set points for the protective equipment or software: _____

Note: A completed Power Systems Load Flow data sheet must be supplied with the Interconnection Request.

ATTACHMENT I INTERCONNECTION REQUEST

Generating Facility Characteristic Data (for inverter-based machines)

Max design fault contribution current: 125A Instantaneous or RMS? _____

Harmonics Characteristics: < 3% THD

Start-up requirements: None

Available fault current: 125A

Generating Facility Characteristic Data (for rotating machines)

RPM Frequency: _____

Neutral Grounding Resistor (If Applicable): _____

Synchronous Generators:

Direct Axis Synchronous Reactance, X_d : _____ Per Unit

Direct Axis Transient Reactance, X_d' : _____ Per Unit

Direct Axis Sub transient Reactance, X_d'' : _____ Per Unit

Negative Sequence Reactance, X_2 : _____ Per Unit

Zero Sequence Reactance, X_0 : _____ Per Unit

KVA Base: _____

Field Volts: _____

Field Amperes: _____

Induction Generators:

Motoring Power (kW): _____

$I_2^2 t$ or K (Heating Time Constant): _____

Rotor Resistance, R_r : _____ Per Unit

Stator Resistance, R_s : _____ Per Unit

Stator Reactance, X_s : _____ Per Unit

Rotor Reactance, X_r : _____ Per Unit

Magnetizing Reactance, X_m : _____ Per Unit

Short Circuit Reactance, X_d'' : _____ Per Unit

Exciting Current: _____ Amps

Temperature Rise: _____

Frame Size: _____

Design Letter: _____

Reactive Power Required In Vars (No Load): _____

Reactive Power Required In Vars (Full Load): _____

Total Rotating Inertia, H: _____ Per Unit on kVA Base

ATTACHMENT I INTERCONNECTION REQUEST

Excitation and Governor System Data for Synchronous Generators Only.

Provide appropriate IEEE model block diagram of excitation system, governor system and power system stabilizer (PSS) in accordance with the regional reliability council criteria. A PSS may be determined to be required by applicable studies. A copy of the manufacturer's block diagram may not be substituted.

Interconnection Facilities Information

An Interconnection transformer is required unless waived by the Interconnecting EDC.

Transformer Data (If Applicable, for Generating Facility-Owned Transformer):

Is the transformer: single phase three phase? Size: _____ kVA

Transformer Impedance: _____ % on _____ kVA Base

Transformer Positive-Sequence Short Circuit Impedances (pu): $Z_{ps} =$ _____, $Z_{pt} =$ _____, $Z_{st} =$ _____

Transformer Zero-Sequence Impedances (pu): $Z_{pm0} =$ _____, $Z_{sm0} =$ _____, $Z_{mg0} =$ _____

Transformer Neutral Grounding Reactor/Resistor Impedance (Ohms):

Transformer BIL Rating _____ kV

If Three Phase:

Transformer Primary: _____ Volts _____ Delta _____ Wye _____ Wye Grounded

Transformer Secondary: _____ Volts _____ Delta _____ Wye _____ Wye Grounded

Transformer Tertiary: _____ Volts _____ Delta _____ Wye _____ Wye Grounded

Transformer Fuse Data (If Applicable, for Generating Facility-Owned Fuse):

(Attach copy of fuse manufacturer's Minimum Melt and Total Clearing Time-Current Curves)

Manufacturer: _____ Type: _____ Size: _____ Speed: _____

Interconnecting Circuit Breaker (if applicable):

Manufacturer: _____ Type: _____

Load Rating (Amps): _____ Interrupting Rating (Amps): _____ Trip Speed (Cycles): _____

Interconnection Protective Relays (If Applicable):

If Microprocessor-Controlled:

List of Functions and Adjustable Set points for the protective equipment or software:

ATTACHMENT I INTERCONNECTION REQUEST

Set point Function	Minimum	Maximum
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____
6. _____	_____	_____

If Discrete Components:

(Enclose Copy of any Proposed Time-Overcurrent Coordination Curves)

Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
 Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
 Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
 Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
 Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____

Current Transformer Data (If Applicable):

(Enclose Copy of Manufacturer's Excitation and Ratio Correction Curves)

Manufacturer: _____
 Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____

Manufacturer: _____
 Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____

Potential Transformer Data (If Applicable):

Manufacturer: _____
 Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____

Manufacturer: _____
 Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____

ATTACHMENT I INTERCONNECTION REQUEST

General Information

Enclose two D-sized (24" x 36") copies of site electrical one-line diagram showing the configuration of all Generating Facility equipment (unless waived by the EDC), current and potential circuits, and protection and control schemes. This D-sized one-line diagram must be signed and stamped by a licensed Professional Engineer if the Generating Facility is larger than 50 kW. Are two copies of One-Line Diagram Enclosed? Yes No

Enclose copy of any site documentation that indicates the precise physical location of the proposed Generating Facility (e.g., USGS topographic map or other diagram or documentation).

Proposed location of protective interface equipment on property (include address if different from the Generating Facility's address): _____

Enclose copy of any site documentation that describes and details the operation of the protection and control schemes.

Is Available Documentation Enclosed? Yes No

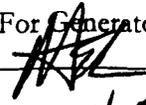
Enclose copies of schematic drawings for all protection and control circuits, relay current circuits including CT's wiring connection and their ratios, relay potential circuits including Potential Transformer's (PT's) wiring connection and their ratios, any alarm/monitoring circuits (if applicable).

Are Schematic Drawings Enclosed? Yes No

Applicant Signature

I have read the Guidelines for Generator Interconnection – Fast Track and Study Processes and agree to abide by all terms and conditions as provided for in these Guidelines. I understand that my Interconnection Request may be rejected by the Interconnecting EDC or there may be a delay in processing my Interconnection Request if the Interconnecting EDC determines that I have not complied with these Guidelines.

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

For Generator: _____
 Robert E. Lee- Town Manager

Date: 1/15/09



STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC UTILITY CONTROL
TEN FRANKLIN SQUARE
NEW BRITAIN, CT 06051

DOCKET NO. 09-07-13 APPLICATION OF PLAINVILLE BOARD OF EDUCATION
FOR QUALIFICATION OF TOFFOLON ELEMENTARY
SCHOOL AS A CLASS I RENEWABLE ENERGY SOURCE

September 30, 2009

By the following Commissioners:

John W. Betkoski, III
Amalia Vazquez Bzdyra
Kevin M. DelGobbo

DECISION

I. INTRODUCTION

A. SUMMARY

In this Decision, the Department of Public Utility Control determines that the solar generation facility located at the Toffolon Elementary School in Plainville, Connecticut qualifies as a Class I renewable energy source and assigns it Connecticut Renewable Portfolio Standard (RPS) Registration Number CT00359-09.

B. BACKGROUND OF THE PROCEEDING

By application received July 23, 2009 (Application), Plainville Board of Education (Applicant) requested that the Department of Public Utility Control (Department) determine that the Toffolon Elementary School (Toffolon) solar generation facility qualifies as a Class I renewable energy source. Toffolon is a solar generation facility located at 145 Northwest Drive in Plainville, Connecticut. The Toffolon solar generation facility system began commercial operation on March 20, 2009, and has a nameplate capacity of 0.06339 MW. Application, p. 2.

C. CONDUCT OF THE PROCEEDING

There is no statutory requirement for a hearing, no person requested a hearing, and none was held.

D. PARTICIPANTS IN THE PROCEEDING

The Department recognized Steven Busel as the authorized representative from the Plainville Board of Education, 47 Robert Holcomb Way, Plainville, CT 06063, and the Office of Consumer Counsel, Ten Franklin Square, New Britain, Connecticut 06051, as participants in this proceeding.

II. DEPARTMENT ANALYSIS

Pursuant to the General Statutes of Connecticut (Conn. Gen. Stat.) §16-1(a)(26), "Class I renewable energy source" includes energy derived from solar power.

As provided in the Application, Toffolon is a solar facility located at 145 Northwest Drive in Plainville, Connecticut 06063. Toffolon's New England Generation Information System Identification Number is NON32811. Application, p. 2. Toffolon is a grid connected generation facility. Application, Section 8.

Based on the foregoing, the Department determines that the Toffolon solar generation facility qualifies as a Class I renewable energy facility. The Department reserves the right to perform on-site audits as the Department deems necessary.

III. FINDINGS OF FACT

1. The Toffolon solar generation facility is located in Plainville, Connecticut.
2. The Toffolon solar generation facility began commercial operation on March 20, 2009.
3. The Toffolon solar generation facility has a rated capacity of 0.06339 MW.
4. Toffolon's New England Generation Information System Identification Number is NON32811.

IV. CONCLUSION

Based on the evidence submitted, the Department finds that the Toffolon solar generation facility qualifies as a Class I renewable generation source pursuant to Conn. Gen. Stat. §16-1(a)(26).

The Department assigns each renewable generation source a unique Connecticut RPS registration number. The Toffolon solar generation facility Connecticut RPS registration number is CT00359-09.

The Department's determination in this docket is based on the information submitted by the Plainville Board of Education. The Department may reverse its ruling or revoke the Applicant's registration if any material information provided by the Applicant proves to be false or misleading. The Department reminds the Applicant that it is obligated to notify the Department within 10 days of any changes to any of the information it has provided to the Department.

V. ORDER

On or before February 1 of each year, the Plainville Board of Education shall certify to the Department the Toffolon solar generation output for the previous calendar year.

**DOCKET NO. 09-07-13 APPLICATION OF PLAINVILLE BOARD OF EDUCATION
FOR QUALIFICATION OF TOFFOLON ELEMENTARY
SCHOOL AS A CLASS I RENEWABLE ENERGY
SOURCE**

This Decision is adopted by the following Commissioners:



John W. Betkoski, III



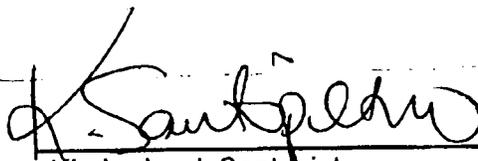
Amalia Vazquez Bzdyra



Kevin M. DelGobbo

CERTIFICATE OF SERVICE

The foregoing is a true and correct copy of the Decision issued by the Department of Public Utility Control, State of Connecticut, and was forwarded by Certified Mail to all parties of record in this proceeding on the date indicated.



Kimberley J. Santopietro
Executive Secretary
Department of Public Utility Control

OCT - 2 2009

Date