

# VERMONT PUBLIC POWER SUPPLY AUTHORITY

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P.O. Box 126 • Waterbury Ctr., VT 05677  
(802) 244-7678 Fax (802) 244-6889 [www.vppsa.com](http://www.vppsa.com)

**SUBMITTED ELECTRONICALLY 9/9/2013**

Luly E. Massaro, Commission Clerk  
Rhode Island Public Utilities Commission  
89 Jefferson Blvd  
Warwick, RI 02888  
Attn: Renewable Energy Resources Eligibility

September 9, 2013

Ms. Massaro:

Vermont Public Power Supply Authority (“VPPSA”) is pleased to submit this application on behalf of the Town of Hardwick Electric Department for eligibility as an Existing Renewable Resource for Wolcott Hydro #1 generation station under Rhode Island’s renewable portfolio standard. Wolcott Hydro #1 is an existing hydroelectric generation facility located on the Lamoille River in Wolcott, VT and began commercial operation in 1937.

VPPSA is acting on behalf of the Town of Hardwick Electric Department and will be the primary contact for this application.

Provided below for reference is a schedule of appendixes and attachments:

Appendix B – included per application instructions section 1.8

Appendix C – included per application instructions section 3.3

Attachment A – Copy of order granting qualification for Wolcott Hydro #1 as a Connecticut Class II eligible renewable energy source; included per instructions section 2.8

Should there be any additional questions please do not hesitate to contact me.

Regards,



Gregory E. Morse, ERP  
Sr. Power Analyst  
Vermont Public Power Supply Authority

**RIPUC Use Only**

Date Application Received: \_\_\_ / \_\_\_ / \_\_\_  
Date Review Completed: \_\_\_ / \_\_\_ / \_\_\_  
Date Commission Action: \_\_\_ / \_\_\_ / \_\_\_  
Date Commission Approved: \_\_\_ / \_\_\_ / \_\_\_

GIS Certification #:  
\_\_\_\_\_

## RENEWABLE ENERGY RESOURCES ELIGIBILITY FORM

### The Standard Application Form

Required of all Applicants for Certification of Eligibility of Renewable Energy Resource  
(Version 7 – June 11, 2010)

### STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION

#### Pursuant to the Renewable Energy Act

#### Section 39-26-1 et. seq. of the General Laws of Rhode Island

**NOTICE:**

When completing this Renewable Energy Resources Eligibility Form and any applicable Appendices, please refer to the State of Rhode Island and Providence Plantations Public Utilities Commission Rules and Regulations Governing the Implementation of a Renewable Energy Standard (RES Regulations, Effective Date: January 1, 2006), and the associated RES Certification Filing Methodology Guide. All applicable regulations, procedures and guidelines are available on the Commission's web site: [www.ripuc.org/utilityinfo/res.html](http://www.ripuc.org/utilityinfo/res.html). Also, all filings must be in conformance with the Commission's Rules of Practice and Procedure, in particular, Rule 1.5, or its successor regulation, entitled "Formal Requirements as to Filings."

- Please complete the Renewable Energy Resources Eligibility Form and Appendices using a typewriter or black ink.

- Please submit one original and three copies of the completed Application Form, applicable Appendices and all supporting documentation to the Commission at the following address:

Rhode Island Public Utilities Commission  
89 Jefferson Blvd  
Warwick, RI 02888

Attn: Renewable Energy Resources Eligibility

In addition to the paper copies, electronic/email submittals are required under Commission regulations. Such electronic submittals should be sent to: Luly E. Massaro, Commission Clerk at [lmassaro@puc.state.ri.us](mailto:lmassaro@puc.state.ri.us)

- In addition to filing with the Commission, Applicants are required to send, electronically or electronically and in paper format, a copy of the completed Application including all attachments and supporting documentation, to the Division of Public Utilities and Carriers and to all interested parties. A list of interested parties can be obtained from the Commission's website at [www.ripuc.org/utilityinfo/res.html](http://www.ripuc.org/utilityinfo/res.html).

- Keep a copy of the completed Application for your records.

- The Commission will notify the Authorized Representative if the Application is incomplete.

- Pursuant to Section 6.0 of the RES Regulations, the Commission shall provide a thirty (30) day period for public comment following posting of any administratively complete Application.

- Please note that all information submitted on or attached to the Application is considered to be a public record unless the Commission agrees to deem some portion of the application confidential after consideration under section 1.2(g) of the Commission's Rules of Practice and Procedure.

- In accordance with Section 6.2 of the RES Regulations, the Commission will provide prospective reviews for Applicants seeking a preliminary determination as to whether a facility would be eligible prior to the formal certification process described in Section 6.1 of the RES Regulations. Please note that space is provided on the Form for applicant to designate the type of review being requested.

- Questions related to this Renewable Energy Resources Eligibility Form should be submitted in writing, preferably via email and directed to: Luly E. Massaro, Commission Clerk at [lmassaro@puc.state.ri.us](mailto:lmassaro@puc.state.ri.us)

**SECTION I: Identification Information**

- 1.1 Name of Generation Unit (sufficient for full and unique identification):  
Wolcott Hydro #1
- 
- 1.2 Type of Certification being requested (check one):  
 Standard Certification     Prospective Certification (Declaratory Judgment)
- 1.3 This Application includes: (Check all that apply)<sup>1</sup>
- APPENDIX A: Authorized Representative Certification for Individual Owner or Operator
  - APPENDIX B: Authorized Representative Certification for Non-Corporate Entities Other Than Individuals
  - APPENDIX C: Existing Renewable Energy Resources
  - APPENDIX D: Special Provisions for Aggregators of Customer-sited or Off-grid Generation Facilities
  - APPENDIX E: Special Provisions for a Generation Unit Located in a Control Area Adjacent to NEPOOL
  - APPENDIX F: Fuel Source Plan for Eligible Biomass Fuels
- 1.4 Primary Contact Person name and title: Gregory Morse, Senior Power Analyst
- 
- 1.5 Primary Contact Person address and contact information:  
Address: Vermont Public Power Supply Authority  
P.O. Box 126  
Waterbury Center, VT 05677  
Phone: 802-882-8508                      Fax: 802-244-6889  
Email: gmorse@vppsa.com
- 1.6 Backup Contact Person name and title: Brian Callnan, Director of Power Supply and Transmission
- 
- 1.7 Backup Contact Person address and contact information:  
Address: Vermont Public Power Supply Authority  
P.O. Box 126  
Waterbury Center, VT 05677  
Phone: 802-882-8510                      Fax: 802-244-6889  
Email: bcallnan@vppsa.com

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<sup>1</sup> Please note that all Applicants are required to complete the Renewable Energy Resources Eligibility Standard Application Form and all of the Appendices that apply to the Generation Unit or Owner or Operator that is the subject of this Form. Please omit Appendices that do not apply.

1.8 Name and Title of Authorized Representative (*i.e.*, the individual responsible for certifying the accuracy of all information contained in this form and associated appendices, and whose signature will appear on the application):  
Mike Sullivan, Manager, Town of Hardwick Electric Department

Appendix A or B (as appropriate) completed and attached?  Yes  No  N/A

1.9 Authorized Representative address and contact information:  
Address: Town of Hardwick Electric Department  
P.O. Box 516  
Hardwick, VT 05843  
Phone: 802-472-5201 Fax: 802-472-6769  
Email: msullivan@hardwickelectric.com

1.10 Owner name and title: Town of Hardwick Electric Department

1.11 Owner address and contact information:  
Address: Town of Hardwick Electric Department  
P.O. Box 516  
Hardwick, VT 05843  
Phone: 802-472-5201 Fax: 802-472-6769  
Email: msullivan@hardwickelectric.com

1.12 Owner business organization type (check one):  
 Individual  
 Partnership  
 Corporation  
 Other: Municipal Electric Department

1.13 Operator name and title: Town of Hardwick Electric Department

1.14 Operator address and contact information:  
Address: Town of Hardwick Electric Department  
P.O. Box 516  
Hardwick, VT 05843  
Phone: 802-472-5201 Fax: 802-472-6769  
Email: msullivan@hardwickelectric.com

1.15 Operator business organization type (check one):  
 Individual  
 Partnership  
 Corporation  
 Other: Municipal Electric Department

**SECTION II: Generation Unit Information, Fuels, Energy Resources and Technologies**

2.1 ISO-NE Generation Unit Asset Identification Number or NEPOOL GIS Identification Number (either or both as applicable): ISO-NE: 1167 GIS: MSS1167

2.2 Generation Unit Nameplate Capacity: 0.815 MW

2.3 Maximum Demonstrated Capacity: 0.860 MW

2.4 Please indicate which of the following Eligible Renewable Energy Resources are used by the Generation Unit: (Check ALL that apply) – *per RES Regulations Section 5.0*

- Direct solar radiation
- The wind
- Movement of or the latent heat of the ocean
- The heat of the earth
- Small hydro facilities
- Biomass facilities using Eligible Biomass Fuels and maintaining compliance with all aspects of current air permits; Eligible Biomass Fuels may be co-fired with fossil fuels, provided that only the renewable energy fraction of production from multi-fuel facilities shall be considered eligible.
- Biomass facilities using unlisted biomass fuel
- Biomass facilities, multi-fueled or using fossil fuel co-firing
- Fuel cells using a renewable resource referenced in this section

2.5 If the box checked in Section 2.4 above is “Small hydro facilities”, please certify that the facility’s aggregate capacity does not exceed 30 MW. – *per RES Regulations Section 3.32*

← check this box to certify that the above statement is true

N/A or other (please explain) \_\_\_\_\_

2.6 If the box checked in Section 2.4 above is “Small hydro facilities”, please certify that the facility does not involve any new impoundment or diversion of water with an average salinity of twenty (20) parts per thousand or less. – *per RES Regulations Section 3.32*

← check this box to certify that the above statement is true

N/A or other (please explain) \_\_\_\_\_

2.7 If you checked one of the Biomass facilities boxes in Section 2.4 above, please respond to the following:

A. Please specify the fuel or fuels used or to be used in the Unit: \_\_\_\_\_

B. Please complete and attach Appendix F, Eligible Biomass Fuel Source Plan.

Appendix F completed and attached?  Yes  No  N/A

- 2.8 Has the Generation Unit been certified as a Renewable Energy Resource for eligibility in another state's renewable portfolio standard?
- Yes       No      If yes, please attach a copy of that state's certifying order.
- Copy of State's certifying order attached?       Yes     No     N/A

### SECTION III: Commercial Operation Date

Please provide documentation to support all claims and responses to the following questions:

- 3.1 Date Generation Unit first entered Commercial Operation: 0 1 / 0 1 / 1937 at the site. (approximate)

If the commercial operation date is after December 31, 1997, please provide independent verification, such as the utility log or metering data, showing that the meter first spun after December 31, 1997. This is needed in order to verify that the facility qualifies as a New Renewable Energy Resource.

Documentation attached?       Yes     No     N/A

- 3.2 Is there an Existing Renewable Energy Resource located at the site of Generation Unit?

Yes  
 No

- 3.3 If the date entered in response to question 3.1 is earlier than December 31, 1997 or if you checked "Yes" in response to question 3.2 above, please complete Appendix C.

Appendix C completed and attached?       Yes     No     N/A

- 3.4 Was all or any part of the Generation Unit used on or before December 31, 1997 to generate electricity at any other site?

Yes  
 No

- 3.5 If you checked "Yes" to question 3.4 above, please specify the power production equipment used and the address where such power production equipment produced electricity (attach more detail if the space provided is not sufficient):

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### SECTION IV: Metering

- 4.1 Please indicate how the Generation Unit's electrical energy output is verified (check all that apply):

- ISO-NE Market Settlement System
- Self-reported to the NEPOOL GIS Administrator
- Other (please specify below and see Appendix D: Eligibility for Aggregations):

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Appendix D completed and attached?  Yes  No  N/A

## SECTION V: Location

5.1 Please check one of the following that apply to the Generation Unit:

- Grid Connected Generation
- Off-Grid Generation (not connected to a utility transmission or distribution system)
- Customer Sited Generation (interconnected on the end-use customer side of the retail electricity meter in such a manner that it displaces all or part of the metered consumption of the end-use customer)

5.2 Generation Unit address: Power Plant Rd, Wolcott, VT 05680  
\_\_\_\_\_  
\_\_\_\_\_

5.3 Please provide the Generation Unit's geographic location information:

- A. Universal Transverse Mercator Coordinates: Zone 18 North; 703038 4934663
- B. Longitude/Latitude: 44.5367 N / -72.4444 W

5.4 The Generation Unit located: (please check the appropriate box)

- In the NEPOOL control area
- In a control area adjacent to the NEPOOL control area
- In a control area other than NEPOOL which is not adjacent to the NEPOOL control area ← *If you checked this box, then the generator does not qualify for the RI RES – therefore, please do not complete/submit this form.*

5.5 If you checked "In a control area adjacent to the NEPOOL control area" in Section 5.4 above, please complete Appendix E.

Appendix E completed and attached?  Yes  No  N/A

## SECTION VI: Certification

- 6.1 Please attach documentation, using one of the applicable forms below, demonstrating the authority of the Authorized Representative indicated in Section 1.8 to certify and submit this Application.

### Corporations

If the Owner or Operator is a corporation, the Authorized Representative shall provide **either**:

- (a) Evidence of a board of directors vote granting authority to the Authorized Representative to execute the Renewable Energy Resources Eligibility Form, **or**
- (b) A certification from the Corporate Clerk or Secretary of the Corporation that the Authorized Representative is authorized to execute the Renewable Energy Resources Eligibility Form or is otherwise authorized to legally bind the corporation in like matters.

Evidence of Board Vote provided?  Yes  No  N/A

Corporate Certification provided?  Yes  No  N/A

### Individuals

If the Owner or Operator is an individual, that individual shall complete and attach APPENDIX A, or a similar form of certification from the Owner or Operator, duly notarized, that certifies that the Authorized Representative has authority to execute the Renewable Energy Resources Eligibility Form.

Appendix A completed and attached?  Yes  No  N/A

### Non-Corporate Entities

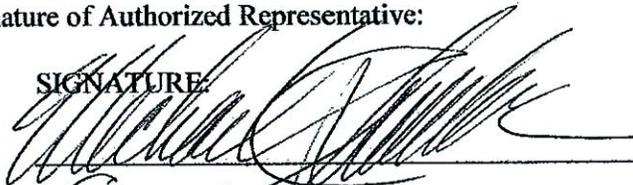
(Proprietorships, Partnerships, Cooperatives, etc.) If the Owner or Operator is not an individual or a corporation, it shall complete and attach APPENDIX B or execute a resolution indicating that the Authorized Representative named in Section 1.8 has authority to execute the Renewable Energy Resources Eligibility Form or to otherwise legally bind the non-corporate entity in like matters.

Appendix B completed and attached?  Yes  No  N/A

6.2 Authorized Representative Certification and Signature:

I hereby certify, under pains and penalties of perjury, that I have personally examined and am familiar with the information submitted herein and based upon my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties, both civil and criminal, for submitting false information, including possible fines and punishment. My signature below certifies all information submitted on this Renewable Energy Resources Eligibility Form. The Renewable Energy Resources Eligibility Form includes the Standard Application Form and all required Appendices and attachments. I acknowledge that the Generation Unit is obligated to and will notify the Commission promptly in the event of a change in a generator's eligibility status (including, without limitation, the status of the air permits) and that when and if, in the Commission's opinion, after due consideration, there is a material change in the characteristics of a Generation Unit or its fuel stream that could alter its eligibility, such Generation Unit must be re-certified in accordance with Section 9.0 of the RES Regulations. I further acknowledge that the Generation Unit is obligated to and will file such quarterly or other reports as required by the Regulations and the Commission in its certification order. I understand that the Generation Unit will be immediately de-certified if it fails to file such reports.

Signature of Authorized Representative:

SIGNATURE  
  
\_\_\_\_\_  
General Manager  
(Title)

DATE:  
9/5/13

**APPENDIX B**  
**(Required When Owner or Operator is a Non-Corporate Entity**  
**Other Than An Individual)**

**STATE OF RHODE ISLAND**  
**PUBLIC UTILITIES COMMISSION**

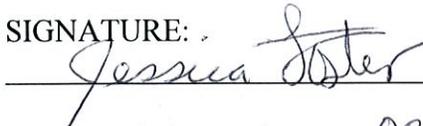
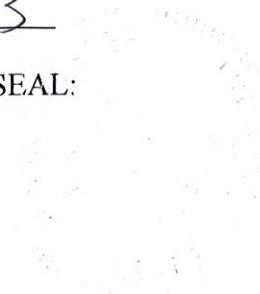
**RENEWABLE ENERGY RESOURCES ELIGIBILITY FORM**  
**Pursuant to the Renewable Energy Act**  
**Section 39-26-1 et. seq. of the General Laws of Rhode Island**

**RESOLUTION OF AUTHORIZATION**

**Resolved:** that Michael Sullivan, named in  
Section 1.8 of the Renewable Energy Resources Eligibility Form as Authorized Representative,  
is authorized to execute the Application on the behalf of Hardwick Electric Dept.  
the Owner or Operator of the Generation Unit named in section 1.1 of the Application.

SIGNATURE: DATE: 8/13/13State: VTCounty: Caledonia

(TO BE COMPLETED BY NOTARY) I, Jessica Foster as a  
notary public, certify that I witnessed the signature of the above named Michael Sullivan  
and that said person stated that he/she is authorized to execute this resolution, and the individual  
verified his/her identity to me, on this date: 8/13/2013.

SIGNATURE: DATE: 8/13/2013My commission expires on: 02/10/2015NOTARY SEAL: 

**APPENDIX C**  
**(Revised 6/11/10)**  
**(Required of all Applicants with Generation Units at the Site of Existing**  
**Renewable Energy Resources)**

**STATE OF RHODE ISLAND**  
**PUBLIC UTILITIES COMMISSION**

**RENEWABLE ENERGY RESOURCES ELIGIBILITY FORM**

**Pursuant to the Renewable Energy Act**  
**Section 39-26-1 et. seq. of the General Laws of Rhode Island**

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If the Generation Unit: (1) first entered into commercial operation before December 31, 1997; or (2) is located at the exact site of an Existing Renewable Energy Resource, please complete the following and attach documentation, as necessary to support all responses:

- C.1 Is the Generating Unit seeking certification, either in whole or in part, as a New Renewable Energy Resource?  Yes  No
- C.2 If you answered "Yes" to question C.1, please complete the remainder of Appendix C. If you answered "No" and are seeking certification entirely as an Existing Renewable Energy Resource, you do NOT need to complete the remainder of Appendix C.
- C.3 If an Existing Renewable Energy Resource is/was located at the site, has such Existing Renewable Energy Resource been retired and replaced with the new Generation Unit at the same site?  Yes  No
- C.4 Is the Generation Unit a Repowered Generation Unit (as defined in Section 3.29 of the RES Regulations) which uses Eligible Renewable Energy Resources and which first entered commercial operation after December 31, 1997 at the site of an existing Generation Unit?  Yes  No
- C.5 If you checked "Yes" to question C.4 above, please provide documentation to support that the entire output of the Repowered Generation Unit first entered commercial operation after December 31, 1997.
- C.6 Is the Generation Unit a multi-fuel facility in which an Eligible Biomass Fuel is first co-fired with fossil fuels after December 31, 1997?  Yes  No

- C.7 If you checked “Yes” to question C.6 above, please provide documentation to support that the renewable energy fraction of the energy output first occurred after December 31, 1997.
- C.8 Is the Generation Unit an Existing Renewable Energy Resource other than an Intermittent Resource (as defined in Sections 3.10 and 3.15 of the RES Regulations)?  Yes  No
- C.9 If you checked “Yes” to question C.8 above, please attach evidence of completed capital investments after December 31, 1997 attributable to efficiency improvements or additions of capacity that are sufficient to, were intended to, and can be demonstrated to increase annual electricity output in excess of ten percent (10%). As specified in Section 3.23.v of the RES Regulations, the determination of incremental production shall not be based on any operational changes at such facility **not directly** associated with the efficiency improvements or additions of capacity.

Please provide the single proposed percentage of production to be deemed incremental, attributable to the efficiency improvements or additions of capacity placed in service after December 31, 1997. Please make this calculation by comparing actual electrical output over the three calendar years 1995-1997 (the “Historical Generation Baseline”) with the actual output following the improvements. The incremental production above the Historical Generation Baseline will be considered “New” generation for the purposes of RES. Please give the percentage of the facility’s total output that qualifies as such to be considered “New” generation.

- C.10 Is the Generating Unit an Existing Renewable Energy Resource that is an Intermittent Resource?  Yes  No
- C.11 If you checked “Yes” to question C.10 above, please attach evidence of completed capital investments after December 31, 1997 attributable to efficiency improvements or additions of capacity that are sufficient to, were intended to, and have demonstrated on a normalized basis to increase annual electricity output in excess of ten percent (10%). The determination of incremental production shall not be based on any operational changes at such facility **not directly** associated with the efficiency improvements or additions of capacity. In no event shall any production that would have existed during the Historical Generation Baseline period in the absence of the efficiency improvements or additions to capacity be considered incremental production. Please refer to Section 3.23.vi of the RES Regulations for further guidance.
- C.12 If you checked “Yes” to C.10, provide the single proposed percentage of production to be deemed incremental, attributable to the efficiency improvements or additions of capacity placed in service after December 31, 1997. The incremental production above the Historical Generation Baseline will be considered “New” generation for the purposes of RES. Please make this calculation by comparing actual monthly electrical output over the three calendar years 1995-1997 (the “Historical Generation Baseline”) with the actual output following the improvements on a normalized basis. Please provide back-up

information sufficient for the Commission to make a determination of this incremental production percentage.

For example, for small hydro facilities, please use historical river flow data to create a monthly normalized comparison (e.g. average MWh produced per cubic foot/second of river flow for each month) between actual output values post-improvements with the Historical Generation Baseline. For solar and wind facilities, please use historical solar irradiation, wind flow, or other applicable data to normalize the facility's current production against the Historical Generation Baseline.

C.13 If you checked "no" to both C.3 and C.4 above, please complete the following:

- a. Was the Existing Renewable Energy Resource located at the exact site at any time during calendar years 1995 through 1997?  Yes  No
- b. If you checked "yes" in Subsection (a) above, please provide the Generation Unit Asset Identification Number and the average annual electrical production (MWhs) for the three calendar years 1995 through 1997, or for the first 36 months after the Commercial Operation Date if that date is after December 31, 1994, for each such Generation Unit.
- c. Please attach a copy of the derivation of the average provided in (b) above, along with documentation support (such as ISO reports) for the information provided in Subsection (b) above. Data must be consistent with quantities used for ISO Market Settlement System.



# STATE OF CONNECTICUT

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

**DOCKET NO. 03-12-32 APPLICATION OF TOWN OF HARDWICK ELECTRIC  
DEPARTMENT FOR QUALIFICATION OF WOLCOTT  
HYDRO I AS A CLASS II RENEWABLE ENERGY  
SOURCE**

February 1, 2006

By the following Commissioners:

Anne C. George  
Donald W. Downes  
John W. Betkoski, III

## **DECISION**

### **I. INTRODUCTION**

#### **A. SUMMARY**

In this Decision, the Department of Public Utility Control determines that the Wolcott Hydro 1 generating facility located on the Lamoille River in Hardwick, Vermont qualifies as a Class II renewable energy source.

## **B. BACKGROUND OF THE PROCEEDING**

By application dated December 12, 2003 (Application), the Town of Hardwick, Vermont Electric Department (Hardwick) requested that the Department of Public Utility Control (Department) determine that the Wolcott Hydro 1 generation facility (Wolcott Hydro Facility) qualifies as a Class II renewable energy source.

Wolcott Hydro Facility is a hydroelectric facility owned Hardwick. Wolcott Hydro Facility is located on the Lamoille River in Hardwick, Vermont. Wolcott Hydro Facility began commercial operation in 1937, and has a nameplate capacity of 0.66 megawatts.

## **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 the Town of Hardwick Electric Department, PO Box 516, Hardwick, Vermont 05655, and the Office of Consumer Counsel, Ten Franklin Square, New Britain, Connecticut 06051, as participants in this proceeding.

# **II. DEPARTMENT ANALYSIS**

## **A. LEGAL STANDARDS**

Pursuant to the General Statutes of Connecticut (C.G.S.) §16-1(a)(27), as amended by Public Act 03-135, An Act Concerning Revisions to the Electric Restructuring Legislation, and Public Act 03-221, An Act Concerning Technical Revisions to the Utility Statutes and Telecommunications Towers on Agricultural Land, “Class II renewable energy source” includes energy derived from a run-of-the-river<sup>1</sup> hydropower facility provided such facility has a generating capacity of not more than five megawatts, does not cause an appreciable change in the river flow, and began operation before July 1, 2003.

In interpreting C.G.S. §16-1(a)(26), the Department determined that:

(1) “Facility” refers to an entire hydroelectric plant at a single site rather than a turbine generating unit within a hydroelectric plant;

(2) The “generating capacity of not more than five megawatts” refers to a hydroelectric facility’s nameplate capacity, not its actual or average generation output;

(3) In order to qualify as “run-of-the-river,” a hydroelectric facility must show a current FERC license or exemption that requires the facility to operate in run-of-river

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<sup>1</sup> “Run-of-the-river” and “run-of-river” are used interchangeably in the energy industry.

mode. In addition, a facility can qualify as a Class I or Class II renewable energy facility only to the extent that its FERC license or exemption requires run-of-river operation. Hydroelectric facilities that are not regulated by FERC will be required to show a FERC order or a court decision stating that FERC has no jurisdiction, or has declined to exercise jurisdiction, over such facility. In such cases, the hydroelectric facility must show that its operation allows the river inflow to equal outflow instantaneously and therefore, does not cause an appreciable change in the river flow; and

(4) “Began operations” means (a) the date an existing facility with generation began commercial operation as shown in documentation from FERC; (b) the new date given to an abandoned or destroyed facility that comes back into operation as shown in its documentation from FERC or as determined by the Department; (c) the date upon which a facility changes operation from store and release to run-of-river as shown in documentation from FERC; or (d) the new date that incremental generation is in operation at an existing facility as shown in its documentation from FERC.

See Docket No. 04-02-07, DPUC Declaratory Ruling Concerning “Run-of-the-River Hydropower” as That Term is Used in the Definitions of Class I and Class II Renewable Energy Source in C.G.S. §16-1(a)(26) &(27).

In its Decision dated August 31, 2005 in Docket No. 04-05-16, Application of Connecticut Municipal Electric Energy Cooperative for Qualification of Occum Dam as a Class II Renewable Energy Source, the Department expanded the definition of run-of-river facility to include those facilities that voluntarily operate in run-of-river mode and that can demonstrate that their operation does not cause an appreciable change in river flow.

## **B. DEPARTMENT DETERMINATION**

As provided in the Application, Wolcott Hydro Facility is a hydroelectric facility located on the Lamoille River in Hardwick, Vermont. Wolcott Hydro Facility is currently owned by Hardwick. According to Hardwick, there is one turbine generator at this facility, with a nameplate capacity of 0.66 megawatts. Wolcott Hydro Facility began commercial operation in 1937. Application, p. 2.

Wolcott Hydro Facility is not operated pursuant to a FERC license or exemption, but is under the jurisdiction of the Vermont Department of Environmental Conservation, Water Quality Division. However, that agency does not verify or monitor the facility for run-of-river operations, but rather only performs annual safety reviews. Application, p. 3; Response to Interrogatory EL-4.

Hardwick states that it has installed necessary equipment and instrumentation to maintain automatic run-of-river operations, including pond level sensors, controls to adjust wicket gates to regulate flow through the turbine, and an automatic paging system to notify operators in the event parameters fall outside normal operation. Response to Interrogatory EL-1. This equipment provides the capability to automatically control the turbine in response to pond level.

Hardwick provided hourly operating data for Wolcott Hydro Facility for three months of operation, including generation and pond level. Response to Interrogatory EL-8. The data demonstrates that the facility operated with varying electrical output and constant pond level which is consistent with run-of-river operation.<sup>2</sup> Since Wolcott Hydro Facility has the equipment necessary to support run-of-river operation, and since operating data from the unit is consistent with run-of-river operation, it qualifies as a run-of-river hydroelectric facility.

Wolcott Hydro Facility is a run-of-river hydroelectric facility with a capacity of less than five megawatts that began operation before July 1, 1998. Therefore, the Department concludes that Wolcott Hydro Facility qualifies as a Class II renewable energy source.

The Department notes that the Wolcott Hydro Facility is not monitored for run-of-river operations by any regulatory agency. Therefore, there is no assurance to the Department that the facility will continue to operate in this manner. To address this concern, the Department will order Hardwick to provide quarterly operating data in sufficient detail to demonstrate continuing run-of-river operations at the facility.

### **III. FINDINGS OF FACT**

1. Wolcott Hydro Facility is a hydroelectric facility located on the Lamoille River in Hardwick, Vermont.
2. Wolcott Hydro Facility is currently owned by Hardwick.
3. There is one turbine generator at this facility, with a nameplate capacity of 0.66 megawatts.
4. Wolcott Hydro Facility began commercial operation in 1937.
5. Wolcott Hydro Facility is not operated pursuant to a FERC license or exemption, but is under the jurisdiction of the Vermont Department of Environmental Conservation, Water Quality Division.
6. Hardwick has installed necessary equipment and instrumentation to maintain automatic run-of-river operations, including pond level sensors, controls to adjust wicket gates to regulate flow through the turbine, and an automatic paging system to notify operators in the event parameters fall outside normal operation.

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<sup>2</sup> Reference Decision in Docket No. 04-02-07, p. 7. In run-of-river operations, inflows and outflows are equivalent on an instantaneous basis. Constant pond level coincident with variations in generator output indicate that automatic controls are functioning to adjust flow through the turbine to maintain constant pond level.

#### **IV. CONCLUSION AND ORDER**

##### **A. CONCLUSION**

Based on the evidence submitted, the Department finds that Wolcott Hydro Facility qualifies as a Class II renewable generation source pursuant to Conn. Gen. Stat. § 16-1(a)(27).

The Department assigns each renewable generation source a unique Connecticut Renewable Portfolio Standard (RPS) registration number Wolcott Hydro Facility's Connecticut RPS registration number is CT00019-03.

The Department's determination in this docket is based on the information submitted by Hardwick. 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 Hardwick 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.

##### **B. ORDER**

1. Once each quarter, Hardwick shall file hourly operating data from the Wolcott Hydro Facility including, at a minimum, pond level and electric output. Hardwick shall also file an affirmation with the Department that the Wolcott Hydro Facility has operated in run-of-river mode for the prior calendar quarter, and providing the Department with any deviations from run-of-river mode including the date, length of time, and reason for each such deviation. The report is to be filed within 30 days following the end of each calendar quarter: January 30, April 30, July 30 and October 30.

**DOCKET NO. 03-12-32 APPLICATION OF TOWN OF HARDWICK ELECTRIC  
DEPARTMENT FOR QUALIFICATION OF WOLCOTT  
HYDRO I AS A CLASS II RENEWABLE ENERGY  
SOURCE**

This Decision is adopted by the following Commissioners:

Anne C. George

Donald W. Downes

John W. Betkoski, III

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.

*Louise E. Rickard*

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Louise E. Rickard  
Acting Executive Secretary  
Department of Public Utility Control

February 6, 2006

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Date