

P.O. Box 149, Hamilton, MA 01936

TEL: (978) 468-3999, FAX: (978) 468-1210 pclark@swiftriverhydro.com

January 25, 2008

Rhode Island Public Utilities Commission 89 Jefferson Boulevard Warwick, RI 02888 Attn: Renewable Energy Resources Eligibility

Via Certified Mail, Return Receipt Requested

Re: Applications of Pepperell Hydro Company, LLC and Woronoco Hydro, LLC

Dear Sirs:

Enclosed please find one original and three copies of the Renewable Energy Resources Eligibility Form for our affiliates, Pepperell Hydro Company, LLC and Woronoco Hydro, LLC.

Please note that this submission constitutes a resubmission, as the Applications had been sent in the past, but to date have not been processed. We assume that they had not reached your offices, and accordingly, we hereby resubmit the same.

Thank you for your attention to and consideration of these Applications. Should you have any questions or concerns regarding the enclosed, please contact Dr. Peter B. Clark at the address noted within the Applications and on the letterhead.

David B. Westebbe, General Counsel

CC: Dr. Peter B. Clark Nils Bolgen

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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 3 – September 12, 2006)

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. 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

- 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.
- 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 <u>lmassaro@puc.state.ri.us</u>

SECTION I: Identification Information

1 -	Name of Generation Unit (sufficient for full and unique identification): Worono Co Hydro (NEPOOL GIS Unit ID No. NON 32135)
2	Type of Certification being requested (check one):
	Standard Certification Prospective Certification (Declaratory Judgment)
,	This Application includes: (Check all that apply) ^I
	☐ 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
	Primary Contact Person name and title: Peter B Clark, Manager
	Primary Contact Person address and contact information: Address: Po Rox 149, 823 Ray Road
	M. Hamilton MA 01936/
	Phone: 978-468-3999 Fax: 978-468-1210
	Email: Dolark e Swift river hydro. Com
	Backup Contact Person name and title: David B. Westeble, Gen et a Course
	,
	Backup Contact Person address and contact information:
	Address: 468 Albemarle Road New ran MA 02460
	Phone: 617-307-3004 Fax: 617-57-3004 Email: Swift river @ Westesbe. Com

¹ 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.

	certifying the accuracy of all information contained in this form and associated appendices, and whose signature will appear on the application): Peter R Clark, Manager
	Appendix A or B (as appropriate) completed and attached? ☐ Yes ☐ No ☐ N/A
	Authorized Representative address and contact information: Address: Po Box 149, 83 Bat Read Ham I ton Mt 01936
	Phone: 978 468 3999 Fax: 978 468 1210 Email: Polark @ Swiftrivarhydro. com
	Owner name and title: Wotono Go Hydro, LLC
,	Owner address and contact information: Address: PO Box 149, 873 Bay Road Hamilton MA 01936
	Phone: 978 468 3999 Fax: 978-468-1210 Email: Dolark & Swift river hydro. com
1	Owner business organization type (check one): Individual Partnership Orporation Other: Individual Company
(Operator name and title: Swift Rivar Hydro Operations Company, Inc
	Operator address and contact information: Address: 176 Cottage Avenue, Third Floor Wilson ham MAY 01096
	Phone: 413-599-1211 Fax: 413 599 1291 Email: Wd hobbs @ swift river hydrocom
	Operator business organization type (check one): Individual Partnership Corporation Other:

SEC'	TION 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): NON 32135
2.2	Generation Unit Nameplate Capacity:
2.3	Maximum Demonstrated Capacity: 3.70MW
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 3.31 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 3.31
2.7	If you checked one of the Biomass facilities boxes in Section 2.1 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?

2.6	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 Sta	ate's certifyir	ng order attached?	P Yes	□ No	□ N/A
SEC	TION III: C	ommercial (Operation Date			
Pleas	se provide doc	umentation to	o support all claims and	l responses to the follo	owing que	estions:
3.1	Date Genera site.	ition Unit firs	st entered Commercial	Operation:	? / 1918	at the
3.2	Is there an l	Existing Rene	ewable Energy Resourc	e located at the site of	Generati	on Unit?
	Yes No					
3.3			ponse to question 3.1 is se to question 3.2 abov	e, please complete Ap	pendix C	
	Appendix C	completed a	and attached?	☑ Yes	□ No	□ N/A
3.4		ny part of the	e Generation Unit used y other site?	on or before Decembe	er 31, 199	77 to
	Yes. No					
3.5	equipment us	sed and the ac	uestion 3.4 above, pleaddress where such powerail if the space provide	er production equipme		
	N/	A			· ·	
SEC.	FION IV: M	etering				
4.1	that apply):		Generation Unit's electr	ical energy output is v	verified (c	heck all
	AF		ement System IEPOOL GIS Administ	rator		
٠			below and see Append		ggregatio	ns):
	Appendix	D completed	d 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:
5.3	Please provide the Generation Unit's geographic location information:
	A. Universal Transverse Mercator Coordinates: Zone 18, 7 634704, N 4680676
	B. Longitude/Latitude: 12.888W / 42.165N
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?

SECTION VI: Certification

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 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?

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.

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:	DATE:
Peter B. Clark	10/23/06
Manager	100
(Title)	

Certificate of Corporate Secretary

The undersigned, Peter B. Clark, Secretary of Swift River Hydro Operations Company, Inc., a Massachusetts corporation (the "Company"), herby certifies as follows:

- 1. The Company is the Operator of the Woronoco Hydro generation unit, located in Russell, MA;
- 2. For purposes of any Renewable Energy Resources Eligibility Form, Peter B. Clark, Manager of Woronoco Hydro LLC, is the Authorized Representative of the Company; and
- 3. Said Authorized Representative has been authorized to execute any Renewable Energy Resources Eligibility Form, and to take any and all actions in connection therewith that said Authorized representative may deem to be necessary or convenient.

Executed under the pains and penalties of perjury this 32 day of October 2006.

Peter B. Clark, Secretary

GIS	Certification	#:
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APPENDIX B

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

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISION

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 Parks	*
Resolved: that Peter R Clark, Man.	
Section 1.8 of the Renewable Energy Resources Eligibil	ity Form as Authorized Representative,
is authorized to execute the Application on the behalf of	Woronoco Hydra LLC.
the Owner or Operator of the Generation Unit named in	section 1.1 of the Application.
SIGNATURE: Peter B. Clark	DATE: 10 (23/06
	_
State: Massachuserrs	
County: Essex	
(TO BE COMPLETED BY NOTARY) I,	B Westeble as a
notary public, certify that I witnessed the signature of t	
and that said person stated that he/she is authorized to ex	ecute this resolution, and the individual
verified his/her identity to me, on this date: $10/33/$	<u>06</u> .
SIGNATURE:	DATE
and the second	10/4/2/06
My commission expires on: $4/30/10$	NOTARY SEAL:
OAVED WESTEBBE NESSON WESTEBBE NESSON SERVICES My Commission Expires April 00, 2010	
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APPENDIX C

(Required of all Applicants with Generation Units at the Site of Existing Renewable Energy Resources)

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISION

RENEWABLE ENERGY RESOURCES ELIGIBILITY FORM

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

(2) is	Generation Unit: (1) first entered into commercial operation before December 31, 1997; or located at the exact site of an Existing Renewable Energy Resource, please complete the ving and attach documentation, as necessary to support all responses:
C.1	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.2	Is the Generation Unit a Repowered Generation Unit (as defined in Section 3.28 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?
C.3	If you checked "Yes" to question C.2 above, please provide documentation to support that the entire output of the Repowered Generation Unit first entered commercial operation after December 31, 1997.
C.4	Is the Generation Unit a multi-fuel facility in which an Eligible Biomass Fuel is first cofired with fossil fuels after December 31, 1997?
C.5	If you checked "Yes" to question C.4 above, please provide documentation to support that the renewable energy fraction of the energy output first occurred after December 31, 1997.
C.6	Is the Generation Unit an Existing Renewable Energy Resource other than an Intermittent Resource (as defined in Section 3.9 and 3.14 of the RES Regulations)? Yes No
C.7	If you checked "Yes" to question C.6 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 3.22.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.

- C.8 Is the Generating Unit an Existing Renewable Energy Resource that is an Intermittent Resource?
- 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 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 3.22.vi of the RES Regulations for further guidance.
- C.10 If you checked "Yes" to C.8, 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 provide backup information sufficient for the Commission to make a determination of this incremental production percentage.
- C.11 If you checked "no" to both C.1 and C.2 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.

Woronoco Hydro LLC Balance Sheet As of October 24, 2006

	Oct 24, 06
ASSETS	
Current Assets	
Checking/Savings 1000 · Woronoco BNat	24 556 20
1000 · Woronoco Bnat 1020 · Money Market	34,556.36 2,653.56
1030 · DSRF - Webster 5	119,066.71
Total Checking/Savings	156,276.63
Accounts Receivable	
1110 · Accounts Receivable - Trade	33,382.90
Total Accounts Receivable	33,382.90
Other Current Assets	
1120 · Due From Pepperell 1310 · Prepaid Insurance	0.45
•	1,801.31
Total Other Current Assets	1,801.76
Total Current Assets	191,461.29
Fixed Assets	7 000 00
PPA, REC Contracts, Permits 1640 · Land	7,000.00
1641 · Powerhouse, Fire Alarms, Pumps	110,500.00 126,226.97
1642 · Turbines & Electrical Equipment	120,220.91
1642a · T-1	16,671,83
1642b · T-2	2,607.90
1642c · T-3	6,519.60
1642d · Other	660.62
1642 · Turbines & Electrical Equipment - Other	511,285.75
Total 1642 · Turbines & Electrical Equipment	537,745.70
1643 · Dam & Boat Barrier	
1643b · Flashboards/Crest Gates	11,957.98
1643 - Dam & Boat Barrier - Other	156,279.54
Total 1643 · Dam & Boat Barrier	168,237.52
1644 · Intake structure and Gates	114,822.73
1645 · Rack House and Trashracks	
1645a · Trash Rack	17,565.42
1645b · Trash Rake 1645 · Rack House and Trashracks - Other	9,067.50
	12,758.00
Total 1645 · Rack House and Trashracks	39,390.92
1646 · Access Road	25,376.98
1647 · Site Equipment (crane, boats)	23,791.64
1648 · Penstock and Pressure Case 1649 · PLC Control System and Switchgr	329.68 168,002.06
1650 · Sub Station & Transmission Line	187,757.43
1680 · Maintenance Equipment	10,149.95
1690 · Accum Depreciation	-165,250.00
1695 · Financing Costs	42,772.49
1696 · MTC Fees	10,979.76
1697 · Accum Amort - Financing costs	-532.00
Total Fixed Assets	1,407,301.83
Other Assets	
1800 · FERC License 1800a Drawdown	135.99
1800b Recreation	701.47
1800c Fish Passage	61,711.84
1800 · FERC License - Other	-15,605.46
Total 1800 · FERC License	46,943.84
1801 - Accum Amort FERC License	-5.771.23
	52,005.00
1850 · Goodwill	
Total Other Assets	93,177.61

4:33 PM 10/24/06 Accrual Basis

Woronoco Hydro LLC Balance Sheet As of October 24, 2006

	Oct 24, 06
LIABILITIES & EQUITY Liabilities Current Liabilities Accounts Payable 2050 · Accounts Payable	43,460.90
Total Accounts Payable	43,460.90
Other Current Liabilities Webster 5 LOC 2054 · Accrued FERC Fees 2055 · Accrued RE / PP Taxes 2100 · Accrued Interst LTD	20,000.00 13,952.00 5,716.00 19,432.72
Total Other Current Liabilities	59,100.72
Total Current Liabilities	102,561.62
Long Term Liabilities Webster 5 Loan 2210 · Note Payable BN LOC To SRC	1,145,620.67 75,000.00
Total Long Term Liabilities	1,220,620.67
Total Liabilities	1,323,182.29
Equity 2900 · Members Capital Retained Earnings Net Income	40,099.37 193,621.51 135,037.56
Total Equity	368,758.44
TOTAL LIABILITIES & EQUITY	1,691,940.73

Woronoco Hydro LLC Balance Sheet As of June 30, 2001

	Jun 30, 01
ASSETS Current Assets Checking/Savings	
1000 · Woronoco BNat	8,675.85
Total Checking/Savings	8,675.85
Accounts Receivable 1110 - Accounts Receivable - Trade	16,204.08
Total Accounts Receivable	16,204.08
Other Current Assets 1310 · Prepaid Insurance	-1,071.64
Total Other Current Assets	-1,071.64
Total Current Assets	23,808.29
Fixed Assets 1642 · Turbines & Electrical Equipment 1647 · Site Equipment (crane, boats)	16,223.11 750,000.00
Total Fixed Assets	766,223.11
TOTAL ASSETS	790,031.40
LIABILITIES & EQUITY Liabilities Current Liabilities Accounts Payable 2050 - Accounts Payable	57,843.15
Total Accounts Payable	57,843.15
Other Current Liabilities 2060 · Due to SRH 2330 · Note Pay Due to SRC Advances	5,670.57 29,037.35
Total Other Current Liabilities	34,707.92
Total Current Liabilities	92,551.07
Long Term Liabilities 2210 · Note Payable BN LOC To SRC 2320 · Note Pay Purchase Due to SRC 2500 · Note Payable IPC	34,400.00 151,171.57 600,000.00
Total Long Term Liabilities	785,571.57
Total Liabilities	878,122.64
Equity Retained Earnings Net Income	-9,962.35 -78,128.89
Total Equity	-88,091.24
TOTAL LIABILITIES & EQUITY	790,031.40

Attachment C.10

Proposed percentage of production to be deemed incremental: 23.3%.

Backup information: Please se attached Decision of the State of Connecticut DPUC.



STATE OF CONNECTICUT

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

DOCKET NO. 04-06-25 APPLICATION OF WORONOCO HYDRO COMPANY LLC FOR QUALIFICATION AS A CLASS I RENEWABLE ENERGY SOURCE

April 12, 2005

By the following Commissioners:

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

DECISION

I. INTRODUCTION

A. SUMMARY

In this Decision, the Department finds that: Woronoco Hydro Facility Turbine No. 3 qualifies as a Class II renewable generation facility pursuant to Connecticut General Statutes §16-1(a)(27); Woronoco Hydro Facility Turbine No. 1 qualifies as a Class I renewable generation facility pursuant to Connecticut General Statutes §16-1(a)(26); and Woronoco Hydro Facility Turbine No. 2 will qualify as a Class I renewable generation facility when it enters service. Accordingly, the Department assigns

Woronoco Hydro Facility Connecticut Renewable Portfolio Standard (RPS) Registration Number CT00132-04.

B. BACKGROUND OF THE PROCEEDING

By application dated September 23, 2004 (Application), Woronoco Hydro Company LLC (Woronoco Hydro) requested that the Department of Public Utility Control (Department) determine that the Woronoco generation facility (Woronoco Hydro Facility) qualifies as a Class I renewable energy source if it converted to full-time run-of-river operation.

Woronoco Hydro Facility is located on the Westfield River in Russel, Massachusetts. Woronoco Hydro Facility began commercial operation in 1916, and has a total nameplate capacity of 2.7 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 Woronoco Hydro Company LLC, P.O. Box 149, Hamilton, MA 01936, 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 Connecticut General Statutes (C.G.S.) §16-1(a)(26), 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 I renewable energy source" includes energy derived from a run-of-the-river¹ 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 after 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;

^{1 &}quot;Run-of-the-river" and "run-of-river" are used interchangeably in the energy industry.

- (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 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 existing 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.

<u>See</u> Docket No. 04-02-07, <u>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).</u>

B. DEPARTMENT DETERMINATION

As provided in the Application, Woronoco Hydro Facility is a hydroelectric facility located on the Westfield River in Russel, Massachusetts. Woronoco Hydro Facility is currently owned by Woronoco Hydro. According to Woronoco Hydro, there are 3 turbine generators at this facility, with a total combined nameplate capacity of 2.7 megawatts. The project has three turbines, numbered 1, 2 and 3, which are rated at 0.4 MW, 0.4 MW and 1.9 MW, respectively.

Woronoco Hydro states that the Woronoco Hydro Facility qualifies for Class I status according to the Department's September 10, 2004 declaratory ruling in Docket No. 04-02-07. Woronoco Hydro states that the facility so qualifies based on the fact that it was abandoned for more than three years, from August 1997 to September 2000, when it was acquired by Woronoco Hydro. Further, Woronoco Hydro has refurbished the facility since its acquisition to enable it to operate in run-of-river mode, as evidenced by the Federal Energy Regulatory Commission (FERC) Order Modifying and Approving its Impoundment Fluctuation and Minimum Flow Monitoring Plan Under Article 403, issued July 27, 2004. Woronoco concludes, therefore, that it should be assigned a new "began operation" date of July 2004, in accordance with the Department's Decision in Docket No. 04-02-07. Application, p. 2. The Department finds that the question of

indicate and only

abandonment of the facility is not reached by the facts of this docket because unit 3 remained operational and was put back in service in 2000.² Instead the Department applies the incremental capacity analysis in its review of the application.

Woronoco Hydro's repowering program includes constructing a new intake structure, a new pond level control system, automated switchgear for three turbines, rebuilding turbine-generator no. 2, new bearings and break for turbine no. 3, and a fire detection and suppression system in the firehouse. The total investment in the repowering program has been approximately \$464,000 to date, with approximately \$200,000 more expected for rehabilitation of turbine-generator no. 2. <u>Id</u>., p. 4; Attachment 5.

Woronoco Hydro Facility began commercial operation in 1916. This facility is operated under a FERC license, No. 2631-007, issued April 30, 2002. FERC's Order issuing this license states that the project "would continue to operate" as a run-of-river facility, referring to the previous license issued June 2, 1981. Id., Attachment 1. Woronoco Hydro argues that although the previous license termed it a run-of-river facility, it was not monitored for compliance as such facilities are now, and did not constitute a run-of-river facility as that term is used in Connecticut statutes. Therefore, according to Woronoco Hydro, the facility should be awarded a new operation date reflecting when it physically began operating as a run-of-river facility under the FERC approved Impoundment Fluctuation and Minimum Flow Monitoring Plan, which was issued July 27, 2004. Id., p. 2.

The Department disagrees. Under the Decision in Docket No. 04-02-07, if a facility changes its mode of operation from store and release to run-of-river mode after July 1, 2003, it may be eligible for a new "began operations" date. Decision, p. 14. The Department relies on the FERC license in determining whether a hydroelectric unit is a run-of-river facility. Decision, p. 7. If FERC has required a facility to operate in run-of-river but the facility does not comply, the Department cannot reward the facility for its noncompliance. If a facility is operating under a FERC license requiring run-of-river operation, the facility is, for the Department's purposes, a run-of-river facility. Therefore, the Department cannot grant Woronoco Hydro Facility a new operation date.³ However, the Department does determine that the facility is a run-of-river hydroelectric facility.

In support of its statement that turbine nos. 1 and 2 were permanently shut down in 1984 and 1988 respectively, Woronoco Hydro provided copies of internal notes from the engineering staff at the time that describe the reasons for their retirement. Turbine no. 1 was retired after several wickets were lost while troubleshooting a governor problem, the wheel would not respond to remote control and the unit would trip off line

² In order to qualify as a Class I facility with a new "began operations" date, an "abandoned" facility must meet the requirements outlined in the Decision in Docket No. 04-02-07 and come back on-line after July 1, 2003. See Decision, pp. 13-14. In this case, even if the facility was truly "abandoned", it came back on line prior to July 1, 2003 and therefore would not receive a new "began operations" date under the abandonment analysis.

³ Even if the Department were to accept Woronoco Hydro's assertions, the Department would look to the date of the new license requiring run-of-river operation, not the date of the monitoring and compliance plan.

at less than full load. Turbine no. 2 was retired after an inspection revealed runner damage and a crack in the shaft. Correspondence from Woronoco Hydro dated January 30, 2005. The effects of the retirement of the units is reflected in the annual records of output from the facility, which decreased markedly subsequent to the dates of the shutdown of turbine nos. 1 and 2, respectively. Application, Attachment 4. Additionally, the FERC license takes into account that turbine no. 3 was the only operable unit when the license was issued in 2002, referring to turbine nos. 1 and 2 as "non-functioning units". FERC Order Issuing New License dated April 30, 2002, p. 2. Therefore, FERC recognized that these units were inoperable when the license was issued, thus acknowledging that the facility no longer, and had not for five years, functioned at its nameplate capacity.

As described above, the 1.9 MW turbine no. 3 entered into service before July 1, 2003, and, pursuant to the Department's finding that the Woronoco Hydro Facility was a run-of-river facility prior to that time, the Department determines that turbine no. 3 qualifies as a Class II generator. Because turbine nos. 1 and 2 have been nonfunctioning units for an extended length of time, 21 years for turbine no. 1 (1984-2005 (scheduled)) and 16 years for turbine no. 2 (1988-2004), the facility as a whole has long functioned at a generation output far less than its nameplate capacity, as recognized by Woronoco Hydro has invested, and will further invest, significant capital to make turbine nos. 1 and 2 functional in the future to eventually meet the nameplate capacity of the facility as a whole. The Department determines, because turbine nos. 1 and 2 were non-functioning and inoperable, as determined by FERC for such an extended period, that the extensive refurbishment and investment necessary to rehabilitate those non-functioning units under this specific set of facts is equivalent to adding incremental capacity to an existing station. Thus the Department finds that turbine nos. 1 and 2 qualify for Class I status as 'incremental capacity' as that term is defined in the Decision in Docket No. 04-02-07.

The Department makes this determination on careful review of the unique set of facts in this docket pursuant to its Decision in Docket No. 04-02-07:

Each site is unique and has it own history and configuration ccordingly, the Department will consider exemptions to therequirements of this Decision on a case-by-case basis, wheregood cause for such consideration exists and where exemptions

do not conflict with the statutes or with the intent of this Decision.

Decision, p. 17.

The intent of the legislation and the Department's decision is to encourage such refurbishment of facilities. The Department further reviewed the facts of this Docket and found no evidence of gaming the system in this instance. The Department will continue to consider each set of facts and circumstances of each application while scrutinizing them for evidence of gaming.

Woronoco Hydro Facility is a small hydroelectric facility with a capacity of less than five megawatts, operating in run-of-river mode. Turbine no. 3 of this facility qualifies as a Class II generator, and turbine nos. 1 and 2 qualify as Class I generators. To determine how much generation at the facility is Class I, Woronoco Hydro should use the Renewable Energy Credit proration method described in Section II.B.3 of the Decision in Docket No. 04-02-07.

Woronoco Hydro submitted Written Exceptions to the Department's draft decision on this matter on March 24, 2005. Therein, Woronoco stated that, for the purpose of allocating Class I and II RECs, the Department should consider that electric output capacity of all three turbines differs from the nameplate capacity due to changes that have been made in the facility. Specifically, Woronoco Hydro asks the Department to consider the following factors that affect the electric capacity of the three turbines:

- Turbine no. 3's nameplate capacity of 1900 kW was established when the facility, as accepted by FERC, had 30 inch flashboards on top of the dam. The current configuration of the facility has no flashboards. Absent the flashboards, turbine no. 3 has a capacity of 1650 kW, according to Woronoco Hydro.
- Turbine no. 2 has been extensively renovated, and is now capable of producing up to 500kW. <u>Id.</u>, pp. 1-2. In support of this assertion, Woronoco Hydro provided data showing the actual output of each unit on August 19, 2004. The data shows that turbine no. 2 operated with an output of up to 499 kW on that day. The Department accepts Woronoco Hydro turbine no. 2's capacity as 500 kW, for the purpose of the REC proration calculation.
- Turbine no. 1, which previously had a nameplate capacity of 400 kW, will have a capacity of at least 500 kW after its rehabilitation and upgrade is complete. <u>Id</u>, pp. 2-3. Woronoco Hydro plans to repower turbine nos. 1 and 2 with new higher-efficiency stainless steel turbines, which will increase the output of both units. Therefore, the capacity of the turbine/generator sets and the ratios of the capacities of the three units will be in a state of change.

Written Exceptions, pp. 1-3. The Department notes that the information that Wornoco Hydro provided in Written Exceptions also is provided in Attachment 6 to its Application. Therefore, it is not new evidence.

In its Decision in Docket No. 04-02-07, the Department stated:

There may be instances where a hydroelectric facility is limited in output by factors other than the nameplate capacity of its generator. In such instances, the Department will consider what the capacity of the facility should be on a case-by-case basis. However, in all such cases, the Department will limit its consideration to the maximum output that the

facility possibly can physically achieve, consistent with the legislative intent as well as the Webster Dictionary definition of capacity.

Decision, p. 6.

The Department believes that Woronoco Hydro has provided sound reasoning and evidence demonstrating that the real capacities of the turbine/generating units are different from the nameplate capacities. The Department will therefore accept Woronoco Hydro's modifications to its turbine/generating unit capacities.

Woronoco Hydro states that it plans to petition FERC to change the capacity of turbine no. 3 and also to raise its capacity if FERC allows it to replace the 30" flashboards. Woronoco Hydro states that it plans to notify the Department when FERC approves these changes. Written Exceptions, p. 2. Since this change will decrease the proportion of Class I RECs to Class II RECs, it is imperative that Woronoco Hydro notify the Department of this change, and the Department will therefore order it to do so.

The Department is concerned regarding the practicalities of administering the proration method to facilities where the capacities of the units will apparently undergo several changes in the future. The Department does not desire numerous reopenings and decisions to make small adjustments in the proration method. Accordingly, Woronoco Hydro should only apply to the Department for a modification to the proration method when the capacity of a unit changes by 10% or more.

According to the proration method, 23.3% [500/(1650+500)] of the facility's output currently qualifies for Class I. To receive Class I renewable energy qualification for turbine no. 2, Woronoco Hydro must provide evidence to the Department that the unit has been returned to service. Furthermore, to determine turbine no. 2's capacity for the purpose of the proration calculation, Woronoco Hydro must submit operating data demonstrating the electric capacity of the unit.

III. FINDINGS OF FACT

- Woronoco Hydro Facility is a hydroelectric facility located on the Westfield River in Russel, Massachusetts.
- There are 3 turbine generators at this facility, with a total combined nameplate capacity of 2.7 MW.
- 3. The project has three turbines, numbered 1, 2 and 3, which are rated at 0.4 MW, 0.4 MW and 1.9 MW, respectively.
- Woronoco Hydro Facility began commercial operation in 1916.
- 5. The facility had no electric output from August 1997 to September 2000, there was no electric output from turbine no. 1 for 21 years and turbine no. 2 for 16 years.

- 6. FERC's Order issuing this license states that the project "would continue to operate" as a run-of-river facility, referring to the previous license issued June 2, 1981.
- 7. Woronoco Hydro provided copies of internal notes from the facility's engineering staff at the time that describe the reasons for the retirement of the turbines.
- 8. Turbine no. 1 was shut down in 1984, turbine no. 2 was shut down in 1988.
- 9. Turbine no. 1 was retired after several wickets were lost while troubleshooting a governor problem, the wheel would not respond to remote control and the unit would trip off line at less than full load. Turbine no. 2 was retired after an inspection revealed runner damage, and a crack in the shaft was discovered.
- 10. Woronoco Hydro plans to petition FERC to change the capacity of turbine no. 3, and to install flashboards.
- 11. Woronoco Hydro plans to make further changes to turbine nos. 1 and 2 to increase their efficiency and output.
- 12. Woronoco Hydro submitted data demonstrating that turbine no. 2 operated at an electric output up to 499 kW.

IV. CONCLUSION AND ORDER

A. CONCLUSION

Based on the evidence submitted, the Department finds that Woronoco Hydro Facility Turbine No. 3 qualifies as a Class II renewable generation facility pursuant to Connecticut General Statutes §16-1(a)(27). Woronoco Hydro Facility Turbine No. 1 qualifies as a Class I renewable generation facility pursuant to Connecticut General Statutes §16-1(a)(26). Woronoco Hydro Facility Turbine No. 2 will qualify as a Class I renewable generation facility pursuant to Connecticut General Statutes §16-1(a)(26), upon submission of documentation to the Department demonstrating that it has entered into service. Such documentation shall include, but is not limited to: 1) results of testing of the rehabilitated unit, demonstrating that the unit can be started, synchronized to the grid and will accept full load, and 2) copies of corresponce to and from relevant authorities supporting the assertion that the unit has returned to service.

The Department assigns each renewable generation source a unique Connecticut RPS registration number. Woronoco's Connecticut RPS registration number is CT00132-04.

The Department's determination in this docket is based on the information submitted by Woronoco Hydro. The Department may reverse its ruling if any material information provided by the Applicant proves to be false or misleading. The Department

reminds Woronoco Hydro 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

 Within 30 days of the approval by FERC of a change in the capacity of any of the Woronoco Hydro Facility units, Woronoco Hydro shall notify the Department of FERC's approval and provide copies of the FERC documents that constitute approval of the change.

DOCKET NO. 04-06-25 APPLICATION OF WORONOCO HYDRO COMPANY LLC FOR QUALIFICATION AS A CLASS I 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.

Louis 6. Rickard

April 14, 2005

Date

Louise E. Rickard

Acting Executive Secretary

Department of Public Utility Control