

**Marlow Hydro, LLC**  
**139 Henniker Street**  
**Hillsboro, New Hampshire 03244**  
**(603) 464-3869 (Tel); (603) 494-1854 (Cell)**  
[t-iem@tds.net](mailto:t-iem@tds.net)

NHPUC 4/MAR/15AM11:30

February 28, 2015

**Via E-Mail and U.S. Mail**

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

Re: Application Form For Renewable Energy Source Eligibility for Class IV Hydro Sources with a Total Nameplate Capacity of One Megawatt or Less For Marlow Hydro, LLC (the "Application")

Dear Ms. Howland:

Per its Application Form For Renewable Energy Source Eligibility for Class IV Hydro Sources with a Total Nameplate Capacity of One Megawatt or Less, Marlow Hydro, LLC ("Marlow" or the "Applicant") submits a completed Application for its Old Nash Dam Hydro to be certified as a Class IV Hydro Source with a total nameplate capacity of one megawatt or Less.

For purposes of responding to inquiries regarding this matter, persons should contact the following:

**Primary Contact**

William P. Short III<sup>1</sup>  
 Consultant  
 44 West 62nd Street  
 P.O. Box 237173  
 New York, New York 10023-7173  
 (917) 206-0001 (Office)  
 (201) 970-3707 (Cell)  
[w.shortiii@verizon.net](mailto:w.shortiii@verizon.net)

**Secondary Contact**

Anthony (Tony) B. Rosario  
 Manager  
 Marlow Hydro, LLC  
 139 Henniker Street  
 Hillsboro, New Hampshire 03244  
 (603) 464-3869 (Office)  
 (603) 494-1854 (cell)  
[t-iem@tds.net](mailto:t-iem@tds.net)

<sup>1</sup> With this Application, Marlow Hydro appoints William P. Short III as its authorized representative.

Upon your review of our submission, if you have any questions or comments, please do not hesitate to contact either Anthony (Tony) B. Rosario or myself.

Sincerely yours,

Handwritten signature of William P. Short III in cursive script.

enclosure

cc: Anthony (Tony) B. Rosario (e-mail only)  
Barbara Bernstein (e-mail only)

## **LIST OF ENCLOSURES**

Application Form For Renewable Energy Source Eligibility for Class IV Hydro Sources with a Total Nameplate Capacity of One Megawatt or Less For Marlow Hydro, LLC



# State of New Hampshire Public Utilities Commission

21 S. Fruit Street, Suite 10, Concord, NH 03301-2429



## APPLICATION FORM FOR RENEWABLE ENERGY SOURCE ELIGIBILITY FOR CLASS IV

### HYDRO SOURCES WITH A TOTAL NAMEPLATE CAPACITY OF ONE MEGAWATT OR LESS

Pursuant to New Hampshire Administrative Code [Puc 2500](#) Rules, *Puc 2505.02 Application Requirements*  
*Laws of 2012, Chapter 0272*

- Please submit one (1) original and two (2) paper copies of the completed application and cover letter to:

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

- Send an electronic version of the completed application and the cover letter electronically to [executive.director@puc.nh.gov](mailto:executive.director@puc.nh.gov).

The cover letter must include complete contact information and clearly state that the applicant is seeking certification as a Class IV source. Pursuant to Chapter 362-F: 11 I, the Commission is required to render a decision on an application within 45 days upon receiving a completed application.

If you have any questions please contact Barbara Bernstein at (603)271-6011 or [Barbara.Bernstein@puc.nh.gov](mailto:Barbara.Bernstein@puc.nh.gov).

Please provide the following:

1. Applicant Name: [Marlow Hydro, LLC](#)

Mailing Address: [139 Henniker Street](#)

Town/City: [Hillsborough](#) State: [New Hampshire](#) Zip Code: [03244](#)

Primary Contact: [William P. Short III](#)

Telephone: [\(917\) 206-0001](#) Cell: [\(201\) 970-3707](#)

Email address: [w.shortiii@verizon.net](mailto:w.shortiii@verizon.net)

2. Facility Name: [Old Nash Dam Hydro](#)

(physical address) [199 New Hampshire Route 10](#)

Town/City: [Marlow](#) State: [New Hampshire](#) Zip Code: [03456](#)

If the facility does not have a physical address, the Latitude [43° 05' 09.29"](#) & Longitude [72° 12' 13.47"](#)

(To qualify the electrical production for RECs, the facility must be registered with the NEPOOL – GIS).  
Contact information for the GIS administrator follows:

**James Webb, Registry Administrator, APX Environmental Markets**  
224 Airport Parkway, Suite 600, San Jose, CA 95110  
Office: 408.517.2174, [jwebb@apx.com](mailto:jwebb@apx.com)

3. The facility's ISO-New England asset identification number, if available. [MSS # 897](#)
4. The facility's GIS facility code, if available. \_\_\_\_\_
5. A description of the facility including the following:
  - 5.a. The gross nameplate capacity [212 KW](#)
  - 5.b. The facility's initial commercial operation date [December 1983](#)
  - 5.c. The date the facility began operation, if different than the operation date \_\_\_\_\_
  - 5.d. A complete description of the facility **including location, structures and equipment.**

**Project works consisting of: (1) a rehabilitated stone and masonry dam, consisting of a 100-foot-long dam section nine feet high and two spillway sections, a 40-foot-long ungated spillway seven feet high and a 21-foot-long gated spillway seven feet high; (b) a reservoir with an area of two acres and a storage of 10-acre feet and a normal water surface elevation of 69 feet m.s.l.; a penstock 1,500 feet long and 4.0 feet in diameter placed on the northern bank; (d) an 11- by 14-foot powerhouse containing three turbine generator units with a total installed capacity of 212 KW operating with a head of 43 feet; (e) a tailrace 600 feet long; (f) a 1,000 foot-long 12.5 KV transmission line; and (g) appurtenant facilities.**

6. A copy of all necessary state and federal (FERC) regulatory approvals as **Attachment A**.
7. A copy of the title page of the Interconnection Agreement between the applicant and the distribution utility, the page(s) that identifies the nameplate capacity of the facility and the signature pages. *Please provide this information as **Attachment B**.*
8. Pursuant to 2505.01(c), no generation facility shall be eligible to acquire new certificates under this Chapter while selling its electrical output at long-term rates established before January 1, 2007. Please provide a copy of the facility's long-term rate agreement as **Attachment C**.

9. A description of how the generation facility is connected to the distribution utility.

**The Facility's three generators generate power at 480 V. That power is stepped up from that voltage to 12.47 KV by the Facility's step-up transformer. The power is then placed on a 1,000 foot generator lead which interconnects with a Public Service Company of New Hampshire distribution line running alongside New Hampshire Route 10.**

10. A statement as to whether the facility has been certified under another non-federal jurisdiction's renewable portfolio standard and proof thereof. *Provide documentation as **Attachment D**.*

**The Facility has been self-certified under the Maine renewable portfolio standard (a non-federal jurisdiction’s renewable portfolio standard) as a Maine Class II renewable resource; however, there is no written proof of this certification.**

10. A statement as to whether the facility’s output has been verified by ISO-New England.

**The Facility’s output is verified by ISO-New England as follow:**

**The Facility’s electrical output is read by Public Service Company of New Hampshire. This information is conveyed to ISO New England, Inc. (“ISO-NE”), which in turn conveys it directly to APX, Inc. (“APX”), the operator of the NEPOOL Generation Information System (“GIS”). The Facility’s Asset ID and MSS account number is 897. The Applicant has authorized APX to disclose to the Commission the Facility’s monthly generation production.**

11. An affidavit by the applicant attesting that the contents of the application are accurate. *Use either the Affidavit at the bottom of this page, or provide a separate document as **Attachment E**.*

12. The name and telephone number of the facility’s operator, **if different from the owner**.

Facility Operator Name: [Anthony \(Tony\) B. Rosario](#)

Phone: [\(603\) 464-3869](#)

13. Other pertinent information that you wish to include to assist in classification of the facility provide as **Attachment F**.

<b>CHECK LIST: The following has been included to complete the application:</b>	<b>YES</b>
• All contact information requested in the application.	
• A copy of all necessary state and federal (FERC) regulatory approvals as <b>Attachment A</b> .	
• A copy of the title page of the Interconnection Agreement between the applicant and the distribution utility, the page(s) that identifies the nameplate capacity of the facility and the signature pages as <b>Attachment B</b> .	
• A copy of provide a copy of the facility’s long-term rate agreement as <b>Attachment C</b>	
• <b>If applicable</b> , documentation of the hydro facility’s certification(s) in other non-federal jurisdiction’s renewable portfolio standard program(s) as <b>Attachment D</b> .	
• A signed and notarized attestation or <b>Attachment E</b> .	
• A GIS number has been provided or has been requested.	
• Other pertinent information has been provided (if necessary) as <b>Attachment F</b> .	
• This document has been printed and notarized.	
• The original and two copies are included in the packet mailed to Debra Howland, Executive Director of the PUC.	
• An electronic version of the completed application has been sent to <u><a href="mailto:executive.director@puc.nh.gov">executive.director@puc.nh.gov</a></u> .	

## **Attachment A**

A copy of all necessary state and federal (FERC) regulatory approvals are attached:

- FERC Order Issuing License (Minor) (Issued December 20, 1982)
- FERC Order Amending License (Issued December 31, 1984)
- FERC Order Amending License (Issued June 2, 1989)
- FERC Order Approving Transfer of License (Issued July 18, 2007)

21 FERC 962,553

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Arthur E. Cohen )

Project No. 3309-001

## ORDER ISSUING LICENSE (MINOR)

( Issued December 30, 1982 )

Arthur E. Cohen has filed an application for a license under Part I of the Federal Power Act (Act) to construct, operate, and maintain the Nash Mill Dam Project No. 3309. <sup>1/</sup> The project would be located on the Ashuelot River in the town of Marlow in Cheshire County, New Hampshire. The project would affect the interests of interstate commerce.

Notice of the application has been published and comments have been received from interested Federal, State, and local agencies. No protests have been received and none of the agencies objected to issuance of the license.

The proposed project would consist of a breached stone and masonry dam to be rehabilitated, a small reservoir, a 1,500-foot-long penstock, a small powerhouse containing one 90-kW turbine/generator and a 1,000-foot-long transmission line.

A more detailed project description is contained in ordering paragraph (B) below.

FERC - CONSENT  
DEC 30 1982

1/ Authority to act on th's matter is delegated to the Director, Office of Electric Power Regulation, under §375.308 of the Commission's regulations, 18 C.F.R. §375.308 (1982), FERC Statutes and Regulations §30,238. This order may be appealed to the Commission by any party within 30 days of its issuance pursuant to Rule 1902, 18 C.F.R. §385.1902, FERC Statutes and Regulations §29,052, 47 Fed. Reg. 19014 (1982). Filing an appeal and final Commission action on that appeal are prerequisites for filing an application for rehearing as provided in Section 313(a) of the Act. Filing an appeal does not operate as a stay of the effective date of this order or of any other date specified in this order, except as specifically directed by the Commission.

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### Safety and Adequacy

All project structures, machinery, and appurtenant facilities were inspected by the Commission's staff and found to be adequately maintained. The project is classified as low hazard. Failure of the powerhouse would not create a hazard to downstream human life or cause significant property damage.

It is concluded that the project under the conditions of this license will be safe and adequate.

### Environmental Considerations

The New Hampshire Water Supply and Pollution Control Commission issued a water quality certification, pursuant to Section 401 of the Federal Water Pollution Control Act Amendments of 1972 (33 U.S.C. 1341), for the Nash Mill Dam Project on May 5, 1982.

The proposed project would result in minor, short-term adverse environmental impacts due to equipment installation and start up activities, which would include increases in noise levels, exhaust emissions and turbidity. Repair of the breached dam and installation of the penstock and powerhouse would increase erosion and disturb vegetation and wildlife. Project operation would divert a large portion of the streamflow through the powerhouse, but the minimum flow to be released from the spillway, as provided by Article 23, would be adequate to maintain aquatic resources in the diverted reach of stream. No adverse long-term environmental impacts would result. Construction and operation of the project would have no effect on federally-listed threatened or endangered species.

In accordance with standard Commission practice 2/, Article 24 of this license requires cultural resources protection measures in the event of any future construction or development at the project.

On the basis of the record, including agency comments and staff's independent analysis, it is found that issuance of a license for this project, as conditioned, is not a major Federal action significantly affecting the quality of the human environment.

### Comprehensive Development

The proposed project, with its average annual generation of 474,000 kWh, will utilize a renewable resource that will save the equivalent of approximately 824 barrels of oil or 220 tons of coal per year.

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2/ See S. D. Warren, Project No. 2897, Order Denying Rehearing (issued February 19, 1980).

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It is concluded that subject to the terms and conditions of this license, Project No. 3309 is best adapted to a comprehensive plan for development of the Ashuelot River Basin for beneficial public uses.

### License Term

This license is issued for a term of 40 years. The proposed construction of this project is similar to the relicensing of a project for which a moderate amount of redevelopment or new construction is proposed. <sup>3/</sup>

### It is ordered that:

(A) This license is issued to Arthur E. Cohen (Licensee), of Keene, New Hampshire, under Part I of the Federal Power Act (Act), for a period of 40 years, effective the first day of the month in which this order is issued, for the construction, operation and maintenance of the Nash Mill Dam Project No. 3309, located on the Ashuelot River in the town of Marlow in Cheshire County, New Hampshire, and affecting the interests of interstate or foreign commerce. This license is subject to the terms and conditions of the Act, which is incorporated by reference as part of this license, and subject to the regulations the Commission issues under the provisions of the Act.

(B) The Nash Mill Dam Project No. 3309 consists of:

(1) All lands, to the extent of the Licensee's interests in those lands, constituting the project area and enclosed by the project boundary. The project area and boundary are shown and described by certain exhibits that form part of the application for license and that are designated and described as:

<u>Exhibit</u>	<u>FERC No. 3309-</u>	<u>Showing</u>
G	2	Development Plan

(2) Project works consisting of: (a) a rehabilitated stone and masonry dam, consisting of a 100-foot-long dam section nine feet high and two spillway sections, a 40-foot-long ungated spillway seven feet high and a 21-foot-long gated spillway seven feet high; (b) a reservoir with an area of

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<sup>3/</sup> See The Montana Power Company, Mystic Lake Project No. 2301, Order Issuing New License (Major)(issued October 5, 1976).

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two acres and a storage of 10 acre-feet; (c) a penstock 1,500 feet long and 2.0 or 2.5 feet in diameter placed on the southern bank; (d) an 11 by 14-foot powerhouse containing one cross-flow 90-kW turbine/generator unit operating under a head of 43 feet; (e) a tailrace 600 feet long; (f) a 1,000-foot-long, 12.5-kV transmission line; and (g) appurtenant facilities.

- The location, nature, and character of these project works are generally shown and described by the exhibits cited above and more specifically shown and described by certain other exhibits that also form a part of the application for license and that are designated and described as:

Exhibit A - Part (I), (I) and (II) of the application filed May 3, 1982,

<u>Exhibit F</u>	<u>FERC No. 3309-</u>	<u>Showing</u>
F	1	Principal Project Works

(3) All of the structures, fixtures, equipment, or facilities used or useful in the operation or maintenance of the project and located within the project boundary, all portable property that may be employed in connection with the project, located within or outside the project boundary, as approved by the Commission, and all riparian or other rights that are necessary or appropriate in the operation or maintenance of the project.

(C) Exhibits F and G, designated in ordering paragraph (B) above, are approved and made a part of the license, only to the extent that they show the general location, description, nature, etc. of the project works.

(D) Pursuant to Section 10(i) of the Act, it is in the public interest to waive the following Sections of Part I of the Act, and they are excluded from the license:

Section 4(b), except the second sentence; 6, insofar as it relates to public notice and to the acceptance and expression in the license of terms and conditions of the Act that are waived here; 10(c), insofar as it relates to depreciation reserves; 10(d); 10(f); 14, except insofar as the power of condemnation is reserved; 15; 16; 20; and 22.

(E) This license is also subject to Articles 1 through 19 set forth in Form L-15 (revised October, 1975), entitled "Terms and Conditions of License for Unconstructed Minor Project Affecting the Interests of Interstate or Foreign Commerce," attached to and made a part of this license. The license is also subject to the following additional articles:

Article 19. The Licensee shall commence construction of the proposed project within one year of the date of issuance of the license and shall complete construction within two years from the start of construction.

Article 20. The Licensee shall file with the Commission's Regional Engineer and the Director, Office of Electric Power Regulation, one copy each of the contract drawings and specifications for pertinent features of the project, such as water retention structures, at least 60 days prior to the start of construction. The Director, Office of Electric Power Regulation, may require changes in the plans and specifications to assure a safe and adequate project.

Article 21. The Licensee shall within 90 days of the completion of construction file in accordance with Commission's Rules and Regulations revised Exhibit F drawings showing the project "as-built."

Article 22. The Licensee shall pay the United States the following annual charges, effective the first day of the month in which this license is issued:

(a) For the purpose of reimbursing the United States for the cost of administration of part I of the Act, a reasonable amount as determined in accordance with the provisions of the Commission's regulations in effect from time to time. The authorized installed capacity for that purpose is 120 horsepower.

Article 23. The Licensee shall discharge from the Nash Mill Project spillway, a continuous minimum flow of 5 cubic feet per second or the inflow to the reservoir, whichever is less, for the protection and enhancement of aquatic resources in the Ashuelot River. In addition, during periods of non-generation all river flow shall be released over the spillway. These flows may be temporarily modified if required by operating emergencies beyond the control of the Licensee, and for short periods for fishery management purposes upon mutual agreement between the Licensee and the New Hampshire Fish and Game Department.

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**Article 24.** Prior to the commencement of any construction or development of any project works or other facilities at the project, the Licensee shall consult and cooperate with the appropriate State Historic Preservation Officer (SHPO) to determine the need for, and extent of, any archeological or historic resource surveys and any mitigative measures that may be necessary. The Licensee shall provide funds in a reasonable amount for any such activity. If any previously unrecorded archeological or historical sites are discovered during the course of construction, construction activity in the vicinity shall be halted, a qualified archeologist shall be consulted to determine the significance of the sites, and the Licensee shall consult with the SHPO to develop a mitigation plan for the protection of significant archeological or historic resources. If the Licensee and the SHPO cannot agree on the amount of money to be expended on archeological or historic work related to the project, the Commission reserves the right to require the Licensee to conduct, at its own expense, any such work found necessary.

**Article 25.** (a) In accordance with the provisions of this article, the Licensee shall have the authority to grant permission for certain types of use and occupancy of project lands and waters and to convey certain interests in project lands and waters for certain other types of use and occupancy, without prior Commission approval. The Licensee may exercise the authority only if the proposed use and occupancy is consistent with the purposes of protecting and enhancing the scenic, recreational, and other environmental values of the project. For those purposes, the Licensee shall also have continuing responsibility to supervise and control the uses and occupancies for which it grants permission, and to monitor the use of, and to ensure compliance with the covenants of the instrument of conveyance for any interests that it has conveyed under this article. If a permitted use and occupancy violates any condition of this article or any other condition imposed by the Licensee for protection and enhancement of the project's scenic, recreational, or other environmental values, or if a covenant of a conveyance made under the authority of this article is violated, the Licensee shall take any lawful action necessary to correct the violation. For a permitted use or occupancy that action includes, if necessary, cancelling the permission to use and occupy the project lands and waters and requiring the removal of any non-complying structures and facilities.

(b) The types of use and occupancy of project lands and waters for which the Licensee may grant permission without prior Commission approval are: (1) landscape plantings; (2) non-commercial piers, landings, boat docks, or similar structures and facilities that can accommodate no more than 10 watercraft at a time where said facility is intended to serve single-family type dwellings; and (3) embankments, bulkheads, retaining walls, or similar structures

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for erosion control to protect the existing shoreline. To the extent feasible and desirable to protect and enhance the project's scenic, recreational, and other environmental values, the Licensee shall require multiple use and occupancy of facilities for access to project lands or waters. The Licensee shall also ensure, to the satisfaction of the Commission's authorized representative, that the uses and occupancies for which it grants permission are maintained in good repair and comply with applicable State and local health and safety requirements. Before granting permission for construction of bulkheads or retaining walls, the Licensee shall: (1) inspect the site of the proposed construction, (2) consider whether the planting of vegetation or the use of riprap would be adequate to control erosion at the site, and (3) determine that the proposed construction is needed and would not change the basic contour of the reservoir shoreline. To implement this paragraph (b), the Licensee may, among other things, establish a program for issuing permits for the specified types of use and occupancy of project lands and waters, which may be subject to the payment of a reasonable fee to cover the Licensee's costs of administering the permit program. The Commission reserves the right to require the Licensee to file a description of its standards, guidelines, and procedures for implementing this paragraph (b) and to require modification of those standards, guidelines, or procedures.

(c) The Licensee may convey easements or rights-of-way across, or leases of, project lands for: (1) replacement, expansion, realignment, or maintenance of bridges and roads for which all necessary State and Federal approvals have been obtained; (2) storm drains and water mains; (3) sewers that do not discharge into project waters; (4) minor access roads; (5) telephone, gas, and electric utility distribution lines; (6) non-project overhead electric transmission lines that do not require erection of support structures within the project boundary; (7) submarine, overhead, or underground major telephone distribution cables or major electric distribution lines (69-kV or less); and (8) water intake or pumping facilities that do not extract more than one million gallons per day from a project reservoir. No later than January 31 of each year, the Licensee shall file three copies of a report briefly describing for each conveyance made under this paragraph (c) during the prior calendar year, the type of interest conveyed, the location of the lands subject to the conveyance, and the nature of the use for which the interest was conveyed.

(d) The Licensee may convey fee titles to, easements or rights-of-way across, or leases of project lands for: (1) construction of new bridges or roads for which all necessary State and Federal approvals have been obtained; (2) sewer or effluent lines that discharge into project waters for which all

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necessary Federal and State water quality certificates or permits have been obtained; (3) other pipelines that cross project lands or waters but do not discharge into project waters; (4) non-project overhead electric transmission lines that require erection of support structures within the project boundary for which all necessary Federal and State approvals have been obtained; (5) private or public marinas that can accommodate no more than 10 watercraft at a time and are located at least one-half mile from any other private or public marina; (6) recreational development consistent with an approved Exhibit R or approved report on recreational resources of an Exhibit E; and (7) other uses, if: (i) the amount of land conveyed for a particular use is five acres or less; (ii) all of the land conveyed is located at least 75 feet, measured horizontally, from the edge of the project reservoir at normal maximum surface elevation; and (iii) no more than 50 total acres of project lands for each project development are conveyed under this clause (d)(7) in any calendar year. At least 45 days before conveying any interest in project lands under this paragraph (d), the Licensee must file a letter to the Director, Office of Electric Power Regulation, stating its intent to convey the interest and briefly describing the type of interest and location of the lands to be conveyed (a marked Exhibit G or K map may be used), the nature of the proposed use, the identity of any Federal or State agency official consulted, and any Federal or State approvals required for the proposed use. Unless the Director, within 45 days from the filing date, requires the Licensee to file an application for prior approval, the Licensee may convey the intended interest at the end of that period.

(e) The following additional conditions apply to any intended conveyance under paragraphs (c) or (d) of this article:

(1) Before conveying the interest, the Licensee shall consult with Federal and State fish and wildlife or recreation agencies, as appropriate, and the State Historic Preservation Officer.

(2) Before conveying the interest, the Licensee shall determine that the proposed use of the lands to be conveyed is not inconsistent with any approved Exhibit R or approved report on recreational resources of an Exhibit E; or, if the project does not have an approved Exhibit R or approved report on recreational resources, that the lands to be conveyed do not have recreational value.

(3) The instrument of conveyance must include covenants running with the land adequate to ensure that: (i) the use of the lands conveyed shall not endanger health, create a nuisance, or otherwise be incompatible with overall project recreational use; and (ii) the grantee shall take all reasonable

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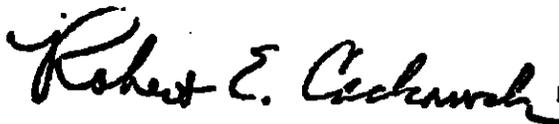
precautions to ensure that the construction, operation, and maintenance of structures or facilities on the conveyed lands will occur in a manner that will protect the scenic, recreational, and environmental values of the project.

(4) The Commission reserves the right to require the Licensees to take reasonable remedial action to correct any violation of the terms and conditions of this article for the protection and enhancement of the project's scenic, recreational, and other environmental values.

(f) The conveyance of an interest in project lands under this article does not in itself change the project boundaries. The project boundaries may be changed to exclude land conveyed under this article only upon approval of revised Exhibit G or K drawings (project boundary maps) reflecting exclusion of that land. Lands conveyed under this article will be excluded from the project only upon a determination that the lands are not necessary for project purposes, such as operation and maintenance, flowage, recreation, public access, protection of environmental resources, and shoreline control, including shoreline aesthetic values. Absent extraordinary circumstances, proposals to exclude lands conveyed under this article from the project shall be consolidated for consideration when revised Exhibit G or K drawings would be filed for approval for other purposes.

Article 26. The Licensee shall continue to consult and cooperate with the U.S. Fish and Wildlife Service, the U.S. Heritage Conservation and Recreation Service of the Department of the Interior, the New Hampshire Fish and Game Department and other appropriate agencies for the protection and development of the environmental resources and values of the project area. The Commission reserves the right to require changes to the project works or operations that may be necessary to protect and enhance those resources and values.

(F) The Licensee's failure to file a petition appealing this order to the Commission shall constitute acceptance of this license. In acknowledgment of acceptance of this order and its terms and conditions, it shall be signed by the Licensee and returned to the Commission within 60 days from the date this order is issued.



FOR Lawrence R. Anderson  
Director, Office of Electric  
Power Regulation

**Project No. 3309-001**

**IN TESTIMONY of his acknowledgment of acceptance of all of the terms and conditions of this Order, Arthur E. Cohen this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_, has caused his name to be signed hereto.**

**By \_\_\_\_\_  
Arthur E. Cohen**

**(Executed in quadruplicate)**

Form E-15  
(October, 1975)

FEDERAL ENERGY REGULATORY COMMISSION

TERMS AND CONDITIONS OF LICENSE FOR UNCONSTRUCTED  
MINOR PROJECT AFFECTING THE INTERESTS OF  
INTERSTATE OR FOREIGN COMMERCE

Article 1. The entire project, as described in this order of the Commission, shall be subject to all of the provisions, terms, and conditions of the license.

Article 2. No substantial change shall be made in the maps, plans, specifications, and statements described and designated as exhibits and approved by the Commission in its order as a part of the license until such change shall have been approved by the Commission: Provided, however, That if the licensee or the Commission deems it necessary or desirable that said approved exhibits, or any of them, be changed, there shall be submitted to the Commission for approval a revised, or additional exhibit or exhibits covering the proposed changes which, upon approval by the Commission, shall become a part of the license and shall supersede, in whole or in part, such exhibit or exhibits theretofore made a part of the license as may be specified by the Commission.

Article 3. The project works shall be constructed in substantial conformity with the approved exhibits referred to in Article 2 herein or as changed in accordance with the provisions of said article. Except when emergency shall require for the protection of navigation, life, health, or property, there shall not be made without prior approval of the Commission any substantial alteration or addition not in conformity with the approved plans to any dam or other project works under the license or any substantial use of project lands and waters not authorized herein; and any emergency alteration, addition, or use so made shall thereafter be subject to such modification and change as the Commission may direct. Minor changes in project works, or in uses of project lands and waters, or divergence from such approved exhibits may be made if such changes will not result in a decrease in efficiency, in a material increase in cost, in an adverse environmental impact, or in impairment of the general scheme of development; but any of such minor changes

made without the prior approval of the Commission, which in its judgment have produced or will produce any of such results, shall be subject to such alteration as the Commission may direct.

Upon the completion of the project, or at such other time as the Commission may direct, the licensee shall submit to the Commission for approval revised exhibits insofar as necessary to show any divergence from or variations in the project area and project boundary as finally located or in the project works as actually constructed when compared with the area and boundary shown and the works described in the license or in the exhibits approved by the Commission, together with a statement in writing setting forth the reasons which in the opinion of the licensee necessitated or justified variation in or divergence from the approved exhibits. Such revised exhibits shall, if and when approved by the Commission, be made a part of the license under the provisions of Article 2 hereof.

Article 4. The construction, operation, and maintenance of the project and any work incidental to additions or alterations shall be subject to the inspection and supervision of the Regional Engineer, Federal Power Commission, in the region wherein the project is located, or of such other officer or agent as the Commission may designate, who shall be the authorized representative of the Commission for such purposes. The licensee shall cooperate fully with said representative and shall furnish him a detailed program of inspection and shall furnish him a provide for an adequate and qualified inspection force for construction of the project and for any subsequent alterations to the project. Construction of the project works or any feature or alteration thereof shall not be initiated until the program of inspection for the project works or any such feature thereof has been approved by said representative. The licensee shall also furnish to said representative such further information as he may require concerning the construction, operation, and maintenance of the project, and of any alteration thereof, and shall notify him of the date upon which work will begin, as far in advance thereof as said representative may reasonably specify, and shall notify him promptly in writing of any suspension of work for a period of more than one week, and of its resumption and completion. The licensee shall allow said representative and other

officers or employees of the United States, showing proper credentials, free and unrestricted access to, through, and across the project lands and project works in the performance of their official duties. The Licensee shall comply with such rules and regulations of general or special applicability as the Commission may prescribe from time to time for the protection of life, health, or property.

Article 5. The Licensee, within five years from the date of issuance of the license, shall acquire title in fee or the right to use in perpetuity all lands, other than lands of the United States, necessary or appropriate for the construction, maintenance, and operation of the project. The Licensee or its successors and assigns shall, during the period of the license, retain the possession of all project property covered by the license as issued or as later amended, including the project area, the project works, and all franchises, easements, water rights, and rights of occupancy and use; and none of such properties shall be voluntarily sold, leased, transferred, abandoned, or otherwise disposed of without the prior written approval of the Commission, except that the Licensee may lease or otherwise dispose of interests in project lands or property without specific written approval of the Commission pursuant to the then current regulations of the Commission. The provisions of this article are not intended to prevent the abandonment or the retirement from service of structures, equipment, or other project works in connection with replacements thereof when they become obsolete, inadequate, or inefficient for further service due to wear and tear; and mortgage or trust deeds or judicial sales made thereunder, or tax sales, shall not be deemed voluntary transfers within the meaning of this article.

Article 6. The Licensee shall install and thereafter maintain gages and stream-gaging stations for the purpose of determining the stage and flow of the stream or streams on which the project is located, the amount of water held in and withdrawn from storage, and the effective head on the turbines; shall provide for the required reading of such gages and for the adequate rating of such stations; and shall install and maintain standard meters adequate for the determination of the amount of electric energy generated by the project works. The number, character, and location of gages, meters, or other measuring devices, and the method of operation thereof, shall at all times be satisfactory to the Commission or its authorized representative.

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The Commission reserves the right, after notice and opportunity for hearing, to require such alterations in the number, character, and location of gages, meters, or other measuring devices, and the method of operation thereof, as are necessary to secure adequate determinations. The installation of gages, the rating of said stream or streams, and the determination of the flow thereof, shall be under the supervision of, or in cooperation with, the District Engineer of the United States Geological Survey having charge of stream-gaging operations in the region of the project, and the Licensee shall advance to the United States Geological Survey the amount of funds estimated to be necessary for such supervision, or cooperation for such periods as may be mutually agreed upon. The Licensee shall keep accurate and sufficient records of the foregoing determinations to the satisfaction of the Commission, and shall make return of such records annually at such time and in such form as the Commission may prescribe.

Article 7. The Licensee shall, after notice and opportunity for hearing, install additional capacity or make other changes in the project as directed by the Commission, to the extent that it is economically sound and in the public interest to do so.

Article 8. The Licensee shall, after notice and opportunity for hearing, coordinate the operation of the project, electrically and hydraulically, with such other projects or power systems and in such manner as the Commission may direct in the interest of power and other beneficial public uses of water resources, and on such conditions concerning the equitable sharing of benefits by the Licensee as the Commission may order.

Article 9. The operations of the Licensee, so far as they affect the use, storage and discharge from storage of waters affected by the license, shall at all times be controlled by such reasonable rules and regulations as the Commission may prescribe for the protection of life, health, and property, and in the interest of the fullest practicable conservation and utilization of such waters for power purposes and for other beneficial public uses, including recreational purposes, and the Licensee shall release water from the project reservoir at such rate in cubic feet per second, or such volume in acre-feet per specified period of time, as the Commission may prescribe for the purposes hereinbefore mentioned.

**Article 10.** On the application of any person, association, corporation, Federal agency, State or municipality, the Licensee shall permit such reasonable use of its reservoir or other project properties, including works, lands and water rights, or parts thereof, as may be ordered by the Commission, after notice and opportunity for hearing, in the interests of comprehensive development of the waterway or waterways involved and the conservation and utilization of the water resources of the region for water supply or for the purposes of steam-electric, irrigation, industrial, municipal or similar uses. The Licensee shall receive reasonable compensation for use of its reservoir or other project properties or parts thereof for such purposes, to include at least full reimbursement for any damages or expenses which the joint use causes the Licensee to incur. Any such compensation shall be fixed by the Commission either by approval of an agreement between the Licensee and the party or parties benefiting or after notice and opportunity for hearing. Applications shall contain information in sufficient detail to afford a full understanding of the proposed use, including satisfactory evidence that the applicant possesses necessary water rights pursuant to applicable State law, or a showing of cause why such evidence cannot concurrently be submitted, and a statement as to the relationship of the proposed use to any State or municipal plans or orders which may have been adopted with respect to the use of such waters.

**Article 11.** The Licensee shall, for the conservation and development of fish and wildlife resources, construct, maintain, and operate; or arrange for the construction, maintenance, and operation of such reasonable facilities, and comply with such reasonable modifications of the project structures and operation, as may be ordered by the Commission upon its own motion or upon the recommendation of the Secretary of the Interior or the fish and wildlife agency or agencies of any State in which the project or a part thereof is located, after notice and opportunity for hearing.

**Article 12.** Whenever the United States shall desire, in connection with the project, to construct fish and wildlife facilities or to improve the existing fish and wildlife facilities at its own expense, the Licensee shall

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permit the United States or its designated agency to use, free of cost, such of the Licensee's lands and interests in lands, reservoirs, waterways and project works as may be reasonably required to complete such facilities or such improvements thereof. In addition, after notice and opportunity for hearing, the Licensee shall modify the project operation as may be reasonably prescribed by the Commission in order to permit the maintenance and operation of the fish and wildlife facilities constructed or improved by the United States under the provisions of this article. This article shall not be interpreted to place any obligation on the United States to construct or improve fish and wildlife facilities or to relieve the Licensee of any obligation under this license.

Article 13. So far as is consistent with proper operation of the project, the Licensee shall allow the public free access, to a reasonable extent, to project waters and adjacent project lands owned by the Licensee for the purpose of full public utilization of such lands and waters for navigation and for outdoor recreational purposes, including fishing and hunting: Provided, That the Licensee may reserve from public access such portions of the project waters, adjacent lands, and project facilities as may be necessary for the protection of life, health, and property.

Article 14. In the construction, maintenance, or operation of the project, the Licensee shall be responsible for, and shall take reasonable measures to prevent, soil erosion on lands adjacent to streams or other waters, stream sedimentation, and any form of water or air pollution. The Commission, upon request or upon its own motion, may order the Licensee to take such measures as the Commission finds to be necessary for these purposes, after notice and opportunity for hearing.

Article 15. The Licensee shall consult with the appropriate State and Federal agencies and, within one year of the date of issuance of this license, shall submit for Commission approval a plan for clearing the reservoir area. Further, the Licensee shall clear and keep clear to an adequate width lands along open conduits and shall dispose of all temporary structures, unused timber, brush, refuse, or other material unnecessary for the purposes of the project which results from the clearing of lands or from the maintenance or alteration of the project works. In addition,

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all trees along the periphery of project reservoirs which may die during operations of the project shall be removed. Upon approval of the clearing plan all clearing of the lands and disposal of the unnecessary material shall be done with due diligence and to the satisfaction of the authorized representative of the Commission and in accordance with appropriate Federal, State, and local statutes and regulations.

Article 16. If the Licensee shall cause or suffer essential project property to be removed or destroyed or to become unfit for use, without adequate replacement, or shall abandon or discontinue good faith operation of the project or refuse or neglect to comply with the terms of the license and the lawful orders of the Commission mailed to the record address of the Licensee or its agent, the Commission will deem it to be the intent of the Licensee to surrender the license. The Commission, after notice and opportunity for hearing, may require the Licensee to remove any or all structures, equipment and power lines within the project boundary and to take any such other action necessary to restore the project waters, lands, and facilities remaining within the project boundary to a condition satisfactory to the United States agency having jurisdiction over its lands or the Commission's authorized representative, as appropriate, or to provide for the continued operation and maintenance of nonpower facilities and fulfill such other obligations under the license as the Commission may prescribe. In addition, the Commission in its discretion, after notice and opportunity for hearing, may also agree to the surrender of the license when the Commission, for the reasons recited herein, deems it to be the intent of the Licensee to surrender the license.

Article 17. The right of the Licensee and of its successors and assigns to use or occupy waters over which the United States has jurisdiction, or lands of the United States under the license, for the purpose of maintaining the project works or otherwise, shall absolutely cease at the end of the license period, unless the Licensee has obtained a new license pursuant to the then existing laws and regulations, or an annual license under the terms and conditions of this license.

**Article 18. The terms and conditions expressly set forth in the license shall not be construed as impairing any terms and conditions of the Federal Power Act which are not expressly set forth herein.**

Document Content(s)

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UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

29 FERC 162, 432

Arthur E. Cohen )

Project No. 3309-002

**COPY**

ORDER AMENDING LICENSE

( Issued December 31, 1984 )

Arthur E. Cohen (Licensee) filed on March 9, 1984, and amended on July 30, 1984, an application for amendment of the license for the Nash Mill Project No. 3309, under Part I of the Federal Power Act (Act). <sup>1/</sup> The project is located on the Ashuelot River, in Cheshire County, New Hampshire. The Licensee proposes to amend the license to increase the project's installed capacity from 90 kW to 200 kW.

Notice of the application has been published and comments have been received from interested Federal, State, and local agencies. No motions to intervene were received and none of the agencies objected to the amendment of the license. The significant concerns of the commenting agencies are discussed below.

Safety and Adequacy

Nash Mill Dam was licensed for hydroelectric power development on December 30, 1982. Subsequently, new studies showed that an increase in capacity was economically feasible. The major changes proposed in this amendment include an increase in installed capacity, an increase in penstock diameter, and relocation of the powerhouse and penstock from the southern bank to the northern river bank. The installed capacity of the project would be increased from 90 kW to 200 kW.

The Commission's New York Regional Office inspected the project and classified the dam as low hazard. The proposed modifications to the project will not affect the safety of the existing dam.

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<sup>1/</sup> Authority to act on this matter is delegated to the Director, Office of Hydropower Licensing, under §375.314 of the Commission's regulations, 49 Fed. Reg. 29,369 (1984) (Errata issued July 27, 1984), (to be codified at 18 C.F.R. §375.314). This order may be appealed to the Commission by any party within 30 days of its issuance pursuant to Rule 1902, 18 C.F.R. §385.1902 (1983). Filing an appeal and final Commission action on that appeal are prerequisites for filing an application for rehearing as provided in Section 313(a) of the Act. Filing an appeal does not operate as a stay of the effective date of this order or of any other date specified in this order, except as specifically directed by the Commission.

### Environmental Considerations

The proposed amended project will have no direct or indirect adverse effects on recreation, other land and water uses, and socio-economic values. Substantive issues have been raised concerning the following resource topics.

#### Instream Flows

Operation of the proposed amended project will result in the reduction of flows in about 1,500 feet of the Ashuelot River. Article 23 of the project license currently requires a continuous minimum flow over the dam of 5 cubic feet per second (cfs) to protect aquatic resources in the bypassed reach. The Department of the Interior (Interior) recommended that an article be added to the license requiring a minimum instantaneous discharge from the project of 23 cfs, or inflow to the project, whichever is less.

The Applicant does not object to Interior's recommendations.

A continuous minimum flow of 23 cfs from the project, with 5 cfs continually spilled over the dam, will protect the aquatic resources of the Ashuelot River. Thus, Article 23 of the license is revised herein to include these minimum flows.

#### Other Environmental Concerns

Water quality certification, under the Federal Water Pollution Control Act, was granted for the proposed amended project by the State of New Hampshire Water Supply and Pollution Control Commission on December 14, 1983.

The proposed project will not affect any Federally listed threatened or endangered species or critical habitat, or any sites listed on the National Register of Historic Places or eligible for listing on the National Register of Historic Places. Article 24 of the existing license will protect any cultural resources that may be discovered during the proposed construction or during any future construction at the project.

#### Finding of No Significant Impact

Construction of the proposed penstock and powerhouse will result in the disturbance of vegetation and wildlife in a 1,500-foot-long corridor along the right bank of the Ashuelot River. This disturbance will cause temporary and minor increases in turbidity in the Ashuelot River that will terminate upon completion of construction. Project operation will reduce river flows in a 1,500-foot-long reach of the river, resulting in a long-term reduction in aquatic habitat. The Applicant's proposed minimum flow of 5 cfs through the bypassed reach and the minimum flow of 23 cfs from the project will, however, protect the fishery resources of the Ashuelot River.

On the basis of the record and Staff's independent environmental analysis, issuance of an amendment of license for the project, as conditioned herein, will not constitute a major Federal action significantly affecting the quality of the human environment.

#### Economic Feasibility

The installed capacity of the project would be increased from 90 kW to 200 kW. <sup>2/</sup> The proposed project would be economically feasible based on project power being sold at avoided cost rates for the State of New Hampshire, adjusted for escalation.

#### Other Aspects of Comprehensive Development

The proposed modifications make good use of the flow and fall of the Ashuelot River, would not be in conflict with any planned or potential development and would be best adapted to the comprehensive development of the Connecticut River Basin upon compliance with the terms and conditions of the amended license.

#### It is ordered that:

(A) The license for the Nash Mill Project No. 3309 is amended by this order, effective the first day of the month in which this order is issued.

(B) The description of the project contained in ordering paragraph (b)(2) of the license is amended to read:

(2) Project works consisting of: (a) a rehabilitated stone and masonry dam, consisting of a 100-foot-long dam section nine feet high and two spillway sections, a 40-foot-long ungated spillway seven feet high and a 21-foot-long gated spillway seven feet high; (b) a reservoir with an area of two acres and a storage capacity of 10 acre-feet and a normal water surface elevation of 69 feet m.s.l.; (c) a penstock 1,500 feet long and 4.0 feet in diameter placed on the northern bank; (d) an 11- by 14-foot powerhouse containing two generating units with a total installed capacity of 200 kW operating under a head of 43 feet; (e) a tailrace 600 feet long; (f) a 1,000-foot-long, 12.5-kV transmission line; and (g) appurtenant facilities.

(C) The following Exhibits A and F are approved and made a part of this license.

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<sup>2/</sup> The proposed project generating 850,000 kWh annually would utilize a renewable resource that will save the equivalent of approximately 1395 barrels of oil or 393 tons of coal per year.

Exhibit A - Page 9, Section A.4. entitled Powerhouse  
Page 11, Table A-1. "Project Statistics"

<u>Exhibit F</u> <u>Drawing No.</u>	<u>FERC No.</u>	<u>Description</u>	<u>Superseding</u> <u>FERC No.</u>
Revised F-1	3309-3	Nash Mill Dam Top	---
Revised F-2	3309-4	Nash Mill Dam Spillway	---
F-3	3309-5	Revised Location of Penstock and Powerhouse	3309-1
F-4	3309-6	Profile of Penstock and Powerhouse	---

(D) Article 21 is revised to read:

Article 21. The Licensee shall within 90 days of the completion of construction file in accordance with the Commission's Rules and Regulations revised Exhibits A, F, and G showing the project "as-built."

(E) Article 22 is revised to read:

Article 22. The Licensee shall pay the United States the following annual charge, effective December 1, 1984:

(a) For the purpose of reimbursing the United States for the cost of administration of Part I of the Act, a reasonable amount as determined in accordance with the provisions of the Commission's regulations in effect from time to time. The authorized installed capacity for that purpose is 266 horsepower.

(F) Article 23 is revised to read:

Article 23. Licensee shall discharge from the Nash Mill Project a continuous minimum flow of 23 cubic feet per second (cfs), as measured immediately downstream of the project powerhouse and to include a continuous flow of 5 cfs over the project dam, or inflow to the reservoir, whichever is less, for the protection and enhancement of fish and wildlife resources in the Ashuelot River. This flow may be temporarily modified if required by operating emergencies beyond the control of the Licensee, and for short periods upon mutual agreement between the Licensee and the New Hampshire Fish and Game Department.

(G) The license is also subject to the following additional article:

Project No. 3309-002

IN TESTIMONY of his acknowledgment of acceptance of all of the terms and conditions of this order, Arthur E. Cohen, this 8<sup>th</sup> day of

January, 1985 signed this order.

  
Arthur E. Cohen

(Executed in quadruplicate)

January 8, 1985

Quentin A. Edson, Director  
Office of Hydropower Licensing  
Federal Energy Regulatory Commission  
Washington, DC 20426

Re: Project No. 3309-002  
Arthur E. Cohen

Dear Mr. Edson:

Under letter dated December 31, 1984 you forwarded to my client, Arthur E. Cohen, four copies of an order designated Amendment No. 1, Instrument No. 2, relative to the above project number. The acknowledgment page on the Amendment was set up for a corporate signature. However, Arthur E. Cohen holds this license as an individual and is operating the power plant as a general partner of a limited partnership. I therefore prepared a new acknowledgment page for Arthur's individual signature. I appended that acknowledgment page to the copies of the Amendment and I had Arthur sign the acknowledgment page.

I am returning to you with this letter three copies of the Amendment, each with the revised acknowledgment page signed by Arthur E. Cohen. If I have done this incorrectly or if you have any questions please do not hesitate to give me a call.

Thank you very much for your help.

Very truly yours,

Joseph W. Worthen, II

JWW:cas

Enc.

cc: Arthur E. Cohen

FEDERAL ENERGY REGULATORY COMMISSION  
WASHINGTON, D.C. 20426

Project No. 3309-002

12/31/84

Arthur E. Cohen  
44 Hanover Street  
Keene, New Hampshire 03431

Gentlemen:

Enclosed are four copies of the order designated Amendment No. 1  
Instrument No. 2 , in the above entitled matter.

Please execute the acknowledgement of acceptance attached to  
the order and return three copies of the order, the acceptance  
and resolution of your Board of Directors authorizing such  
acceptance.



Quentin A. Edson  
Director, Office of  
Hydropower Licensing

OD-ORDER, 21 FERC ¶62,553, Arthur E. Cohen, Project No. 3309-001, (Dec. 30, 1982)

Arthur E. Cohen, Project No. 3309-001

[63,841]

[¶62,553]

Arthur E. Cohen, Project No. 3309-001

Order Issuing License (Minor)

(Issued December 30, 1982)

Lawrence R. Anderson, Director, Office of Electric Power Regulation.

Arthur E. Cohen has filed an application for a license under Part I of the Federal Power Act (Act) to construct, operate, and maintain the Nash Mill Dam Project No. 3309. <sup>1</sup> The project would be located on the Ashuelot River in the town of Marlow in Cheshire County, New Hampshire. The project would affect the interests of interstate commerce.

Notice of the application has been published and comments have been received from interested Federal, State, and local agencies. No protests have been received and none of the agencies objected to issuance of the license.

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The proposed project would consist of a breached stone and masonry dam to be rehabilitated, a small reservoir, a 1,500-foot-long penstock, a small powerhouse containing one 90-kW turbine/generator and a 1,000-foot-long transmission line.

A more detailed project description is contained in ordering paragraph (B) below.

#### *Safety and Adequacy*

All project structures, machinery, and appurtenant facilities were inspected by the Commission's staff and found to be adequately maintained. The project is classified as low hazard. Failure of the powerhouse would not create a hazard to downstream human life or cause significant property damage.

It is concluded that the project under the conditions of this license will be safe and adequate.

#### *Environmental Considerations*

The New Hampshire Water Supply and Pollution Control Commission issued a water quality certification, pursuant to Section 401 of the Federal Water Pollution Control Act Amendments of 1972 (33 U.S.C. 1341), for the Nash Mill Dam Project on May 5, 1982.

The proposed project would result in minor, short-term adverse environmental impacts due to equipment installation and start up activities, which would include increases in noise levels, exhaust emissions and turbidity. Repair of the breached dam and installation of the penstock and powerhouse would increase erosion and disturb vegetation and wildlife. Project operation would divert a large portion of the streamflow through the powerhouse, but the minimum flow to be released from the spillway, as provided by Article 23, would be adequate to maintain aquatic resources in the diverted reach of stream. No adverse long-term environmental impacts would result. Construction and operation of the project would have no

effect on federally-listed threatened or endangered species.

In accordance with standard Commission practice, <sup>2</sup> Article 24 of this license requires cultural resources protection measures in the event of any future construction or development at the project.

On the basis of the record, including agency comments and staff's independent analysis, it is found that issuance of a license for this project, as conditioned, is not a major Federal action significantly affecting the quality of the human environment.

#### *Comprehensive Development*

The proposed project, with its average annual generation of 474,000 kWh, will utilize a renewable resource that will save the equivalent of approximately 824 barrels of oil or 220 tons of coal per year.

It is concluded that subject to the terms and conditions of this license, Project No. 3309 is best adapted to a comprehensive plan for development of the Ashuelot River Basin for beneficial public uses.

#### *License Term*

This license is issued for a term of 40 years. The proposed construction of this project is similar to the relicensing of a project for which a moderate amount of redevelopment or new construction is proposed. <sup>3</sup>

*It is ordered that:*

(A) This license is issued to Arthur E. Cohen (Licensee), of Keene, New Hampshire, under Part I of the Federal Power Act (Act), for a period of 40 years, effective the first day of the month in which this order is issued, for the construction, operation and maintenance of the Nash Mill Dam Project No. 3309, located on the Ashuelot River in the town of Marlow in Cheshire County, New Hampshire, and affecting the interests of interstate or foreign commerce. This license is subject to the terms and conditions of the Act, which is incorporated by reference as part of this license, and subject to the regulations the Commission issues under the provisions of the Act.

(B) The Nash Mill Dam Project No. 3309 consists of:

(1) All lands, to the extent of the Licensee's interests in those lands, constituting the project area and enclosed by the project boundary. The project area and boundary are shown and described by certain exhibits that form part of the application for license and that are designated and described as:

Exhibit FERC No. 3309-            Showing  
G    2 Development Plan

(2) Project works consisting of: (a) a rehabilitated stone and masonry dam, consisting of a 100-foot-long dam section nine feet high and two spillway sections, a 40-foot-long ungated spillway seven feet high and a 21-foot-long gated spillway seven feet high; (b) a reservoir with an area of two acres and a storage of 10 acre-feet; (c) a penstock 1,500 feet long and 2.0 or 2.5 feet in diameter placed

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on the southern bank; (d) an 11 by 14-foot powerhouse containing one cross-flow 90-kW turbine/generator unit operating under a head of 43 feet; (e) a tailrace 600 feet long; (f) a 1,000-foot-long, 12.5-kV

transmission line; and (g) appurtenant facilities.

The location, nature, and character of these project works are generally shown and described by the exhibits cited above and more specifically shown and described by certain other exhibits that also form a part of the application for license and that are designated and described as:

*Exhibit A* - Part (1), (I) and (II) of the application filed May 3, 1982,

Exhibit FERC No. 3309-                      Showing  
F    1 Principal Project Works

(3) All of the structures, fixtures, equipment, or facilities used or useful in the operation or maintenance of the project and located within the project boundary, all portable property that may be employed in connection with the project, located within or outside the project boundary, as approved by the Commission, and all riparian or other rights that are necessary or appropriate in the operation or maintenance of the project.

(C) Exhibits F and G, designated in Ordering Paragraph (B) above, are approved and made a part of the license, only to the extent that they show the general location, description, nature, *etc.*, of the project works.

(D) Pursuant to Section 10(i) of the Act, it is in the public interest to waive the following Sections of Part I of the Act, and they are excluded from the license:

Section 4(b), except the second sentence; 6, insofar as it relates to public notice and to the acceptance and expression in the license of terms and conditions of the Act that are waived here; 10(c), insofar as it relates to depreciation reserves; 10(d); 10(f); 14, except insofar as the power of condemnation is reserved; 15; 16; 20; and 22.

(E) This license is also subject to Articles 1 through 19 set forth in Form L-15 (revised October, 1975), entitled "Terms and Conditions of License for Unconstructed Minor Project Affecting the Interests of Interstate or Foreign Commerce," attached to (reported at 54 FPC 1883) and made a part of this license. The license is also subject to the following additional articles:

*Article 19.* The Licensee shall commence construction of the proposed project within one year of the date of issuance of the license and shall complete construction within two years from the start of construction.

*Article 20.* The Licensee shall file with the Commission's Regional Engineer and the Director, Office of Electric Power Regulation, one copy each of the contract drawings and specifications for pertinent features of the project, such as water retention structures, at least 60 days prior to the start of construction. The Director, Office of Electric Power Regulation, may require changes in the plans and specifications to assure a safe and adequate project.

*Article 21.* The Licensee shall within 90 days of the completion of construction file in accordance with Commission's Rules and Regulations revised Exhibit F drawings showing the project "as-built."

*Article 22.* The Licensee shall pay the United States the following annual charges, effective the first day of the month in which this license is issued:

(a) For the purpose of reimbursing the United States for the cost of administration of part I of the Act, a reasonable amount as determined in accordance with the provisions of the Commission's regulations in

effect from time to time. The authorized installed capacity for that purpose is 120 horsepower.

*Article 23.* The Licensee shall discharge from the Nash Mill Project spillway, a continuous minimum flow of 5 cubic feet per second or the inflow to the reservoir, whichever is less, for the protection and enhancement of aquatic resources in the Ashuelot River. In addition, during periods of non-generation all river flow shall be released over the spillway. These flows may be temporarily modified if required by operating emergencies beyond the control of the Licensee, and for short periods for fishery management purposes upon mutual agreement between the Licensee and the New Hampshire Fish and Game Department.

*Article 24.* Prior to the commencement of any construction or development of any project works or other facilities at the project, the Licensee shall consult and cooperate with the appropriate State Historic Preservation Officer (SHPO) to determine the need for, and extent of, any archeological or historic resource surveys and any mitigative measures that may be necessary. The Licensee shall provide funds in a reasonable amount for any such activity. If any previously unrecorded archeological or historical sites are discovered during the course of construction, construction activity in the vicinity shall be halted, a qualified archeologist shall be consulted to determine the significance of the sites, and the Licensee shall consult with the SHPO to develop a mitigation plan for the protection of significant archeological or historic resources. If the Licensee and the SHPO cannot agree on the amount of money to

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be expended on archeological or historic work related to the project, the Commission reserves the right to require the Licensee to conduct, at its own expense, any such work found necessary.

*Article 25.* (a) In accordance with the provisions of this article, the Licensee shall have the authority to grant permission for certain types of use and occupancy of project lands and waters and to convey certain interests in project lands and waters for certain other types of use and occupancy, without prior Commission approval. The Licensee may exercise the authority only if the proposed use and occupancy is consistent with the purposes of protecting and enhancing the scenic, recreational, and other environmental values of the project. For those purposes, the Licensee shall also have continuing responsibility to supervise and control the uses and occupancies for which it grants permission, and to monitor the use of, and to ensure compliance with the covenants of the instrument of conveyance for any interests that it has conveyed under this article. If a permitted use and occupancy violates any condition of this article or any other condition imposed by the Licensee for protection and enhancement of the project's scenic, recreational, or other environmental values, or if a covenant of a conveyance made under the authority of this article is violated, the Licensee shall take any lawful action necessary to correct the violation. For a permitted use or occupancy that action includes, if necessary, cancelling the permission to use and occupy the project lands and waters and requiring the removal of any non-complying structures and facilities.

(b) The types of use and occupancy of project lands and waters for which the Licensee may grant permission without prior Commission approval are: (1) landscape plantings; (2) non-commercial piers, landings, boat docks, or similar structures and facilities that can accommodate no more than 10 watercraft at a time where said facility is intended to serve single-family type dwellings; and (3) embankments, bulkheads, retaining walls, or similar structures for erosion control to protect the existing shoreline. To the extent feasible and desirable to protect and enhance the project's scenic, recreational, and other environmental values, the Licensee shall require multiple use and occupancy of facilities for access to project lands or waters. The Licensee shall also ensure, to the satisfaction of the Commission's authorized representative, that the uses and occupancies for which it grants permission are maintained in good repair and comply with applicable State and local health and safety requirements. Before granting permission for construction of bulkheads or retaining walls, the Licensee shall: (1) inspect the site of the proposed construction, (2) consider whether the planting of vegetation or the use of riprap would be adequate to control erosion at the site, and (3) determine that the proposed construction is needed and would not change the basic contour of the reservoir shoreline. To implement this paragraph (b), the Licensee may, among other things, establish a program for issuing permits for the specified types of use and occupancy of project

lands and waters, which may be subject to the payment of a reasonable fee to cover the Licensee's costs of administering the permit program. The Commission reserves the right to require the Licensee to file a description of its standards, guidelines, and procedures for implementing this paragraph (b) and to require modification of those standards, guidelines, or procedures.

(c) The Licensee may convey easements or rights-of-way across, or leases of, project lands for: (1) replacement, expansion, realignment, or maintenance of bridges and roads for which all necessary State and Federal approvals have been obtained; (2) storm drains and water mains; (3) sewers that do not discharge into project waters; (4) minor access roads; (5) telephone, gas, and electric utility distribution lines; (6) non-project overhead electric transmission lines that do not require erection of support structures within the project boundary; (7) submarine, overhead, or underground major telephone distribution cables or major electric distribution lines (69-kV or less); and (8) water intake or pumping facilities that do not extract more than one million gallons per day from a project reservoir. No later than January 31 of each year, the Licensee shall file three copies of a report briefly describing for each conveyance made under this paragraph (c) during the prior calendar year, the type of interest conveyed, the location of the lands subject to the conveyance, and the nature of the use for which the interest was conveyed.

(d) The Licensee may convey fee titles to, easements or rights-of-way across, or leases of project lands for: (1) construction of new bridges or roads for which all necessary State and Federal approvals have been obtained; (2) sewer or effluent lines that discharge into project waters for which all necessary Federal and State water quality certificates or permits have been obtained; (3) other pipelines that cross project lands or waters but do not discharge into project waters; (4) non-project overhead electric transmission lines that require erection of support structures within the project boundary for which all necessary Federal and State approvals have been obtained; (5) private or public marinas that

[63,845]

can accommodate no more than 10 watercraft at a time and are located at least one-half mile from any other private or public marina; (6) recreational development consistent with an approved Exhibit R or approved report on recreational resources of an Exhibit E; and (7) other uses, if: (i) the amount of land conveyed for a particular use is five acres or less; (ii) all of the land conveyed is located at least 75 feet, measured horizontally, from the edge of the project reservoir at normal maximum surface elevation; and (iii) no more than 50 total acres of project lands for each project development are conveyed under this clause (d)(7) in any calendar year. At least 45 days before conveying any interest in project lands under this paragraph (d), the Licensee must file a letter to the Director, Office of Electric Power Regulation, stating its intent to convey the interest and briefly describing the type of interest and location of the lands to be conveyed (a marked Exhibit G or K map may be used), the nature of the proposed use, the identity of any Federal or State agency official consulted, and any Federal or State approvals required for the proposed use. Unless the Director, within 45 days from the filing date, requires the Licensee to file an application for prior approval, the Licensee may convey the intended interest at the end of that period.

(e) The following additional conditions apply to any intended conveyance under paragraph (c) or (d) of this article:

(1) Before conveying the interest, the Licensee shall consult with Federal and State fish and wildlife or recreation agencies, as appropriate, and the State Historic Preservation Officer.

(2) Before conveying the interest, the Licensee shall determine that the proposed use of the lands to be conveyed is not inconsistent with any approved Exhibit R or approved report on recreational resources of an Exhibit E; or, if the project does not have an approved Exhibit R or approved report on recreational resources, that the lands to be conveyed do not have recreational value.

(3) The instrument of conveyance must include covenants running with the land adequate to ensure that: (i) the use of the lands conveyed shall not endanger health, create a nuisance, or otherwise be incompatible with overall project recreational use; and (ii) the grantee shall take all reasonable precautions to ensure that

the construction, operation, and maintenance of structures or facilities on the conveyed lands will occur in a manner that will protect the scenic, recreational, and environmental values of the project.

(4) The Commission reserves the right to require the Licensee to take reasonable remedial action to correct any violation of the terms and conditions of this article for the protection and enhancement of the project's scenic, recreational, and other environmental values.

(f) The conveyance of an interest in project lands under this article does not in itself change the project boundaries. The project boundaries may be changed to exclude land conveyed under this article only upon approval of revised Exhibit G or K drawings (project boundary maps) reflecting exclusion of that land. Lands conveyed under this article will be excluded from the project only upon a determination that the lands are not necessary for project purposes, such as operation and maintenance, flowage, recreation, public access, protection of environmental resources, and shoreline control, including shoreline aesthetic values. Absent extraordinary circumstances, proposals to exclude lands conveyed under this article from the project shall be consolidated for consideration when revised Exhibit G or K drawings would be filed for approval for other purposes.

*Article 26.* The Licensee shall continue to consult and cooperate with the U.S. Fish and Wildlife Service, the U.S. Heritage Conservation and Recreation Service of the Department of the Interior, the New Hampshire Fish and Game Department and other appropriate agencies for the protection and development of the environmental resources and values of the project area. The Commission reserves the right to require changes to the project works or operations that may be necessary to protect and enhance those resources and values.

(F) The Licensee's failure to file a petition appealing this order to the Commission shall constitute acceptance of this license. In acknowledgment of acceptance of this order and its terms and conditions, it shall be signed by the Licensee and returned to the Commission within 60 days from the date this order is issued.

-- Footnotes --

<sup>1</sup> Authority to act on this matter is delegated to the Director, Office of Electric Power Regulation, under §375.308 of the Commission's regulations, 18 C.F.R. §375.308 (1982), *FERC Statutes and Regulations* ¶30,238. This order may be appealed to the Commission by any party within 30 days of its issuance pursuant to Rule 1902, 18 C.F.R. §385.1902, *FERC Statutes and Regulations* ¶29,052, 47 Fed. Reg. 19014 (1982). Filing an appeal and final Commission action on that appeal are prerequisites for filing an application for rehearing as provided in

[63,846]

Section 313(a) of the Act. Filing an appeal does not operate as a stay of the effective date of this order or of any other date specified in this order, except as specifically directed by the Commission.

<sup>2</sup> See *S. D. Warren*, Project No. 2897, Order Denying Rehearing (Issued February 19, 1980 [10 FERC ¶61,153]).

<sup>3</sup> See *The Montana Power Company, Mystic Lake Project No. 2301*, Order Issuing New License (Major)(issued October 5, 1976 [56 FPC 2008]).

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Arthur E. Cohen                      Project No. 3309-005  
New Hampshire

ORDER AMENDING LICENSE  
June 2, 1989

Arthur E. Cohen (licensee) filed on June 18, 1987 and supplemented on February 3 and 18, and November 28, 1988, an application for amendment of the license for the Nash Mill Project. The amendment was requested to allow the installation of 36-inch flashboards instead of the 24-inch flashboards authorized in the license.

The licensee provided evidence of concurrence on the proposal from the New Hampshire Fish and Game Department, the U.S. Fish and Wildlife Service, and the U.S. Army Corps of Engineers; evidence of rights to property affected by raising the pond elevation; and identified that the total installed capacity of the project would not be altered.

Increase in the flashboard height should not result in safety problems. However, prior to the installation of the higher flashboards, the licensee should file a design report showing analysis under all loading conditions, demonstrating that the dam meets the requirements of the Commission's engineering guidelines. The increased flashboard height would not result in any additional adverse impacts than those identified during the licensing proceeding and in the environmental assessment for the project.

The Director orders:

(A) The licensee's request to increase the height of the flashboards from 24 to 36 inches, filed on June 18, 1987, is approved.

(B) Prior to the installation of the approved flashboards, the licensee shall file with the Commission a design report showing analysis under all loading conditions, demonstrating that

the dam meets the requirements of the Commission's engineering guidelines.

The higher flashboards cannot be installed until notified by the Commission. Based on the filed report, the Commission reserves the right to require modifications to the project structures or operations to ensure public safety and the protection of public facilities.

-2-

(C) This order is issued under authority delegated to the Director, and is final unless appealed to the Commission under Rule 1902 within 30 days from the date of this order.

J. Mark Robinson  
Director, Division of Project  
Compliance and Administration

OHL/DPCA:WARNER, J.:nm/jss:05/17/89:Product Category:K04  
cc: DPCA

UNITED STATES OF AMERICA 120 FERC ¶ 62,046  
FEDERAL ENERGY REGULATORY COMMISSION

Arthur E. Cohen  
Marlow Hydro, LLC

Project No. 3309-019

ORDER APPROVING TRANSFER OF LICENSE

(Issued July 18, 2007)

By application filed April 30, 2007, Arthur E. Cohen (transferor) and Marlow Hydro, LLC (transferee) request approval to transfer the license<sup>1</sup> for the Nash Mill Dam Project No. 3309 from transferor to transferee. The project is located on the Ashuelot River, in Cheshire County, New Hampshire.

Public notice of the transfer application was issued. No protests, comments, or motions to intervene were filed.

The transferee has agreed to accept and be bound by all of the terms and conditions of the license as though it were the original licensee.

The transferor has complied with the terms and conditions of the license and agrees to pay annual charges that accrue under the license to the date of transfer. The transferee will be required to comply with the requirements of the license as though it were the original licensee. Transfer of the license for this project is consistent with the Commission's regulations and is in the public interest.

The Director orders:

(A) The transfer of the license for the Nash Mill Dam Project No. 3309 from Arthur E. Cohen to Marlow Hydro, LLC is approved.

(B) Arthur E. Cohen shall pay all annual charges that accrue up to the effective date of the transfer.

(C) Approval of the transfer is contingent upon: (1) transfer of the title of the property under license and delivery of all license instruments to Marlow Hydro, LLC, which shall be subject to the terms and conditions of the license as though it were the original licensee; (2) Marlow Hydro, LLC acknowledging acceptance of this order and its terms and conditions by signing and returning the attached acceptance sheet. Within 60 days from the date of this

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<sup>1</sup> Arthur E. Cohen, 21 FERC ¶ 62, 553 (1982).

order, Marlow Hydro, LLC shall submit certified copies of all instruments of conveyance and the signed acceptance sheet.

(D) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to 18 CFR §385.713.

William Guey-Lee  
Chief, Engineering and Jurisdiction Branch  
Division of Hydropower Administration  
and Compliance

IN TESTIMONY of its acknowledgement of acceptance of all the terms and conditions of this order, Marlow Hydro, LLC, this 13TH day of AUGUST, 2007, has caused its ~~LLC~~ name to be signed hereto by ANTHONY B. ROSARIO, its ~~President,~~ MANAGER and its corporate seal to be affixed hereto and attested by \_\_\_\_\_, its Secretary, pursuant to a resolution of its ~~Board of Directors~~ MEMBERS/MANAGERS duly adopted on the 13TH day of AUGUST, 2007, a certified copy of the record of which is attached hereto.

MARLOW HYDRO, LLC

By Anthony B. Rosario  
ANTHONY B. ROSARIO  
MEMBER AND MANAGER

~~Attest:~~

\_\_\_\_\_  
~~Secretary~~  
 (Execute in quadruple)

## **Attachment B**

A copy of the Interconnection Agreement between the applicant and the distribution utility, the page(s) that identifies the nameplate capacity of the facility and the signature pages are attached

- Operating Agreement For Purposes of Wheeling and Power Sales



**Public Service  
of New Hampshire**

November 3, 2004

Arthur E. Cohen, MD  
Marlow Power  
44 Hanover Street  
Keene, NH 03431

Subject: Old Nash Dam (SESD #028)  
Operating Agreement for Purposes of Wheeling and Power Sales

Dear Dr. Cohen:

Enclosed is your executed original of the subject Agreement. By copy of this letter, we are asking our Law Department to file our original and are notifying the New Hampshire Public Utilities Commission that this Agreement has been executed.

Following completion of the existing 20 year contract at midnight on December 18, 2004 we will begin paying the ISO hourly clearing price for the NH Load Zone for all generation from your project. We will apply the line loss adjustment factor of 1.0793 to all generation produced and beginning with the January 2005 invoice, the generation and line loss savings will show as separate line items.

Sincerely,

S. B. Wicker, Jr.  
Manager  
Supplemental Energy Sources

CNV/dem

Enclosure

cc: D. A. Howland (NHPUC)  
G. M. Eaton (w/original)  
S. R. Hall

bcc: P. A. Magoun  
T. J. Brown  
D. M. Mullen  
R. E. Evans  
S. K. Bernier  
J. M. Coolbroth  
L. G. Lajoie  
SESD File #028

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www.p

The Northeast Utilities system

**OPERATING AGREEMENT  
FOR  
PURPOSES OF WHEELING AND POWER SALES**

AGREEMENT, dated December 19, 2004 by and between Marlow Power (hereinafter referred to as the "Interconnector"), and Public Service Company of New Hampshire, a New Hampshire corporation having its principal place of business in Manchester, New Hampshire (hereinafter referred to as "PSNH").

WHEREAS, Interconnector's 225 KW Old Nash Dam hydroelectric generating facility (the "Facility"), (SESD #028) located Ashuelot River in Marlow, New Hampshire, is interconnected with the electric system of PSNH in accordance with applicable New Hampshire Public Utilities Commission ("NHPUC") Orders and federal law; and

WHEREAS, Interconnector desires to, and PSNH agrees to, provide for the interconnection of the Facility with the electric system of PSNH, its successors and permitted assigns, and Interconnector may have the right to sell the electric output of the Facility to PSNH and/or to such other third party purchasers with which Interconnector may make sales arrangements; and

WHEREAS, to provide for the continued interconnection of the Facility, it is necessary that certain agreements be made to ensure the safety, reliability and integrity of PSNH's electric system and the operation of the Facility; and

WHEREAS, Interconnector and PSNH wish to provide for certain other matters pertaining to discretionary power sales from the Facility;

NOW, THEREFORE, the parties hereby agree as follows:

Article 1. Interconnection and Voltage Characteristics.

The interconnection point shall continue to be that point at which the Facility presently interconnects with the 12.47 KV electric system of PSNH. Under this Agreement, the Interconnector shall receive and pay for the services necessary for the purpose of connecting, and providing the continued connection of, the Facility with the PSNH electrical system, including Pool Transmission Facilities ("PTF") as defined by the New England Power Pool ("NEPOOL"), and

non-PTF.

Unless PSNH converts its interconnection circuit, all electric energy delivered to PSNH's system from the Facility shall be 12.47 KV, three-phase, sixty hertz.

Article 2. Metering.

The metering shall continue to be configured so as to represent the electric power output delivered to the PSNH electric system as specified in the Interconnection Report ("Report"), dated August 14, 2003 attached as Attachment A. The metering may be installed on the generation side of the transformer provided that transformer losses are subtracted from the measured generation by a suitable method. Interconnector shall be responsible for all costs associated with the metering required for sales to PSNH and/or other third parties from the Facility.

Interconnector has installed and will own, and maintain all metering equipment as referenced in Article 5, to measure the physical flow of electrical energy from the Facility into the PSNH electric system. If at any time the meter is found to be in error by more than two percent fast or slow (+ or - 2%), Interconnector shall cause such meter to be corrected and the meter readings for the period of inaccuracy shall be adjusted to correct such inaccuracy so far as the same can be reasonably ascertained, but no adjustment prior to the beginning of the preceding month shall be made except by agreement of the parties. All tests and calibrations shall be made in accordance with Section V-14 of the NHPUC Rules and Regulations prescribing Standards for Electric Utilities in effect as of September 8, 1972, as amended, and any applicable Rules and Regulations of ISO-New England, Inc. ("ISO"). Interconnector is responsible for assuring that meter tests are performed as required at Interconnector's expense. PSNH's local Division Meter Engineer should be contacted in advance to arrange for said meter testing.

Interconnector shall cause the meter to be tested at any time upon request of either party and, at PSNH's option, in the presence of a representative of PSNH. If such equipment proves accurate within two percent fast or slow (+ or - 2%), the expense of the test shall be borne by the requesting party.

PSNH reserves the right to secure or seal the metering installation, but upon the written request of Interconnector will provide such information regarding, and access to, the metering installation as Interconnector requests. Interconnector is required to record electrical energy

physically delivered to the PSNH electric system on an hour-by-hour basis, and to electronically make available to PSNH, Interconnector's generation in kilowatt-hours for each hour during the prior 24 hours.

To the extent necessary for Interconnector to receive credit and compensation for power sales to entities other than PSNH of electric energy and/or other power products generated at the Facility, PSNH shall cooperate with and assist Interconnector to ensure that the metering installations applicable to the Facility meet the required specifications and operational characteristics as necessary to accomplish such sales.

Article 3. Wheeling Arrangements.

If requested by Interconnector in connection with any sales of energy or other electric products to entities other than PSNH, PSNH (or other Northeast Utilities system companies) shall transmit the electric output of the Facility, or such portion(s) thereof as are identified by Interconnector, to an appropriate PTF point or to such purchasers (as applicable to the transaction) under the terms and conditions and rates set forth in the NORTHEAST UTILITIES SYSTEM COMPANIES Open Access Transmission Service Tariff No. 9 (the "NU OATT") filed with the Federal Energy Regulatory Commission ("FERC"), or its successor tariff, as those tariffs may be amended or supplemented from time to time hereafter. The wheeling of generation shall also be subject to any regulatory approved and applicable local transmission and distribution wheeling tariffs.

Article 4. Power Sales, Billing and Payment.

(a) PURPA Sales

If the Facility meets the definition of a Qualifying Facility ("QF") as defined by the Public Utility Regulatory Policies Act (as the same may be amended from time to time) ("PURPA"), Interconnector may make sales to PSNH and PSNH shall purchase all or a portion of the electric energy and other electrical products generated at the Facility pursuant to the requirements of the PURPA, the New Hampshire Limited Electrical Energy Producers Act ("LEEPA"), and ISO.

Pursuant to PURPA, and as approved by the NHPUC in Docket No. DE 99-099, in accordance with the Settlement Agreement between PSNH and the State of New Hampshire, the

rates paid to Interconnector for short-term, as available power sales to PSNH shall be the applicable market clearing price for such energy and/or other electrical product(s) or such replacement pricing methods as determined by the ISO or any successor entity for each period during which Interconnector has delivered such energy and/or other electrical power products for sale to PSNH. The above short-term prices shall be adjusted for line losses, wheeling costs, and administrative costs as they may be determined by PSNH or the NHPUC and as modified from time to time. The parties agree to abide by the ISO rules for recognition and determination of energy and capacity credit.

Facilities delivering all of their output to the PSNH grid will be assigned a Line Loss Adjustment Factor (the "LLAF"). The initial LLAF for the Facility is 1.0793. If a recalculation of the LLAF is required, PSNH shall calculate a new LLAF to represent the change in PSNH's electrical system losses attributable to the generator characteristics and physical location of the Facility. The LLAF shall be applied to that portion of the generation output from the Facility which is sold to PSNH during a billing month by multiplying the LLAF times the kilowatt output. PSNH shall not have the right to use a new or materially different methodology for conducting any such LLAF study except as ordered by the NHPUC. The LLAF may be less than one or greater than one.

Should PSNH no longer be the load holding entity for all of the retail load connected to its System, the LLAF shall be proportionally reduced to reflect the percentage of retail load supplied by PSNH. This adjustment shall become effective with the billing months of February and August based upon the percentage of retail load supplied by PSNH over the previous six (6) month period ending in December and June, respectively. The LLAF may be recalculated at the request of either party. The requesting party shall pay for the cost of performing the line loss study. Upon the completion of the updated LLAF study, the new LLAF shall be used at the start of the next billing month.

In addition, Interconnector shall have the right and option at any time to engage a third party consultant to validate and verify the methodology and results of any LLAF study performed by PSNH under this Agreement, at Interconnector's expense. If the review performed by such consultant concludes that the results of any study performed by PSNH are incorrect, then PSNH shall perform a new study, at its expense, to determine the correct LLAF. Any dispute between the

parties related to such studies shall be resolved by the NHPUC.

PSNH shall read the meter, installed in accordance with Article 2, once each month and shall promptly send Interconnector an invoice showing the billing month's net generation and amount owed for energy and other electrical products generated for any sales to PSNH hereunder. Interconnector shall then return to PSNH the approved invoice for payment. PSNH shall make payments to Interconnector electronically for the total amount due within 23 days of the meter reading date, provided that PSNH receives a timely return of the approved invoice.

(b) Bilateral and Power Exchange Sales

At all times during the term of this Agreement, Interconnector shall have the right to sell any or all of the Facility's electric power output, including electric energy, installed capacity, spinning reserves, other operating reserves and/or automatic generation control and other products, to entities other than PSNH, either through bilateral transactions or through the markets administered by the ISO. With respect to any such bilateral or market sales by Interconnector, Interconnector may request that PSNH function as "Lead Participant", and/or "Designated Entity" (as those terms are defined and amended or replaced from time to time by the ISO) and/or other similar role (or function necessary to process and implement such sales) on Interconnector's behalf and, subject to Interconnector's instructions, perform any and all functions in such roles as are necessary to implement and consummate such sales, and shall submit to ISO and/or other appropriate entities (on Interconnector's behalf) all information, including, without limitation, standard or non-standard contracts, self-schedules, unit characteristics, bid submissions and metering data, required to effect such transactions, provided that Interconnector provides PSNH with all information and direction reasonably required for the submission of such information by PSNH but no later than 9:30 am on the last business day prior to the commencement of such transaction or bid, unless PSNH can accommodate the transaction in less time.

As PSNH's full compensation when it acts as the "Lead Participant" for performing the administrative services described in this subsection, Interconnector shall pay to PSNH for each such month an amount equal to the greater of \$500 or 0.0126¢/kwhr of Interconnector's sales of generation for which PSNH is "Lead Participant" during such month made pursuant to this Article 4 (b). The foregoing shall only be due to PSNH when PSNH actually acts as "Lead Participant" in

such sale.

(c) FERC Sales

If the Facility does not meet the definition of a QF, Interconnector may enter into contractual arrangements for the sale of electricity with PSNH or others in accordance with the requirements of the Federal Power Act and the rules of FERC. The price and products associated with such sale shall be identified in the contractual arrangements.

Article 5. Interconnection and Protection Requirements.

Interconnector has installed all interconnection, protection, metering, and control equipment as specified in the Report to ensure the continued safe and reliable operation of the Facility in parallel with the PSNH system. The Interconnector has assumed responsibility for all study costs associated with the development of the Report, and those costs associated with the equipment and its installation, required by the Report. No additional studies are required to be performed, and no additional or different interconnection facilities, system upgrades or protection systems are required to be constructed, installed or implemented, in order to maintain the interconnection of the Facility with the PSNH System.

Up to the interconnection point, all equipment shall remain the sole property of Interconnector.

Interconnector shall have sole responsibility for the operation, maintenance, replacement, and repair of the Facility, including the interconnection equipment owned by the Interconnector.

Prior to the interconnection to PSNH's system under this Agreement Interconnector tested, and every twelve months thereafter, Interconnector shall continue to test, or cause to be tested, all protection devices including verification of calibration and tripping functions; and Interconnector shall provide PSNH with a copy of the tests and results.

If either party reasonably determines that the operation or use of any portion of the protection system will or may not perform its protective function, Interconnector shall immediately open the interconnection between PSNH's system and the Facility. Interconnector shall promptly notify PSNH of this action and the reason for this action. The interconnection shall remain open until Interconnector has satisfactorily cured the defect. Any repair or replacement of Interconnector's equipment shall be at no cost to PSNH, except PSNH shall be responsible for any

loss or damage requiring repair or replacement of all or a portion of the Interconnector's equipment as a result of the negligence or misconduct of PSNH, its agents or employees.

Article 6. Right of Access.

Upon prior written or oral notice to Interconnector, PSNH shall have the right to enter the property of Interconnector at mutually agreed upon reasonable times and shall be provided reasonable access to Interconnector's metering, protection, control, and interconnection equipment to review for compliance with this Agreement. PSNH shall provide Interconnector with a copy of any notes, reports or other documents made relating to any such inspection or review.

Article 7. Modification of Facility.

If Interconnector plans any modifications to its Facility as described in Attachment A, which modifications would reasonably be expected to affect its interconnection with the PSNH System, Interconnector shall give PSNH prior written notice of its intentions.

Article 8. Term of Agreement.

This Agreement shall become effective between the parties on the date of execution of this agreement and shall remain in full force and effect subject to the suspension and termination rights contained in this Article 8. [PSNH acknowledges that it has received a certificate of insurance as required by Article 9, and that the interconnection equipment as set forth in Attachment A has been properly installed and tested.]

Interconnector may terminate this Agreement by giving PSNH not less than sixty (60) days prior written notice of its intention to terminate. PSNH may terminate the interconnection under this Agreement by giving not less than sixty (60) days prior written notice should Interconnector fail to substantially perform with the interconnection, metering and other safety provisions of this Agreement, and such failure continues for more than sixty (60) days from date of notice without cure. The PSNH notice shall state with specificity the facts constituting the alleged failure to perform by Interconnector. If the parties are unable to reach agreement within 60 days on a cure for the Interconnector's failure to perform, either party may elect to submit the dispute to the NHPUC for resolution.

If changes in applicable federal or state statutes, regulations or orders; or changes in applicable ISO or NEPOOL requirements occur which materially affect this Agreement, the parties shall negotiate in good faith to modify this Agreement to accommodate such changes. If the parties are unable to reach agreement within 60 days, either party may elect to submit the dispute to the NHPUC for resolution.

PSNH may also terminate its obligation contained in this Agreement if all laws, regulations and orders mandating interconnections or purchases from qualifying facilities are repealed, or declared invalid by a Court or Regulatory Agency, and no revised law is enacted providing for such interconnection or sales on a similar basis.

After termination of this Agreement, both parties shall be discharged from all further obligation under the terms of this Agreement, excepting any liability (including without limitation the obligation to pay for power delivered prior to any such termination which obligation shall survive the termination of this Agreement) which may have been incurred before the date of such termination. Any reasonable costs incurred by PSNH to physically disconnect the Facility as a result of the termination of this Agreement shall be paid by the Interconnector. Termination of this Agreement shall not effect the parties' obligation to pay for power delivered prior to termination of that purchase obligation.

#### Article 9. Indemnification and Insurance.

Each party will be responsible for its equipment and the operation thereof and will indemnify and save the other harmless from any and all loss by reason of property damage, bodily injury, including death resulting therefrom suffered by any person or persons including the parties hereto, employees thereof or members of the public, (and all expenses in connection therewith, including attorney's fees) whether arising in contract, warranty, tort (including negligence), strict liability or otherwise, caused by or sustained on, or alleged to be caused by or sustained on, equipment or property, or the operation or use thereof, owned or controlled by such party, except that each party shall be solely responsible for and shall bear all costs of its negligence, and willful misconduct, and claims by its own employees or contractors growing out of any workers' compensation law. The foregoing paragraph shall survive the termination of this Agreement and such termination will not extinguish any liabilities or obligations in respect of reimbursements

under this paragraph, incurred up to the time of termination.

The Interconnector shall, at its own expense, continue to maintain throughout the term of this Agreement Comprehensive General Liability Insurance with a combined single limit of not less than \$1,000,000 for each occurrence.

The insurance policy specified above has named and shall continue to name PSNH, Northeast Utilities and its subsidiaries, officers, directors and employees, as additional insured with respect to any and all third party bodily injury and/or property damage claims arising from Interconnector's performance of this Agreement. It is further agreed that PSNH shall not by reason of its inclusion as an additional insured incur liability to the insurance carrier for the payment of premium for such insurance. The policy shall not be canceled, terminated, altered, reduced or materially changed without at least thirty (30) days prior written notice to PSNH.

Evidence of the required insurance has been provided to PSNH in the form of a Certificate of Insurance prior to the actual physical interconnection of the Facility, and annually thereafter. During the term of this Agreement, the Interconnector, upon PSNH's reasonable request, shall furnish PSNH with certified copies of the actual insurance policies described in this Article.

The insurance coverage is and shall continue to be primary and is not in excess to or contributing with any insurance or self-insurance maintained by PSNH or its affiliates and shall not be deemed to limit Interconnector's liability under this Agreement.

PSNH shall have the right to modify the limits of liability specified herein, at any time in the future, to remain consistent with those limits generally required by the NHPUC. PSNH must notify Interconnector in writing, at least ninety (90) days prior to any required change and these new liability limits will become effective upon renewal of the Insurance Policy.

In no event shall either party be liable, whether in contract, tort (including negligence), strict liability, warranty, or otherwise, for any special, indirect, incidental, punitive or consequential losses or damages, suffered by the other party or any person or entity and arising out of or related to this Agreement including but not limited to, cost of capital, cost of replacement power, loss of profits or revenues or the loss of the use thereof. This paragraph of Article 9 shall apply notwithstanding any other statement to the contrary, if any, in this Agreement and shall survive the termination of this Agreement.

Article 10. Force Majeure.

Neither party shall be considered to be in default hereunder and shall be excused from performance hereunder if and to the extent that it shall be prevented from doing so by storm, flood, lightning, earthquake, explosion, equipment failure, civil disturbance, labor dispute, act of God or the public enemy, action of a court or public authority, withdrawal of equipment from operation for necessary maintenance and repair, or any other cause beyond the reasonable control of either party and not due to the fault or negligence of the party claiming force majeure, provided that the party claiming excuse from performance uses its best efforts to remedy its inability to perform.

Article 11. Dispute Resolution and Voluntary Arbitration.

In the event of any dispute, disagreement, or claim (except for disputes referred to the NHPUC under Article 8 of this Agreement) arising out of or concerning this Agreement, the Party that believes there is such a dispute, disagreement, or claim will give written notice to the other Party of such dispute, disagreement, or claim. The affected Parties shall negotiate in good faith to resolve such dispute, disagreement, or claim. If such negotiations have not resulted in resolution of such dispute to the satisfaction of the affected Parties within ten (10) working days after notice of the dispute has been given, then, an affected Party may, upon mutual agreement of all of the affected Parties, submit such dispute, disagreement, or claim arising out of or concerning this Agreement, including whether such dispute, disagreement, or claim is arbitrable, to binding arbitration.

The arbitration proceeding shall be conducted by a single arbitrator, appointed by mutual agreement of the affected Parties, in Manchester, New Hampshire, under the Commercial Arbitration Rules of the American Arbitration Association in effect at the time a demand for arbitration under such rules was made. In the event that the affected Parties fail to agree upon a single arbitrator, each shall select one arbitrator, and the arbitrators so selected shall, within twenty (20) days of being selected, mutually select a single arbitrator to govern the arbitration. A decision and award of the arbitrator made under the Rules and within the scope of his or her jurisdiction shall be exclusive, final, and binding on all Parties, their successors, and assigns. The costs and expenses of the arbitration shall be allocated equitably amongst the affected Parties, as determined by the arbitrator(s). Judgment upon the award rendered by the arbitrator(s) may be entered in any

court having jurisdiction. Each Party hereby consents and submits to the jurisdiction of the federal and state courts in the State of New Hampshire for the purpose of confirming any such award and entering judgment thereon.

Article 12. Modification of Agreement.

In order for any modification to this Agreement to be binding upon the parties, said modification must be in writing and signed by both parties.

Article 13. Prior Agreements Superseded.

Once effective, this Agreement with Attachment A represents the entire agreement between the parties with respect to the interconnection of the Facility with the PSNH electric system and, as between Interconnector and PSNH, all previous agreements including previous Contracts, discussion, communications and correspondence related thereto are superseded by the execution of this Agreement.

Article 14. Waiver of Terms or Conditions.

The failure of either party to enforce or insist upon compliance with any of the terms or conditions of this Agreement shall not constitute a general waiver or relinquishment of any such terms or conditions, but the same shall remain at all times in full force and effect. Any waiver is only effective if given to the other party in writing.

Article 15. Binding Effect; Assignment

This Agreement shall be binding upon, and shall inure to the benefit of, the respective successors and permitted assigns of the parties hereto. PSNH shall not assign this Agreement or any of its rights or obligations hereunder without the prior written consent of Interconnector except to a successor-in-interest. PSNH shall provide written notice to Interconnector of any such assignment to a successor-in-interest within fifteen (15) days following the effective date of the assignment. Interconnector shall have the right to assign this Agreement to any person or entity that is a successor-in-interest to the Facility without the consent of PSNH. In the event of any such assignment, Interconnector shall notify PSNH in writing within fifteen (15) days following the

effective date of the assignment. Interconnector may make such other assignment of this Agreement as it determines, subject to the prior written consent of PSNH, which consent shall not be unreasonably withheld or delayed. Any assignment in violation of this Article shall be void at the option of the non-assigning party.

Article 16. Applicable Law.

This Agreement is made under the laws of the State of New Hampshire and, to the extent applicable, the Federal Power Act, and the interpretation and performance hereof shall be in accordance with and controlled by such laws, excluding any conflicts of law provisions of the State of New Hampshire that could require application of the laws of any other jurisdiction.

Article 17. Headings.

Captions and headings in the Agreement are for ease of reference and shall not be used to and do not affect the meaning of this Agreement.

Article 18. Notices and Service.

All notices, including communications and statements which are required or permitted under the terms of this Agreement, shall be in writing, except as otherwise provided or as reasonable under the circumstances. Service of a notice may be accomplished and will be deemed to have been received by the recipient party on the day of delivery if delivered by personal service, on the day of confirmed receipt if delivered by telegram, registered or certified commercial overnight courier, or registered or certified mail or on the day of transmission if sent by telecopy with evidence of receipt obtained, and in each case addressed as follows:

Interconnector:            Marlow Power  
                                  44 Hanover Street  
                                  Keene, NH 03431  
                                  Attn.: Arthur E. Cohen, MD  
  
                                  Telephone No. (603) 352-2127  
                                  email: artruth@monad.net

PSNH:

Public Service Company of New Hampshire  
780 North Commercial Street  
P. O. Box 330  
Manchester, NH 03105-0330  
Attn.: Manager, Supplemental Energy Sources Department  
Telephone No. (603) 634-2312  
Fax No. (603) 634-2449  
email: psnhesd@psnh.com

IN WITNESS WHEREOF, the parties, each by its duly authorized representative, have hereunto caused their names to be subscribed, as of the day and year first above written.

Marlow Power

By: Arthur E. Cohen

Title: GENERAL PARTNER  
Duly Authorized

Public Service Company of New Hampshire

Paul E. Ramsey  
By: Paul E. Ramsey  
Title: Vice President, Customer Services  
Duly Authorized

**PSNH INTERCONNECTION REPORT  
FOR  
CUSTOMER GENERATION**

**OLD NASH DAM**

**FINAL REPORT**

**SESD SITE NO. 028**

D. J. Western  
August 14, 2003

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## I. INTRODUCTION

A study has been performed to determine the impact of this proposed facility on the PSNH system. All technical analysis was based on the equipment listed under Section II, and the facility arrangement illustrated on partial one-line diagram SK-DJW-028-1. Where actual site-specific data was not readily available, estimated or "typical" values were utilized in any required calculations. Any deviation from the listed equipment and/or the illustrated configuration may have significant safety and/or technical ramifications. Consequently, if changes are anticipated now or in the future, PSNH should be informed immediately so that the requirements and recommendations contained within the report may be revised where necessary. This procedure will ensure that the Developer is informed of PSNH requirements in a timely fashion and should eliminate the delays and expense which could otherwise be experienced by the Developer.

This facility has been in operation and was previously studied and built in 1984 as a 225 KW project using three induction generators. Due to technical issues, one unit was taken out of service and operation changed over to two units sized 75 KW and 100 KW. The Developer at this time is replacing the out-of-service machine with a 37 KW induction generator bringing the new generation total to 212 KW for this location.

## II. DESCRIPTION OF MAJOR COMPONENTS

### A. Description Of Facilities

The Old Nash Dam Site is a hydroelectric facility located in Marlow, NH. When completed, three induction generators sized 75 kW, 100 kW and 37 kW will be installed. Power factor correction capacitors, as detailed in drawing SK-DJW-028-1, will be required to meet the reactive requirements of the site.

### B. Electrical Components

1. Generators (3) – Induction  
Hydrolec 75 kW, 1200 RPM, 480 volt, 0.85 PF (existing)  
Ossberger 100 kW, 1200 RPM, 480 volt, 0.85 PF (existing)  
Sysco 37 kW, 1200 RPM, 480 volt, 0.85 PF (new)
2. Exciters - None
3. Voltage Regulators - None
4. Circuit Breakers / Contactors – 480Volt
5. Generator Step-up Transformers: 3 – 75 KVA, 7.2 kV – 277 volt, connected grounded wye to grounded wye. (%Z = Unknown)
6. Power Factor Correction Capacitors – 50 KVAR, 480 Volt

### C. Mechanical Components

1. Turbines – (3) – Number, make, size and type are unknown
2. Actuator/Governor - None

## III. PSNH REQUIREMENTS - GENERAL

### A. Safety Considerations

1. The connection of the facility to the PSNH system must not compromise the safety of PSNH's customers, personnel, or the owner's personnel.
2. The generating facility must not have the capability of energizing a de-energized PSNH circuit.
3. An emergency shutdown switch with facility status indicator lights, and a disconnecting device with a visible open shall be made available for unrestricted use by PSNH personnel. The operation of the switch shall cause all of the facility's generation to be removed from service, and shall block all automatic startup of generation until the switch is reset. The status lights, mounted with the shutdown switch, shall be located outdoors at a position acceptable to PSNH Operating Division personnel. A red light shall indicate that the facility may have generation connected to the PSNH system. A green light shall indicate that all generation is disconnected from the PSNH system. The lights shall be driven directly from auxiliary contacts coupled with the main generator contactors. The disconnecting device with visible open shall be located between the PSNH system and the facility's generation.
4. The Developer is responsible for determining and applying the complete settings for all non PSNH required protective relays. PSNH will determine, at the Developer's expense, voltage, frequency and current set points only for PSNH required protective functions.
5. A PSNH approved testing company will be required to verify the proper functioning of those protective systems required by PSNH. This work will be performed at the Developer's expense.
6. The generating facility has full responsibility for ensuring that the protective system and the associated devices are maintained in reliable operating condition. PSNH reserves the right to inspect and test all protective equipment at the generator site whenever it is considered necessary. This inspection may include tripping of the breakers.
7. The short circuit interrupting device(s) must have sufficient interrupting capacity for all faults that might exist. The PSNH system impedance at the facility will be supplied on request.
8. All shunt-tripped short circuit interrupting devices applied to generators must be equipped with reliable power sources. A D.C. battery with associated charging facilities is considered a reliable source.

9. All synchronous generator facilities must be equipped with battery-tripped circuit breakers.
10. Any protection scheme utilizing AC control power must be designed in a fail-safe mode. That is, all protective components must utilize contacts which are closed during normal operating conditions, but which open during abnormal conditions or when control power is lost to de-energize the generator contactor coil. These schemes may be utilized only with non-latching contactors and may not be used with synchronous generators.
11. A complete set of AC and DC elementary diagrams showing the implementation of all systems required by PSNH must be supplied for PSNH review. These drawings should be supplied as soon as possible so that any non-conforming items may be corrected by the Developer without impacting the scheduled completion date of the facility.
12. All voltage transformers driving PSNH-required protection systems must be rated by the manufacturer as to accuracy class, and must be capable of driving their connected burdens with an error not exceeding 1.2 percent.
13. All current transformers driving PSNH-required protection systems must be rated by the manufacturer as to accuracy class and must be capable of driving their connected burdens with an error not exceeding 10 percent at maximum fault requirements.
14. All PSNH-required protective relays, and any other relays which PSNH might be requested to test, must be equipped with test facilities which allow secondary quantity injection and output contact isolation.
15. It is not the policy of PSNH to maintain a stock of protective relays for resale to facility Developers. Since many protective devices have delivery times of several months, Developers are strongly advised to order them as soon as possible after PSNH type-approval is received.
16. Protection of the generating facility equipment for problems and/or disturbances which might occur internal or external to the facility is the responsibility of the Developer.
17. No operation of the facility's generation is allowed until all requirements in Sections III and IV of this report have been met, and all systems required therein, are in place, calibrated, and, if applicable, proven functional. This requirement may be waived by PSNH for a given system if generation is required to demonstrate the proper functioning of that system.

## B. Service Quality Considerations

1. The connection of the facility to the PSNH system must not reduce the quality of service currently existing on the PSNH system. Voltage fluctuations, flicker, and excessive voltage and current harmonic content are among the service quality considerations. Harmonic limitations should conform to the latest IEEE guidelines and/or ANSI standards.
2. In general, induction generators must be accelerated to "synchronous" speed prior to connection to the PSNH system to reduce the magnitude and duration of accelerating current and resulting voltage drop to PSNH customers to acceptable levels.
3. In general, synchronous generators may not use the "pull-in" method of synchronizing due to excessive voltage drops to PSNH customers.
4. Power factor correction capacitors may be required for some facilities either at the time of initial installation, or, at some later date. The installation will normally be done by the Developer at his expense.
5. Certain facilities, having installed capacity similar in magnitude to connected circuit load, may require that control modifications be made to tap changers in the electrical vicinity. Should they be necessary, the modifications will be made at the Developer's expense.
6. Automatic reclosing of the PSNH circuit after a tripping operation may occur after an appropriate time delay. If additional voltage blocking of automatic reclosing is required, it will be added at the developer's expense.

## C. Metering Considerations

1. Except for protection/control and metering voltage sensing and generator and/or capacitor contactor supply voltage, no unmetered station service AC shall be taken from the station service transformers.

## D. Other Considerations

1. The following is a list of information which must be available to the PSNH Supplemental Energy Sources Department for these generators.

-Nameplate ratings for MW, MVAR, and power factor.

## IV. PSNH REQUIREMENTS - SPECIFIC

### A. System Configuration and Protection

1. The facility must be arranged and equipped as per partial one-line diagram SK-DJW-028-1.



2. Engineering - PSNH review of control circuits, material specifications and development of PSNH required relay settings at the site, as well as a review of related protective equipment on the circuit supplying the site.

SUBTOTAL \$ 500.00

SECTION A TOTAL \$ 500.00

B. Metering

The Existing metering will remain.

SECTION B TOTAL \$ 0.00

C. Primary Interconnection

No primary interconnection materials or labor, as a result of this study, have been identified.

SECTION C TOTAL \$ 0.00

GRAND TOTAL (A + B + C) \$ 500.00

VI. INTERCONNECTION EQUIPMENT OWNERSHIP, OPERATION AND MAINTENANCE

A. Delivery Point

For the purpose of establishing ownership, operation and maintenance responsibilities, the location of facility energy delivery to PSNH (the "Delivery Point") must be defined. At this facility, the delivery point will be the customer side of the 20T fused cutouts located on pole 29/262. The customer will own all equipment on the customer's side of the delivery point except that PSNH will own and maintain the metering associated with providing station service.

B. Description of Responsibilities

PSNH will own and maintain all equipment up to the delivery point. The Developer will own and maintain all equipment from the delivery point into and throughout the plant.

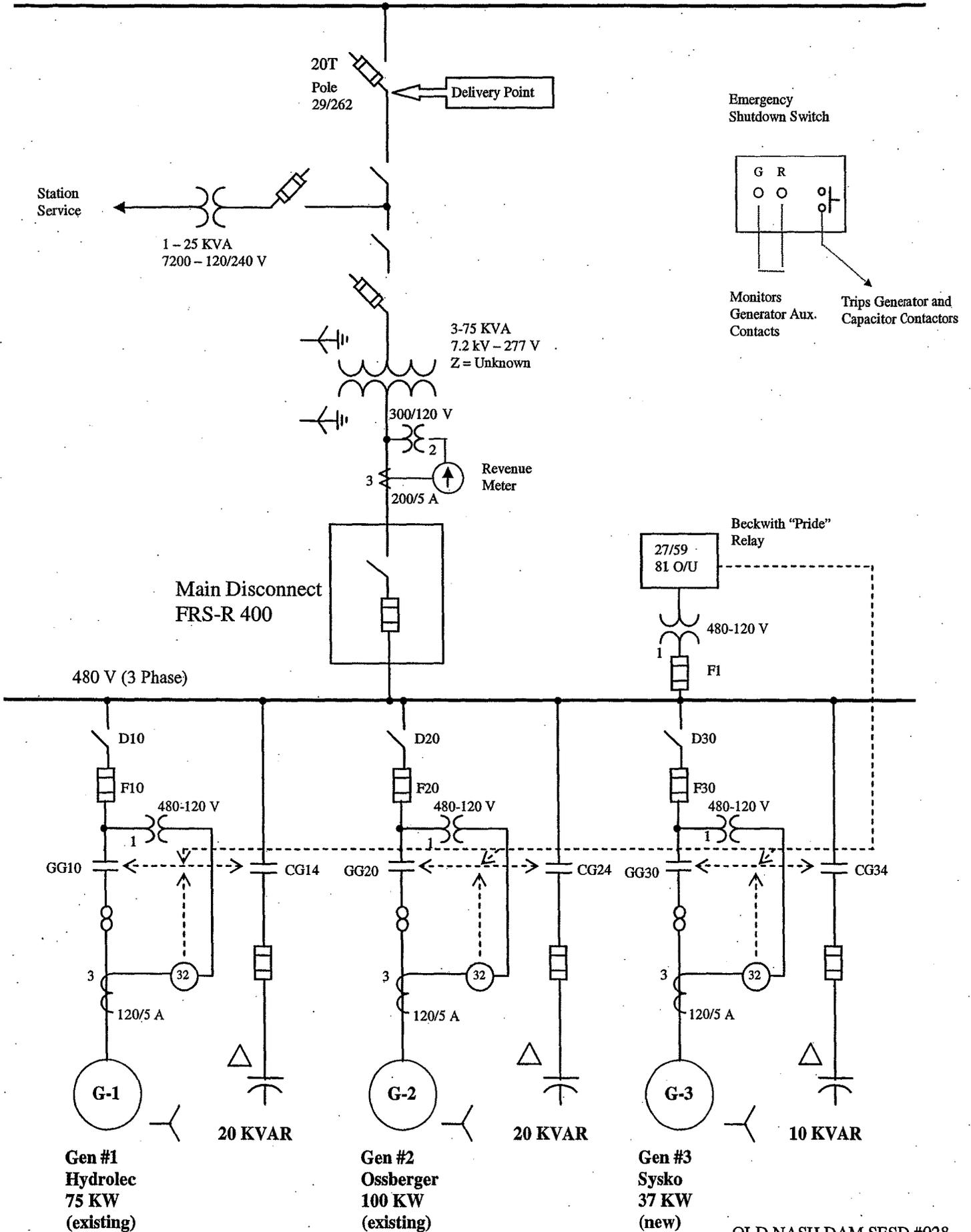
VII. DRAWINGS

- A. Partial One-Line Diagram SK-DJW-028-1 is attached.

# W14 Circuit

RTE 10

12.47 / 7.2 kV



OLD NASH DAM SESD #028  
 SK-DJW-028-1  
 08/14/03

## **Attachment C**

A copy of the Facility's order surrendering its long-term rate agreement is attached.

DE 02-070

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

Power Supply Arrangement with Old Nash Dam

Order Approving Settlement Agreement Amending Contract  
for the Purchase and Sale of Electric Energy

O R D E R   N O.   24,027

August 9, 2002

**APPEARANCES:** Gerald M. Eaton, Esq. for Public Service Company of New Hampshire; Michael W. Holmes, Esq. for Office of Consumer Advocate; Jack K. Ruderman, Esq. for Governor's Office of Energy and Community Services; Edward N. Damon, Esq. for the Staff of the New Hampshire Public Utilities Commission.

**I.    PROCEDURAL HISTORY**

On April 19, 2002, Public Service Company of New Hampshire (PSNH) filed with the New Hampshire Public Utilities Commission (Commission) a series of motions seeking approval of renegotiated power purchase arrangements with eleven small hydro-electric facilities from which PSNH currently purchases power pursuant to long term rate orders or power purchase contracts previously approved by the Commission,<sup>1</sup> including a motion to amend the power purchase contract involving Old Nash Dam, a hydroelectric facility located on the Ashuelot River in the Town of Marlow. According to estimates provided by PSNH, the Old Nash Dam facility generates 600 megawatt hours of power

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<sup>1</sup> These motions were given separate docket numbers from DE 02-064 through DE 02-074 (collectively, the Hydro Dockets). As stated in the joint Order of Notice dated April 22, 2002, the proceedings were provisionally consolidated for purposes of hearing, although each petition would ultimately be

on an annual basis.

By a series of letters from PSNH dated April 25, 2002, each municipality having a hydro-electric facility within its borders was notified of the relevant Hydro Docket, including the Town of Marlow.

By another letter from PSNH dated April 25, 2002, James W. Gallagher, Jr., Chief Water Resources Engineer, Water Division, State Department of Environmental Services was also notified of the pendency of these proceedings.

Other aspects of the procedural history of this docket up to May 24, 2002 are set forth in *Public Service Company of New Hampshire*, Order No. 23,978 (Order Following Prehearing Conference, May 15, 2002) and accordingly are not repeated here.

By letter dated May 29, 2002, Alan Linder, Esq. requested that New Hampshire Legal Assistance be placed on the service list for the limited purpose of receiving copies of documents in the Hydro Dockets.

A secretarial letter dated July 3, 2002 clarified that the hydro-electric facilities named in the Commission's Order of Notice, to the extent they wished to participate, would be treated as parties in their respective dockets.

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considered separately.

On July 3, 2002, PSNH filed a series of Stipulation and Settlement documents in regard to the Hydro Dockets, including this docket.

GOECS filed a letter in support of the Hydro Docket settlements on July 5, 2002.

A hearing on the Hydro Docket settlements was held on July 9, 2002.

## **II. POSITIONS OF THE PARTIES AND STAFF**

### **A. PSNH**

The pre-filed testimony of Stephen R. Hall, Rate and Regulatory Services Manager for PSNH, supports the motions made in the Hydro Dockets. The testimony in each of the dockets is substantially similar except that it is modified to reflect data specific to each docket. PSNH supplemented Mr. Hall's pre-filed testimony with testimony of Mr. Hall and Carl Vogel at the hearing.

PSNH's testimony may be summarized as follows:

PSNH reviewed the specifics of the power purchase rate orders or contracts currently in place with fifty eight hydro-electric independent power producers and two non-hydro projects. These projects annually produce 220,000 megawatt hours of power at an annual cost to PSNH of \$25 million, an average cost of \$.114 per kilowatt hour (kWh). PSNH then made buydown offers to

fifty five hydro projects; these offers also expressed PSNH's willingness to make buyout offers to the extent any of the projects were interested in a buyout. Offers were not made to two projects which have an unreliable performance history and have been out of service for an extended period of time; three other projects have contract prices that are close to or less than the offer rate of \$.05 per kWh and so an offer would not have produced any meaningful reduction in stranded costs.

According to PSNH, the specific offers were calculated using the same methodology and assumed a September 1, 2002 closing date. The offers took into account the term of years remaining on the rate order or power contract, the average historical output of a project, and the price currently paid under the rate order or power contract for the project's output. An up-front payment was then calculated based on a revised purchase rate of \$.05 per kWh. The amount of the payment was designed to yield a present value savings of 20% of the difference between what would be paid to the projects under their existing arrangements and the \$.05 per kWh buydown rate.

PSNH states that three projects representing 3,800 megawatt hours accepted its buydown offer and eight projects representing 7,875 megawatt hours opted for a buyout. Under the buydown offers, the projects will continue to sell all of their

output to PSNH through the remaining term of the rate order or power contract; projects choosing a buyout have the option of continuing to sell output to PSNH at short term avoided cost rates as established consistent with the PSNH Restructuring Settlement Agreement, see Docket No. DE 99-099, or selling to other energy suppliers or utilities.

For those projects accepting a buydown or buyout offer, PSNH and the hydro producer entered into an agreement to modify or terminate the rate order or power contract. Such agreement also described necessary changes, if any, to interconnection terms, based on the individual circumstances. Each of these agreements was made subject to the Commission's approval of the proposed renegotiated arrangement.

PSNH states that the determination of annual energy generated was based on each project's historical average which was then apportioned to a monthly figure using a ratio based on the overall historical trend of hydro-electric generation. The ratio recognizes maximum output during spring runoff and in late fall, with minimum output occurring in the summer months.

According to PSNH, each buydown and buyout offer consisted of an up-front payment equal to 80% of the net present value, using a 10% discount rate, of the difference between the cost of power under the current pricing arrangement less the

cost of power at (i) \$.05 per kWh for buydown offers and (ii) for buyout offers, the projected cost of replacement power over the remaining term of each project.<sup>2</sup> The savings for a buydown was calculated to be the difference between what PSNH would have paid to the project under the existing rate order or power contract and what it will pay under the restructured agreement for the same amount of power priced at \$.05 per kWh along with the up-front payment. The savings for a buyout was calculated to be equal to the difference between what PSNH would have paid the project for the power under the existing rate order or power contract and what it anticipates it will now pay for the same amount of replacement power on the ISO market, along with the up-front payment.

Regarding the factors listed in RSA 362-A:8,II(b), PSNH states that the approval and consummation of the proposed renegotiated arrangements will have a positive impact on the State and local communities, and on electric rates. More particularly, PSNH states that the cost of energy purchases pursuant to Commission rate orders issued to the independent power producers is the largest single stranded cost which PSNH's customers currently bear; these above market costs are recovered

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<sup>2</sup> The cost of replacement power was assumed to be \$.04 per kWh through 2006 and then escalated at 4% annually through the remaining term of the rate order or power contract.

dollar-for-dollar in Part 2 of PSNH's stranded cost recovery charge. According to PSNH, approval of the proposed renegotiated arrangements will lower these costs in accordance with legislative policies. Furthermore, PSNH states that since most of the projects are expected to continue to operate, there is likely to be little loss of project-related jobs resulting from the proposed renegotiated arrangements.

PSNH also expects the impact on local property taxes to be minor. PSNH states that the majority of projects are subject to payment in lieu of taxation arrangements under which the projects pay towns a small percentage, ranging from 1% to 5%, of their revenues. Since the eleven projects are located in nine different towns with no town having more than two projects, PSNH believes that the individual impacts will be minimized.

Finally, PSNH states that none of the proposed transactions will have an adverse effect on the state's energy security; New Hampshire and the rest of New England have a capacity surplus and, in any event, the buyout arrangements represent a relatively small amount of capacity.

**B. GOECS**

GOECS expressed its support for the Hydro Docket settlements in its July 5, 2002 letter. The letter notes that GOECS's participation was limited to monitoring the important

issues raised in the Hydro Dockets, including those listed in RSA 362-A:8 and states that GOECS is

"pleased that the parties were able to reach settlement agreements that result in ratepayer savings, and [is] hopeful that the small hydro electric plants continue to be a part of New Hampshire's diverse indigenous energy supply."

### III. SUMMARY OF THE TERMS OF THE STIPULATION AND SETTLEMENT

The Stipulation and Settlement in this docket was executed by PSNH, OCA, Commission Staff and Marlow Power, operator of Old Nash Dam. It is similar to the settlement agreements entered into in the other Hydro Dockets except that certain provisions are tailored specifically to reflect the particular facts and circumstances in this docket. Furthermore, it is consistent with the specific offer made to and accepted by Marlow Power.

The Stipulation and Settlement provides that if it is approved by the Commission, PSNH will make a lump sum payment to Marlow Power in exchange for the amendment of its 20 year power purchase contract.<sup>3</sup> The lump sum payment was calculated based upon 80% of the net present value of the difference between the expected payments under the Contract for the remainder of its term and five cents per kilowatt-hour.

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<sup>3</sup> See Contract for the Purchase and Sale of Electric Energy dated March 20, 1984 by and between Marlow Power and PSNH (Contract).

In this case, the lump sum payment of \$39,464 is payable on September 1, 2002, and the net present value of the savings from the renegotiated arrangement is calculated to be \$9,866. PSNH will retain 20% of the calculated savings, \$1,973, in accordance with RSA 362-A:4-d. PSNH will create a regulatory asset equal to the sum of the lump sum payment and 20% of the savings, \$41,437. The regulatory asset will be amortized over the remaining term of the Contract and will be recovered as a Part 2 stranded cost. Carrying charges will accrue on the unamortized balance of the regulatory asset at the Stipulated Rate of Return, as described in the Agreement to Settle PSNH Restructuring in Docket No. DE 99-099. If the closing of the renegotiated agreement is completed after September 1, 2002 but before December 31, 2002, the amounts of the lump sum payment, savings and regulatory asset will be adjusted to reflect the actual payment date. If PSNH does not make the lump sum payment before December 31, 2002, PSNH must re-file its motion if it wishes to pursue a renegotiated agreement.

In order to address OCA's concern over recent legislative efforts to provide financial incentives to small power producers to continue operations beyond the early termination of their rate orders or long term purchase power

contracts,<sup>4</sup> Marlow Power, including its successors or assigns, agrees that

"should it receive any additional payments either directly from PSNH or its customers, excluding direct retail sales to PSNH customers over the remaining life of the contract (i.e., December 18, 2004) to continue or restart generating at the facility subject to the current buydown or buyout, then the lesser amount of the original or additional payment (plus interest calculated in accordance with Puc [1203.03(i)(3)]) shall be refunded through a payment to PSNH on behalf of its customers. Revenues received by Marlow Power on the wholesale or direct retail market, including any premiums for being a renewable resource, are separate from the above noted payments and thus exempted."

Paragraph 6 of the Settlement and Stipulation refers to and describes certain information provided by PSNH regarding the factors the Commission must consider pursuant to RSA 362-A:8. Among the points made by PSNH are the following:

Because the hydropower industry is not labor intensive, there would be minimal loss of jobs if the hydro producer terminated operations. Property tax payments, including payment in lieu of taxation arrangements, for all eleven projects totaled only \$31,000. Because the exemption from local property taxes formerly in RSA 362-A:6 has been repealed, local communities can now levy *ad valorem* real estate taxes to replace the revenue dependent payments in lieu of

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<sup>4</sup> In explaining this provision at the hearing, PSNH stated that it is intended to preclude a hydro producer from retaining both the lump sum payment and a possible future government authorized subsidy. See Transcript of July 9, 2002 at 22-28.

taxation. In terms of environmental and health impacts, the renegotiated arrangements should not have any impacts as to facilities that continue to operate; even if a facility would discontinue hydropower production, no environmental or health impacts are expected unless possibly the dams are operated in a different manner than before. In that case, PSNH is not aware of any significant adverse environmental or health related impacts which are likely to result from the renegotiated arrangements if applicable environmental and health protection laws, regulations and licensing requirements, including Federal Energy Regulatory Commission licensing and exemption requirements, are complied with. Furthermore, any power generation lost by discontinuance of hydropower production is small and there is adequate capacity coming on line from gas-fired generators to replace any lost generation without significant added environmental or health related impacts.

#### **IV. COMMISSION ANALYSIS**

This docket requires us to consider whether it is appropriate to amend the Contract as to Marlow Power and replace it with the arrangements provided for in the Settlement and Stipulation.<sup>5</sup> We conclude that such action is consistent with

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<sup>5</sup> We note we were called on last year to undertake a similar task in connection with proposed renegotiated arrangements involving certain wood-fired cogeneration facilities. See *Public Service Company of New Hampshire*,

the public interest and we will therefore approve the Settlement and Stipulation.

As PSNH points out in its pre-filed testimony, the legislature has encouraged the renegotiation of purchased power arrangements with small power producers, including hydro-electric power producers, in order to mitigate stranded costs. See *e.g.*, RSA 374-F:3,XII(c)(2); RSA 362-A:4-c,I. At the same time, in any decision affecting qualifying small power producers and qualifying cogenerators, we must consider certain factors, including the economic impact on the state, community impact, enhanced energy security by utilizing mixed energy sources, potential environmental and health-related impacts, and impact on electric rates. RSA 362-A:8,II(b)(1)-(4).

The ratepayer "share" of the calculated net present value of the savings in this particular docket, \$7,893 is relatively modest, but the estimated ratepayer "share" of the savings from the renegotiated arrangements in all the Hydro Dockets, \$1,030,310, is significant. While it is not possible to determine conclusively that PSNH has negotiated every possible savings that could have been realized from Marlow Power, we observe that Staff and the OCA, among others, support the calculation of savings reflected in the Stipulation and

Settlement and no party has come forward to contend that the renegotiated arrangement is not sufficiently favorable to ratepayers.

Similarly, we find that the straightforward methodology for calculating and treating the (i) savings to be passed on to both ratepayers and PSNH and (ii) lump sum payments to be made to the hydro producers is fair, reasonable and consistent with applicable requirements.

We note that the information in the record regarding the statutory factors that we must consider is general in nature. Nevertheless, we have no reason to doubt its accuracy in the context of any one of the Hydro Dockets, and no party is contending otherwise.

The information in the record addresses all the factors we must consider. We have discussed the favorable impact on electric rates above. Since hydro-electric generation facilities are typically not labor intensive operations, the impact of the renegotiated arrangements on state and community job loss and job creation does not appear to be significant.

Although the renegotiated arrangements do not increase energy security by utilizing mixed energy sources, they do not appear to adversely affect energy security. For example, the energy output of the eleven renegotiated arrangements represents

less than 0.12% of New Hampshire-based generation. Moreover, even for the projects accepting the offers, it is by no means clear that a significant number will cease to generate electricity.

It is conceivable that some of the renegotiated arrangements will result in environmental effects if the facilities are operated in a different manner than they are at present. However, based on information provided by PSNH in the Stipulation and Settlement, it does not appear that any such effects are likely to be significantly adverse if applicable environmental and health protection laws, regulations and licensing requirements are followed.

Accordingly, weighing and considering the information in the record before us, we are persuaded to approve the Stipulation and Settlement in this docket.

**Based upon the foregoing, it is hereby**

**ORDERED**, the Stipulation and Settlement entered in this docket is approved; and it is

**FURTHER ORDERED**, that in accordance with the Stipulation and Settlement, the Motion to Approve Amendment to Contract for the Purchase and Sale of Electric Energy dated March 20, 1984 by and between Marlow Power and Public Service Company of New Hampshire is granted.

By order of the Public Utilities Commission of New  
Hampshire this ninth day of August, 2002.

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Thomas B. Getz  
Chairman

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Susan S. Geiger  
Commissioner

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Nancy Brockway  
Commissioner

Attested by:

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Michelle A. Caraway  
Assistant Executive Director

## **Attachment D**

The Facility has been self-certified under the Maine renewable portfolio standard (a non-federal jurisdiction's renewable portfolio standard) as a Maine Class II renewable resource; however, there is no written proof of this certification.

## **Attachment E**

An affidavit by the Applicant attesting that the contents of the Application are accurate is attached.

**AFFIDAVIT**

The Undersigned applicant declares under penalty of perjury that contents of this application are accurate.

Applicant's Signature *Anthony B. Rosario* Date 2/24/15  
Printed Name Anthony B. Rosario

Subscribed and sworn before me this 25 Day of 2 (month) in the year

County of Hillsboro State of New Hampshire

*Jenny Nichols*  
Notary Public/Justice of the Peace

My Commission Expires OCT 16, 2018

**JENNY NICHOLS**  
Notary Public, New Hampshire  
My Commission Expires Oct 16, 2018

## **Attachment F**

Other pertinent information, an aerial photograph of the Facility, is attached.



Old Nash Dam Powerhouse

Old Nash Dam

Power Stillwater

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Google earth

Imagery Date: 9/18/2014 1998

43°05'10.43" N 72°12'22.14" W elev 347 m

Eye alt 1.04 km