March 14, 2008

Applicant
[Puc 2505.02 (a)]

Public Service Company of New Hampshire
P.O. Box 330
Manchester, NH 03105-0330

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Location of Facility
[Puc 2505.02 (b)]

PSNH Smith Station
99 Glen Avenue
Berlin, NH 03570

Latitude: 44° 27' 55" N
Longitude: 71° 11' 02" W

ISO-New England Asset Identification Number
[Puc 2505.02 (c)]

The ISO-NE asset identification number for Smith Station is 570.

NEPOOL Generation Information System Facility Code
[Puc 2505.02 (d)]

The NEPOOL Generation Information System (GIS) facility code for Smith Station is MSS570.

Description of Facility
[Puc 2505.02 (e)]

Smith Station is a single-unit hydroelectric generation facility located on the Androscoggin River in Berlin, NH. Constructed in 1948 under Federal Energy Regulatory Commission (FERC) License 2287, Smith Station traditionally had a rated flow of 2580 cubic feet per second and nameplate capacity of 15 MW. Smith Station was issued a FERC 30-year renewed license in 1994, included as Appendix A – FERC Operating License.

PSNH completed a capital investment project in 2006 to replace the original turbine ("runner") with a higher-efficiency design. Smith Station entered commercial operation with the new turbine and an improved gross generation capacity of 17.6 MW on December 15, 2006. The rated flow of 2580 cubic feet per second remains unchanged.

Demonstration of Necessary Regulatory Approvals [Puc 2505.02 (g)]

To summarily demonstrate completion of the necessary regulatory approval processes, Appendix A includes a copy of the FERC Operating License for Smith Station.

Proof of Approved Interconnection Study [Puc 2505.02 (h)]

No modifications were made to the existing approved electrical interconnection system at Smith Station during the turbine upgrade project.

Additional Information [Puc 2505.02 (j)]

An improvement in generation over historical baseline was observed and certified by FERC, as presented in Appendix B – FERC Order Certifying Incremental Hydropower Generation. The following information was filed in support of PSNH's request to FERC for certification of incremental hydropower production at Smith Station:

- A calculation of the historic average annual hydropower production baseline for the facility, along with the supporting water flow information and corresponding actual annual power production data for the period of 1993 through 2002.

- American Hydro's (i.e. the manufacturer's) calculation of efficiency improvement to the upgraded turbine and the anticipated annual generation for the Smith hydro facility based on the same water flow data used to support the calculation of the Historic Average Annual Hydropower Production baseline.

Calculations for annual hydroelectric generation with the original runner and the new runner were approved by FERC and are included as Appendix C – Existing Annual Energy Calculation and Appendix D – Expected Annual Energy Calculation, respectively. Incremental hydroelectric generation resulting from capital investment was calculated using the following information:

Estimated Annual Energy Generation (new turbine)	114,689.20 MWH
Estimated Annual Energy Generation (existing turbine)	105,991.37 MWH
Incremental Increase in Annual Energy Generation	8,697.83 MWH
Percent Increase in Generation Attributable to New Turbine	0.0821 (8.21%)

This FERC-certified improvement in generation over historical baseline is a Class I source as defined by Puc 2502.06; that is, "the incremental new production of electricity in any year from an eligible...hydroelectric generation facility...based on capital investments in efficiency improvement...pursuant to RSA 362-F:4 I(i)."

Puc 2502.06 and RSA 362-F:4 I(i) stipulate that Class I incremental production of electricity from a hydroelectric facility must be attributable to capital investments in efficiency improvement or additions of capacity rather than operational changes. Similarly, the FERC Order Certifying Incremental Hydropower Generation ("Order") states that "the Commission is required to certify the 'historic average annual hydropower production' and the 'percentage of average annual hydropower production at the facility attributable to the efficiency improvements or additions of capacity.'" Pursuant to these definitions, the Order certifies that 8.21% of average annual hydroelectric production is attributable to capital investment in efficiency improvement. Accordingly, PSNH requests eligibility to acquire Class I renewable energy certificates for 8.21% of annual hydroelectric production at Smith Station.

[Puc 2505.02 (f), (i)]

Not applicable.

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D.C. 20426

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UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Elizabeth Anne Moler, Chair;
Vicky A. Bailey, James J. Hoecker,
William L. Massey, and Donald F. Santa, Jr.

Public Service Company of New Hampshire) Project No. 2287-003

ORDER ISSUING NEW LICENSE

(Issued August 1, 1994)

Public Service Company of New Hampshire (Public Service) filed a license application under Part I of the Federal Power Act (FPA) for continued operation and maintenance of the 15 megawatt (MW) J. Brodie Smith Project, located on the Androscoggin River, in Coos County, New Hampshire. The Androscoggin River is a navigable waterway of the United States. 1/ Public Service proposes no new capacity and no new construction. We will issue the license.

BACKGROUND

Notice of the application has been published in the Federal Register. Motions to intervene were filed by the City of Berlin, New Hampshire (Berlin), the Town of Gorham, New Hampshire (Gorham), American Whitewater Affiliation and New England FLOW (American Whitewater), and a coalition of groups consisting of Conservation Law Foundation, Inc., Appalachian Mountain Club, American Rivers, Inc., and Trout Unlimited (Conservation Law). The comments received from interested agencies and individuals have been fully considered in determining whether to issue the license.

On October 19, 1992, the Commission issued a Notice of Intent to prepare an Environmental Impact Statement (EIS) for this project. The Commission's staff issued an FEIS for this project on November 30, 1993. The comments received from interested agencies and individuals have been fully considered in the FEIS in determining whether to issue the license. The staff also prepared a Safety and Design Assessment (SDA), which is available in the Commission's public file for this project.

Concurrently with this order, we are issuing an Order Granting Applications for New License, which addresses issues common to seven projects on the Androscoggin River. The discussion in that order is incorporated by reference herein.

1/ Public Service Company of New Hampshire, 27 FPC 826 (1962).

PROJECT DESCRIPTION

The existing project consists of a 24-foot-high masonry and concrete gravity U-shaped dam, a reservoir with a surface area of 8 acres, a spillway, a 500-foot-long power canal, an 18-foot-diameter, 1,450-foot-long steel penstock, a surge tank, a powerhouse containing one generating unit with an installed capacity of 15 MW, a 1,500-foot-long transmission line, and appurtenant facilities. The average annual energy production is 104.01 GWh. A more detailed project description can be found in ordering paragraph B(2) and in the FEIS.

APPLICANT'S PLANS AND CAPABILITIES

In accordance with Sections 10 and 15 of the FPA, we have evaluated Public Service's record as a licensee for these areas: (1) conservation efforts; (2) compliance history and ability to comply with the new license; (3) safe management, operation, and maintenance of the project; (4) ability to provide efficient and reliable electric service; (5) need for power; (6) transmission line improvements; and (7) project modifications.

1. Section 10(a)(2)(C): Conservation Efforts

The New Hampshire Public Utilities Commission (NHPUC) has statutory and regulatory authority regarding least cost planning and energy conservation in the state of New Hampshire. Public Service promotes electric conservation among its member systems in compliance with the requirements and policies of the NHPUC. Public Service's plans and activities to promote and achieve conservation of electric energy and to reduce the peak demand for generating capacity include: (1) energy analyses, (2) interruptable rates, (3) time of use rates for large power customers, and rates for thermal storage space and water heating, (4) implementation of demand-side management programs, (5) energy-efficient technologies, (5) weatherization, and (6) bill-stuffing of conservation information to its customers. Therefore, Public Service is making a good faith effort to conserve electricity in compliance with the requirements of the NHPUC.

2. Section 15(a)(2)(A): Compliance History and Ability to Comply with the New License

We have reviewed Public Service's license application in an effort to judge its ability to comply with the articles, terms and conditions of any license issued, and with other applicable provisions of this part of the FPA. Based on that review, we believe Public Service has or can acquire the resources and expertise necessary to carry out its plans and comply with all articles, terms and conditions of a new license.

3. Section 15(a)(2)(B): Safe Management, Operation, and Maintenance of the Project

Public Service has continuously operated the plant safely. Flood flows at the J. Brodie Smith Project are generally managed by operation of two wastegates located at the dam. In the event that flood flows exceed the capacity of the wastegates, flashboards located on the crest of the dam would be lowered. Although there is little public access in the river reach immediately below the dam, a horn is sounded by the operator prior to initially operating the wastegates. Public Service retains an independent consultant to make a complete inspection of the project facilities every five years in accordance with Part 12 of the Commission's regulations. Therefore, the project is safe for continued use and operation.

4. Section 15(a)(2)(C): Ability to Provide Efficient and Reliable Electric Service

The project is operated to derive maximum energy benefit from the river flow and is, therefore, operating in an efficient and reliable manner.

5. Section 15(a)(2)(D): Need for Power

Public Service's need for the electricity produced by the project is addressed in the FEIS. Based on that discussion, we conclude that Public Service's short-and long-term need for power exists to justify licensing the J. Brodie Smith Project.

6.

Public Service proposes no new development at the project but wants to continue to use the low-cost energy in its system. The transmission and distribution systems are designed to function with the project out-of-service, such that no operational or circuit loading impacts would occur. Therefore, the existing transmission system is sufficient, and no changes to the service affected by the project's operation would be necessary whether the Commission issues a license for the project or not.

7. Section 15(a)(2)(F): Project Modifications

Public Service proposes to modify the existing project operation of the J. Brodie Smith to enhance environmental and aesthetic resources affected by the project. Public Service doesn't propose any additional generating capacity for the project. The project, as presently constructed and as Public Service proposes to operate it, fully develops and uses the economical hydropower potential of the site.

8. Section 15(a)(3)(A) and (B): Compliance Record

Public Service has complied with the terms and conditions of the existing license and has made timely filings with the Commission.

WATER QUALITY CERTIFICATION

The New Hampshire Department of Environmental Services granted Public Service a water quality certification for the J. Brodie Smith Project on April 25, 1991. It prescribed a water quality monitoring program to be implemented no later than 1994 and continue for three years.

SECTION 18 - RESERVATION OF AUTHORITY TO PRESCRIBE FISHWAYS

The Department of Interior requests that any license issued for the J. Brodie Smith Project include a reservation of authority for Interior to prescribe the construction, operation, and maintenance of fishways pursuant to Section 18 of the FPA. Article 404 of this license reserves authority to the Commission to require the licensee to construct, operate and maintain such fishways as may be prescribed by Interior pursuant to Section 18 of the FPA.

RECOMMENDATIONS OF FEDERAL AND STATE FISH AND WILDLIFE AGENCIES

Section 10(j) of the FPA requires the Commission to include license conditions, based on recommendations of federal and state fish and wildlife agencies, for the protection of, mitigation of adverse impacts to, and enhancement of fish and wildlife resources. Pursuant to Section 10(j) of the FPA, the Commission staff made a determination that the recommendations of the federal and state fish and wildlife agencies are consistent with the purposes and requirements of Part I of the FPA and applicable law. The staff has addressed the concerns of the federal and state fish and wildlife agencies in the FEIS and the license includes conditions consistent with the recommendations of the agencies.

COMPREHENSIVE PLANS

Section 10(a)(2) of the FPA requires the Commission to also consider the extent to which a project is consistent with federal and state comprehensive plans for improving, developing, or conserving a waterway or waterways affected by the project. Under Section 10(a)(2) of the FPA, federal and state agencies filed 12 comprehensive plans that address various resources in

New Hampshire. Of these, staff identified and reviewed eight plans relevant to this project. 2/ No conflicts were found.

COMPREHENSIVE DEVELOPMENT

Sections 4(e) and 10(a)(1) of the FPA require the Commission to give equal consideration to all uses of the waterway on which a project is located. When the Commission reviews a proposed project, the recreational, fish and wildlife resources, and other nondevelopmental values of the involved waterway are considered equally with power and other developmental values. In determining whether, and under what conditions, a hydropower license should be issued, the Commission must weigh the various economic and environmental tradeoffs involved in the decision.

Based on an independent review and evaluation of the existing J. Brodie Smith Project, agency recommendations, and the no-action alternative as documented in the FEIS, we have selected issuing a new license for the J. Brodie Smith Project with additional enhancement measures as the preferred option. We have selected this option because: (1) the required measures would protect and enhance the water quality, fishery resources and aesthetics; and (2) the electricity generated from a renewable resource would be beneficial because it would continue to replace the use of fossil-fueled, steam-electric generating plants, thereby conserving nonrenewable energy resources and reducing atmospheric pollution.

The existing J. Brodie Smith Project has an installed capacity of 15.0 MW and generates about 104.26 GWh of energy per year. The annual operating cost of the existing project is about $970,000 (9.30 mills/kWh). The 30-year levelized annual value of the project's power, based on the cost of equivalent alternative replacement power in the region, is about $7,914,000 (75.91 mills/kWh), in 1994 dollars. Therefore, the levelized net

2/ Wild and scenic rivers for New Hampshire, New Hampshire Office of State Planning, 1977; New Hampshire outdoors, 1988-1993: State comprehensive outdoor recreation plan, New Hampshire Office of State Planning, 1989; New Hampshire wetlands priority conservation plan, New Hampshire Office of State Planning, 1989; Public access plan for New Hampshire's lakes, ponds, sand rivers, New Hampshire Office of State Planning, 1991; New Hampshire rivers management and protection plan, State of New Hampshire, 1991; North American Waterfowl Management Plan, U.S. Fish and Wildlife Service, 1986; The nation-wide rivers inventory, National Park Service, 1982; Fisheries USA: The recreational fisheries Policy of the U.S. Fish and Wildlife Service, U.S. Fish and Wildlife Service, undated.

annual economic benefit of the existing project without any enhancement measures would be about $6,944,000 (66.61 mills/kWh).

The enhancement measures being required include a minimum flow of 20 cfs into the bypassed reach of the dam, reserving additional lands for recreation, protection of wildlife and improvement of the aesthetics of the project. The 20-cfs minimum flow would reduce the project's existing energy generation by about 0.59 GWh annually, and the project's 30-year levelized net economic benefits by about $40,000 per year. Even with the enhancement measures, the proposed project would provide about 103.67 GWh of clean and renewable energy annually, at a cost significantly below the cost of equivalent replacement power.

We believe that issuing a license for the J. Brodie Smith Project, with the required enhancement measures and other special license conditions, would permit the best comprehensive development of the Androscoggin River. The clean energy that would be produced by the project would continue to displace fossil-fueled power generation, thereby conserving nonrenewable energy resources and reducing the emissions of noxious gases that contribute to atmospheric pollution and global warming.

SUMMARY OF FINDINGS

Background information, analysis of impacts and support for related license articles are contained in the FEIS.

The design of this project is consistent with the engineering standards governing dam safety. The project will be safe if operated and maintained in accordance with the requirements of this license. Analysis of related issues is provided in the SDA.

We conclude that the project would not conflict with any planned or authorized development, and would be best adapted to comprehensive development of the waterway for beneficial public uses.

The Commission orders:

(A) This license is issued to Public Service Company of New Hampshire (Licensee), for a period of 30 years, effective the first day of the month in which this license is issued, to operate and maintain the J. Brodie Smith Project. This license is subject to the terms and conditions of the FPA, which is incorporated by reference as part of this license, and subject to the regulations the Commission issues under the provisions of the FPA.

(B) The project consists of:

(1) All lands, to the extent of the Licensee's interests in those lands shown by Exhibit G:

Exhibit G-	FERC No. 2287-	Showing
1	16	Project Map

(2) Project works consisting of: (a) a masonry and concrete gravity U-shaped dam, about 500 feet long with a maximum height of about 24 feet, with (1) a spillway section, 170 feet long, with a crest elevation of 1002.96 feet (USGS), topped with hinged steel flashboards, about 6.7 feet high; separated by (2) a two S. M. Smith steel roller-type sluice gates, each 17 feet high by 25 feet wide, with a sill elevation of 993.0 feet (USGS), (3) a second spillway section, 256 feet long, with a masonry crest elevation of 1006.7 feet (USGS), topped with pin-supported wooden flashboards, about 3 feet high; (b) an intake structure, consisting of (1) a 500-foot-long by 100-foot-wide power canal, (2) a 18-foot-diameter by 1,450-foot-long steel penstock, and (3) a 1.15-million-gallon steel surge tank, measuring 70 feet in diameter by 40 feet high; (c) a powerhouse, 65 feet long by 53 feet wide, with one hydroelectric generating unit with (1) a rated capacity of 15,000 kilowatts (kW), (2) a hydraulic capacity of 3,000 cfs, and (3) a normal operating head of 88 feet; (d) a reservoir with a water surface area of 8 acres, at a normal headwater elevation of 1009.7 feet (USGS); (e) a 115-kV, 1,500-foot-long primary transmission line; and (f) appurtenant facilities.

The project works generally described above are more specifically shown and described by those portions of Exhibits A and F shown below:

Exhibit A - The following sections of Exhibit A filed December 26, 1991:

The dam, turbines, generators and electrical single-line-diagram as described on pages A-1 through A-10.

Exhibit F - The following Exhibit F drawings, filed on December 26, 1991:

Exhibit	FERC No.	Showing
F-1	2287-1	Dam Plan and Sections
F-2	2287-2	Main Dam Elevation & Sections
F-3	2287-3	Main Dam Gate Piers
F-4	2287-4	Plan-Power Canal & Intake
F-5	2287-5	Sections-Canal Wall
F-6	2287-6	Intake-Stanchion Section
F-7	2287-7	Intake Plan-Elevation-Section
F-8	2287-8	Intake-Bascule Gate
F-9	2287-9	Details Penstock-Surge Tank
F-10	2287-10	Powerhouse Plan Generator Floor
F-11	2287-11	Powerhouse Basement Floor Plan
F-12	2287-12	Powerhouse-Longitudinal Section Centerline of Unit
F-13	2287-13	Powerhouse-Transverse Section Centerline of Unit
F-14	2287-14	Powerhouse-North Elevation

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

(C) The Exhibits A, F, and G described above are approved and made part of the license.

(D) This license is subject to the articles set forth in Form L-3, (October 1975), entitled "Terms and Conditions of License for Constructed Major Project Affecting Navigable Waters of the U.S.," and the following additional articles.

Article 201. The Licensee shall pay the United States an annual charge, effective the first day of the month in which this license is issued, for the purpose of reimbursing the United States for the cost of administration of Part I of the FPA as determined by the Commission. The authorized installed capacity for that purpose is 20,000 horsepower.

Article 202. Pursuant to Section 10(d) of the FPA, a specified reasonable rate of return upon the net investment in the project shall be used for determining surplus earnings of the project for the establishment and maintenance of amortization reserves. The Licensee shall set aside in a project amortization reserve account at the end of each fiscal year one half of the project surplus earnings, if any, in excess of the specified rate of return per annum on the net investment. To the extent that there is a deficiency of project earnings below the specified rate of return per annum for any fiscal year, the Licensee shall

deduct the amount of that deficiency from the amount of any surplus earnings subsequently accumulated, until absorbed. The Licensee shall set aside one-half of the remaining surplus earnings, if any, cumulatively computed, in the project amortization reserve account. The Licensee shall maintain the amounts established in the project amortization reserve account until further order of the Commission.

The specified reasonable rate of return used in computing amortization reserves shall be calculated annually based on current capital ratios developed from an average of 13 monthly balances of amounts properly includable in the licensee's long-term debt and proprietary capital accounts as listed in the Commission's Uniform System of Accounts. The cost rate for such ratios shall be the weighted average cost of long-term debt and preferred stock for the year, and the cost of common equity shall be the interest rate on 10-year government bonds (reported as the Treasury Department's 10 year constant maturity series) computed on the monthly average for the year in question plus four percentage points (400 basis points).

Article 203. If the Licensee's project was directly benefitted by the construction work of another licensee, a permittee, or the United States on a storage reservoir or other headwater improvement during the term of the original license (including extensions of that term by annual licenses), and if those headwater benefits were not previously assessed and reimbursed to the owner of the headwater improvement, the Licensee shall reimburse the owner of the headwater improvement for those benefits, at such time as they are assessed. The benefits will be assessed in accordance with Subpart B of the regulations.

Article 204. The Commission reserves authority, in the context of a rulemaking proceeding or a proceeding specific to this license, to require the Licensee at any time to conduct studies, make financial provisions, or otherwise make reasonable provisions for decommissioning of the project. The terms of this article shall be effective unless the Commission, in Docket No. RM93-23, finds that the Commission lacks statutory authority to require such actions, or otherwise determines that the article should be rescinded.

Article 205. The Commission reserves authority, in the context of any licensing, relicensing, or license or exemption amendment proceeding involving the upstream Androscoggin River Basin projects located at Mooselookmeguntic Lake, Richardson Lake, the Aziscohos Project No. 4026, the Errol Project No. 3133, the Pontook Project No. 2861, or the Kennebago Project No. 4413, to require the Licensee, in a proceeding specific to this license, to conduct studies, modify minimum flow releases, or otherwise make reasonable provisions for modifying project

facilities or operation as necessary to mitigate or avoid cumulative effects identified in environmental analyses of these upstream projects.

Article 401. The Licensee shall operate the project in a run-of-river mode for the protection of fish and wildlife resources and water quality in the Androscoggin River. The Licensee shall at all times act to minimize the fluctuation of the reservoir surface elevation by maintaining a discharge from the project so that, at any point in time, flows, as measured immediately downstream from the project tailrace, approximate the sum of inflows to the project reservoir. Run-of-river operation may be temporarily modified if required by operating emergencies beyond the control of the Licensee, or for short periods upon mutual agreement between the Licensee, the New Hampshire Fish and Game Department, and the U.S. Fish and Wildlife Service. If the flow is so modified, the Licensee shall notify the Commission as soon as possible, but no later than 10 days after each such incident.

Article 402. The Licensee shall release from the J. Brodie Smith dam into the Androscoggin River a minimum flow of 20 cubic feet per second, as measured immediately below the J. Brodie Smith dam, or inflow to the project reservoir, whichever is less, for the protection and enhancement of fish and wildlife resources and water quality in the bypassed reach of the Androscoggin River. This flow may be temporarily modified if required by operating emergencies beyond the control of the Licensee, or for short periods upon agreement between the Licensee, the New Hampshire Fish and Game Department, and the U.S. Fish and Wildlife Service. If the flow is so modified, the Licensee shall notify the Commission as soon as possible, but no later than 10 days after each such incident.

Article 403. Within six months from the effective date of the license, the Licensee shall file with the Commission for approval, a plan to monitor run-of-river operation and minimum flows of the project, as stipulated by articles 401 and 402, respectively, and to describe how flows will be maintained below the project when the impoundment is refilled after any maintenance and/or repairs.

The plan shall include, but not be limited to, a schedule for installing the monitoring equipment, the proposed location, design, and calibration of the monitoring equipment, the method of flow data collection, and a provision for providing flow data to the consulted agencies, within 30 days from the date of the agencies request for the data.

The Licensee shall prepare the plan after consultation with the U.S. Geological Survey, the U.S. Fish and Wildlife Service, the New Hampshire Fish and Game Department. The Licensee shall

include with the plan documentation of consultation and copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The Licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations prior to filing the plan with the Commission. If the Licensee does not adopt a recommendation, the filing shall include the Licensee's reasons, based on project-specific information.

The Commission reserves the right to make changes to the plan. Upon Commission approval of the plan, the Licensee shall implement the plan including any changes required by the Commission.

If the results of monitoring indicate that changes in project structures or operations are necessary to ensure run of river operation or maintenance of minimum flows, the Commission may direct the Licensee to modify project structures or operations.

Article 404. Authority is reserved to the Commission to require the licensee to construct, operate, and maintain, or provide for the construction, operation, and maintenance of, such fishways as may be prescribed by the Secretary of the Interior.

Article 405. Within six months of the effective date of the license, the Licensee shall file with the Commission for approval, a plan to monitor dissolved oxygen (DO) levels and temperature of the Androscoggin River upstream and downstream of the project. The purpose of this monitoring plan is to ensure that stream flows, as measured immediately upstream of the impoundment, downstream of the project dam, and downstream of the project tailrace, maintain a DO content of no less than 75 percent saturation.

The monitoring plan shall include a schedule for:

(1) implementation of the monitoring plan;

(2) consultation with the appropriate federal and state agencies concerning the results of the monitoring; and

(3) filing the results, agency comments, and Licensee's response to agency comments with the Commission.

The Licensee shall prepare the monitoring plan after consultation with the New Hampshire Department of Environmental Services, the New Hampshire Fish and Game Department, and the U.S. Fish and Wildlife Service. The Licensee shall include with the plan documentation of consultation and copies of comments and recommendations on the completed monitoring plan after it has

been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the monitoring plan. The Licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations prior to filing the monitoring plan with the Commission. If the Licensee does not adopt a recommendation, the filing shall include the Licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the monitoring plan. Upon Commission approval, the Licensee shall implement the monitoring plan, including any changes required by the Commission.

If the results of monitoring indicate that changes in project structures or operations are necessary to ensure maintenance of the state DO standard, the Commission may direct the Licensee to modify project structures or operations.

Article 406. The Licensee shall implement the provisions of the "Programmatic Agreement Among the Federal Energy Regulatory Commission, the Advisory Council on Historic Preservation, and the New Hampshire Division for Historic Preservation, for Managing Historic Properties Likely to be Affected by Continuing to Operate the Sawmill Project, Project No. 2422, Cross Power Project, Project No. 2326, Cascade Project, Project No. 2327, Gorham Project, Project No. 2311, Shelburne Project, Project No. 2300, J. Brodie Smith Project, Project No. 2287, and Gorham Project, Project No. 2288, All Located on the Androscoggin River" executed on November 18, 1993. The Commission reserves the authority to require changes to the Cultural Resources Management Plan or plans at any time during the term of the license.

Article 407. Within six months from the effective date of this license the Licensee shall file revised project boundary drawings that incorporate the piece of land between the penstock and the bypassed reach into the project boundary and reserve it for future public use if and when Berlin develops a specific proposal for the site.

Article 408. Within six months from the effective date of this license, the Licensee shall develop and file, for Commission approval, a plan for aesthetic enhancements.

The plan must include, but not be limited to:

(1) provisions for painting the surge tank and penstock with a color that blends with the surrounding environment;

(2) provisions to install plant material that screens the view of the surge tank from Route 16 and;

(3) a schedule for completing items (1) and (2).

The Licensee shall prepare the plan after consultation with the City of Berlin, Parks and Recreation Department and the National Park Service. The Licensee shall include with the plan, documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The Licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the Licensee does not adopt a recommendation, the filing shall include the Licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. Upon Commission approval, the Licensee shall implement the plan, including any changes required by the Commission.

Article 409. Within one year from the effective date of this license, the Licensee shall develop and file, for Commission approval, a land protection plan. The plan shall be designed to protect the aesthetics and public access of all undeveloped land between the bypassed reach and the project penstock at the J. Brodie Smith Project.

The plan shall include, but not be limited to:

(1) maps delineating the protected land area; and

(2) provisions for: (a) maintaining prescribed minimum-width buffer zones, no tree-cutting, public roads, and private property; (c) minimizing openings in shoreline vegetation where future recreational facility development requires construction closer to the shoreline than the prescribed minimum-width buffer zone; (d) maintaining the project transmission line right-of-ways in a way that minimizes adverse aesthetic effects caused by the clearing of vegetation; (e) landscape screening, on an as-needed basis, for all storage buildings, parking areas, and other adverse visual features that are visible from the shoreline, impoundment, or other adjacent critical viewpoints. Further, the licensee should conduct a periodic inspection of project lands to identify any features in need of screening or general clean-up, and subsequently take remedial action.

The Licensee shall prepare the plan after consultation with the City of Berlin, New Hampshire Fish and Game Department, and the National Park Service. The Licensee shall include with the plan, documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The

Licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the Licensee does not adopt a recommendation, the filing shall include the Licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. Upon Commission approval, the Licensee shall implement the plan, including any changes required by the Commission.

Article 410. (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 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 use and occupancies for which it grants permission, and to monitor the use of, and 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, canceling the permission to use and occupy the project lands and waters and requiring the removal of any non-complying structures and facilities.

(b) The type 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 and 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 use 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 title 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 certification 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 submit a letter to the Director, Office of Hydropower Licensing, 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 insure 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.

(g) The authority granted to the Licensee under this article shall not apply to any part of the public lands and reservations of the United States included within the project boundary.

(F) The Licensee shall serve copies of any Commission filing required by this order on any entity specified in this order to be consulted on matters related to that filing. Proof of service on these entities must accompany the filing with the Commission.

(G) This order is final unless a request for rehearing is filed within 30 days of the date of issuance of this order, as provided in Section 313 of the FPA. The filing of a request for rehearing 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 ordered by the Commission. The Licensee's failure to file a request for rehearing shall constitute acceptance of this order.

By the Commission.

(S E A L)

Linwood A. Watson, Jr.
Acting Secretary.

C133

118 FERC ¶ 62,217

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Public Service Company of New Hampshire — Project No. 2287-043

ORDER CERTIFYING INCREMENTAL HYDROPOWER GENERATION FOR PRODUCTION TAX CREDIT

(Issued March 22, 2007)

On October 25, 2006, Public Service Company of New Hampshire, licensee for the J. Brodie Smith Hydroelectric Project, FERC No. 2287, filed a request for certification for a renewable energy production tax credit. The request is based on efficiency improvements due to replacing the existing turbine with a new, more efficient turbine that went online by November 27, 2006. The licensee made the filing pursuant to Internal Revenue Code section 45.[1] The project is located on the Androscoggin River in Coos County, New Hampshire.

Section 1301 of the Energy Policy Act of 2005 (EPAct)[2] amended section 45 to apply the tax credit to incremental production gains from efficiency improvements or capacity additions to existing hydroelectric facilities placed into service after August 8, 2005, and before January 1, 2009. Under EPAct section 1301(c), the Commission is required to certify the "historic average annual hydropower production" and the "percentage of average annual hydropower production at the facility attributable to the efficiency improvements or additions of capacity" placed in service during that time period. Based on the above, we are issuing this certification order.

The Director orders:

(A) Based on our review of the information provided by the licensee, we certify the following:

[1] I.R.C. § 45 (2000).
[2] Pub. L. No. 109-58, 119 Stat. 594 (2005) and Pub. L. No. 109-432, Title II, §201, 120 Stat. 2922 (2006).

Type of Improvement	Improved Efficiency Due to Turbine Replacement
Historical Generation Baseline (MWh)	105,991.37
Generation with Improvements (MWh)	114,689.20
Incremental Generation (MWh)	8,697.83
Percentage of Generation Due to Improvements (%)	8.21

(B) 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 C.F.R. §385.713.

Mohamad Fayyad
Engineering Team Lead
Division of Hydropower Administration and Compliance

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON D.C. 20426

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300

JAMES J KEARNS
SENIOR ENGINEER
Public Service Company of New Hampshire
PO Box 330
Manchester NH 03105-0330

P-2287

03105$0330 B503

Annual Energy Calculation for J.B. Smith Hydroplant

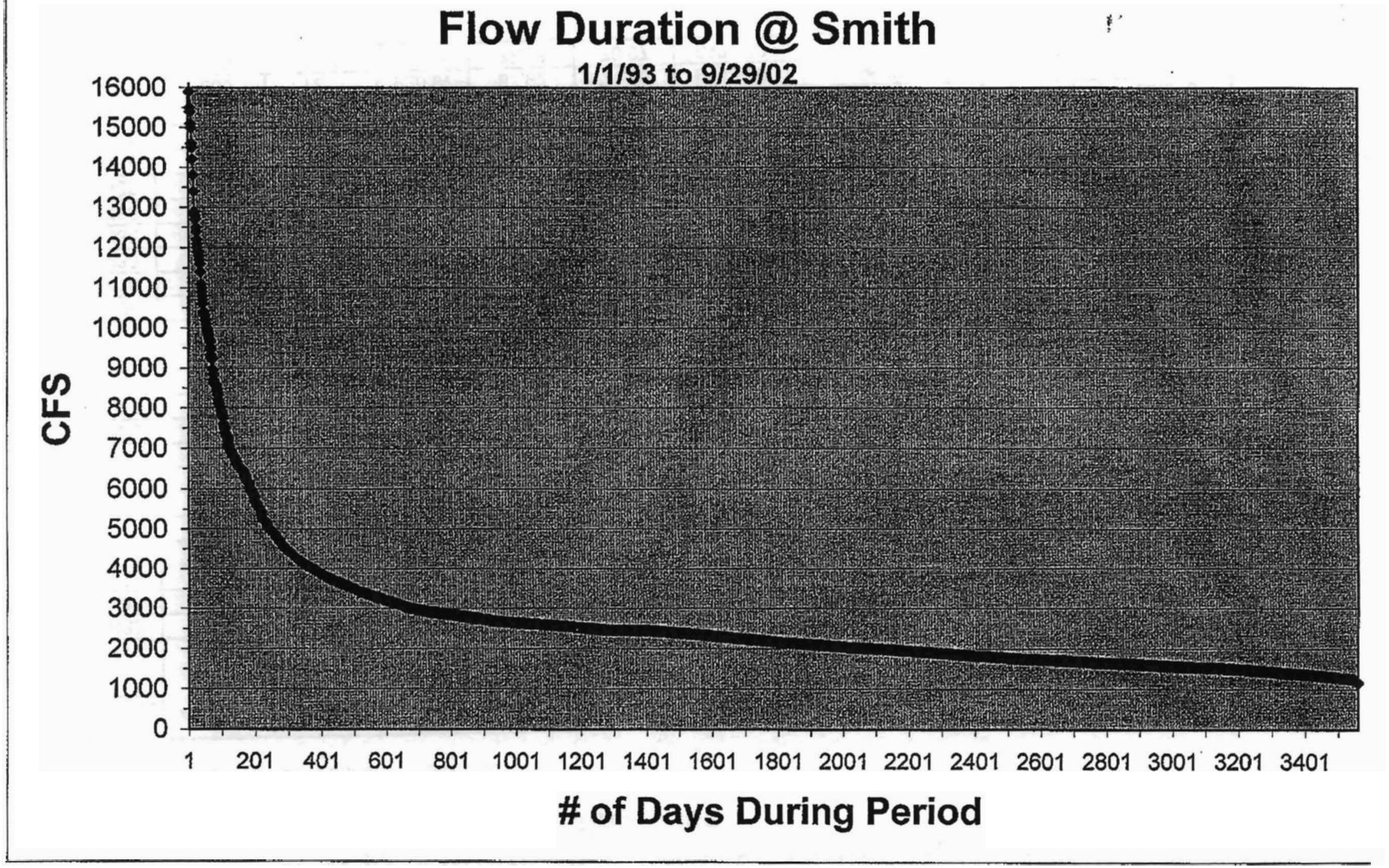
Existing Case

Headwater Elevation Assumed Constant at 1009.7 ft.

% of Year	Hours	Available Flow	Flow used by turbine	Tailwater Elevation	Calculated Net Head	Turbine Efficiency	Turbine Output	Assumed Generator Efficiency	Generator Output	Energy Production
%	hrs	cfs	cfs	ft.	ft.	%	HP	%	kW	MW-hrs
5	438	8320	2580	924.88	81.53	81.26	19401.21	96.00	13888.78	6083.29
10	438	4770	2580	923.42	82.99	82.24	19986.69	96.00	14307.91	6266.87
15	438	3670	2580	922.75	83.65	82.66	20250.31	96.00	14496.63	6349.52
20	438	3150	2580	922.41	84.00	82.88	20388.40	96.00	14595.49	6392.82
25	438	2850	2580	922.20	84.21	83.01	20471.93	96.00	14655.28	6419.01
30	438	2660	2580	922.06	84.35	83.10	20526.28	96.00	14694.19	6436.05
35	438	2560	2560	921.99	84.47	83.50	20494.43	96.00	14671.39	6426.07
40	438	2460	2460	921.91	84.79	85.15	20159.88	96.00	14431.90	6321.17
45	438	2390	2390	921.86	85.01	86.33	19909.78	96.00	14252.85	6242.75
50	438	2250	2250	921.75	85.44	88.40	19290.90	96.00	13809.81	6048.70
55	438	2130	2130	921.66	85.79	88.30	18315.82	96.00	13111.78	5742.96
60	438	2030	2030	921.58	86.08	86.23	17103.85	96.00	12244.17	5362.95
65	438	1930	1930	921.50	86.35	84.19	15926.96	96.00	11401.67	4993.93
70	438	1820	1820	921.42	86.64	82.15	14704.01	96.00	10526.19	4610.47
75	438	1740	1740	921.35	86.85	80.67	13837.40	96.00	9905.80	4338.74
80	438	1660	1660	921.29	87.05	79.26	12999.60	96.00	9306.05	4076.05
85	438	1590	1590	921.23	87.22	78.09	12291.31	96.00	8799.01	3853.96
90	438	1530	1530	921.18	87.36	77.09	11696.21	96.00	8372.99	3667.37
95	438	1440	1440	921.11	87.57	75.46	10800.29	96.00	7731.63	3386.45
96	87.6	1370	1370	921.05	87.72	73.93	10084.33	96.00	7219.09	632.39
97	87.6	1340	1340	921.02	87.79	73.21	9775.83	96.00	6998.24	613.05
98	87.6	1310	1310	921.00	87.85	72.45	9463.57	96.00	6774.71	593.46
99	87.6	1280	1280	920.97	87.92	71.60	9145.20	96.00	6546.79	573.50
100	87.6	1260	1260	920.96	87.96	70.97	8927.30	96.00	6390.80	559.83

Sum 8760 hours in a year

Estimated Annual Energy Generation 105991.37 MW-hrs


Flow Duration @ Smith
1/1/93 to 9/29/02
CFS
16000
15000
14000
13000
12000
11000
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
1
201
401
601
801
1001
1201
1401
1601
1801
2001
2201
2401
2601
2801
3001
3201
3401
# of Days During Period

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	Average thru '05	Avg. thru '02
JANUARY	7,198,052	7,705,912	8,142,732	12,114,000	10,479,000	7,550,000	7,870,000	11,622,000	6,828,000	4,818,000	4,830,000	11,260,000	9,595,000	12,088,000	8,462,592	8,432,770
FEBRUARY	7,934,440	9,035,700	9,737,040	10,971,000	10,196,000	9,767,000	8,979,000	10,928,000	7,175,000	4,620,000	4,192,000	10,915,000	9,436,000	10,729,000	8,760,475	8,934,318
MARCH	10,644,020	9,965,712	11,648,492	11,121,000	11,991,000	11,994,000	11,937,000	11,992,000	8,979,000	6,064,000	6,463,000	11,914,000	9,691,000	11,716,000	10,338,786	10,633,622
APRIL	11,025,848	10,024,592	6,107,580	11,330,000	11,556,000	11,466,000	11,476,000	10,730,000	9,185,000	10,703,000	10,474,000	11,598,000	10,623,000	10,034,000	10,483,771	10,359,402
MAY	7,881,700	12,171,472	8,348,460	11,782,000	11,597,000	9,993,000	8,282,000	12,491,000	8,535,000	11,451,000	8,153,000	9,164,700	11,307,000	9,526,000	10,087,487	10,251,263
JUNE	10,826,712	10,501,980	6,172,192	10,321,000	10,860,000	10,447,000	6,876,000	7,986,000	7,089,000	9,994,000	6,262,000	5,861,300	10,642,000	11,062,000	8,756,860	9,107,388
JULY	5,527,472	7,872,552	4,454,120	13,030,000	10,046,000	11,813,000	7,094,000	6,801,000	5,761,000	8,317,000	5,331,000	6,194,900	7,107,320	6,112,000	7,719,182	8,171,614
AUGUST	7,643,160	8,710,120	4,871,080	8,555,000	5,884,000	8,572,000	4,260,000	6,244,000	4,252,000	4,102,540	3,795,000	7,127,000	7,180,000	0	6,245,838	6,309,390
SEPTEMBER	7,635,780	7,121,692	3,742,200	8,014,000	10,229,000	7,312,000	8,264,000	2,996,000	4,972,000	5,518,000	6,654,000	5,935,100	6,212,250	0	6,508,156	6,580,467
OCTOBER	8,873,196	8,305,000	6,860,964	7,487,000	7,156,000	7,058,000	9,978,000	6,502,000	5,673,000	5,808,000	8,136,000	8,688,000	10,730,000	0	7,785,782	7,368,116
NOVEMBER	9,268,996	6,029,860	10,859,964	6,885,000	7,964,000	5,712,000	12,054,000	6,425,000	5,010,000	5,924,000	11,477,000	7,358,000	11,440,000	0	8,183,663	7,611,262
DECEMBER	7,705,680	5,508,632	10,307,652	11,270,000	7,770,000	7,165,000	11,655,000	6,145,000	4,761,000	4,701,000	11,162,990	9,176,000	10,462,000	0	8,291,381	7,698,696
	102,165,058	102,951,024	91,252,476	122,820,000	115,728,000	108,839,000	108,725,000	100,862,000	79,220,000	82,020,540	88,929,990	105,172,000	114,426,570	71,267,000	101,623,974	101,458,310
YTD NET CF	73.6%	74.1%	65.7%	87.9%	83.0%	78.0%	78.0%									

Appendix D

Expected Annual Energy Calculation

Annual Energy Calculation for J.B. Smith Hydroplant

American Hydro Option 3, Mid Flow

Headwater Elevation Assumed Constant at 1009.7 ft.

% of Year	Hours	Available Flow	Flow used by turbine	Tailwater Elevation	Calculated Net Head	Turbine Efficiency	Turbine Output	Assumed Generator Efficiency	Generator Output	Energy Production
%	hrs	cfs	cfs	ft.	ft.	%	HP	%	kW	MW-hrs
5	438	8320	3000	924.88	80.37	89.02	24362.24	96.00	17440.25	7638.83
10	438	4770	3000	923.42	81.83	89.25	24870.95	96.00	17804.42	7798.33
15	438	3670	3000	922.75	82.49	89.36	25101.92	96.00	17969.76	7870.76
20	438	3150	3000	922.41	82.84	89.42	25223.29	96.00	18056.65	7908.81
25	438	2850	2850	922.20	83.48	91.22	24635.29	96.00	17635.71	7724.44
30	438	2660	2660	922.06	84.14	92.22	23428.54	96.00	16771.84	7346.06
35	438	2560	2560	921.99	84.47	91.71	22509.71	96.00	16114.07	7057.96
40	438	2460	2460	921.91	84.79	90.64	21461.06	96.00	15363.37	6729.16
45	438	2390	2390	921.86	85.01	89.83	20716.54	96.00	14830.39	6495.71
50	438	2250	2250	921.75	85.44	88.07	19219.04	96.00	13758.37	6026.17
55	438	2130	2130	921.66	85.79	86.30	17900.01	96.00	12814.12	5612.58
60	438	2030	2030	921.58	86.08	84.67	16793.91	96.00	12022.29	5265.76
65	438	1930	1930	921.50	86.35	83.09	15717.88	96.00	11251.99	4928.37
70	438	1820	1820	921.42	86.64	81.32	14556.41	96.00	10420.53	4564.19
75	438	1740	1740	921.35	86.85	79.72	13674.29	96.00	9789.04	4287.60
80	438	1660	1660	921.29	87.05	78.31	12844.92	96.00	9195.32	4027.55
85	438	1590	1590	921.23	87.22	76.78	12085.54	96.00	8651.70	3789.45
90	438	1530	1530	921.18	87.36	75.31	11425.47	96.00	8179.18	3582.48
95	438	1440	1440	921.11	87.57	72.68	10402.99	96.00	7447.21	3261.88
96	87.6	1370	1370	921.05	87.72	70.17	9571.44	96.00	6851.93	600.23
97	87.6	1340	1340	921.02	87.79	68.92	9202.20	96.00	6587.60	577.07
98	87.6	1310	1310	921.00	87.85	67.57	8826.11	96.00	6318.36	553.49
99	87.6	1280	1280	920.97	87.92	66.10	8442.45	96.00	6043.71	529.43
100	87.6	1260	1260	920.96	87.96	65.01	8178.58	96.00	5854.82	512.88

Sum 8760 hours in a year

Estimated Annual Energy Generation 114689.20 MW-hrs