

II. Suggested Format for the HYDRO General Permit Notice of Intent (NOI):

Request for General Permit Authorization to Discharge Wastewater Notice of Intent (NOI) to be covered by Hydroelectric Generating Facilities General Permit (HYDROGP) No. MAG360000 or NHG360000

Indicate Applicable General Permit for Discharge(s): MAG360000 NHG360000

A. Facility Information

1. Facility Location	Name: GORHAM HYDROELECTRIC STATION	
	Street: STATION ROAD/ROUTE 2	
	City: GORHAM	State: NEW HAMPSHIRE
	Zip: 03581	SIC Code: 4911
	Latitude: N44° 23' 19.5"	Longitude: W71° 09' 51.7"
	Type of Business: ELECTRIC POWER GENERATION	
2. Facility Mailing Address (if different from Location)	Street: 670 N. COMMERCIAL ST SUITE 204	
	City: MANCHESTER	State: NEW HAMPSHIRE
	Zip: 03101	
3. Facility Owner	Name: PATRIOT HYDRO, LLC	Email: SILLER@PATRIOTHYDRO.COM
	Street: 670 N. COMMERCIAL ST SUITE 204	Telephone: (603) 540 - 8238

	City: MANCHESTER	State: NEW HAMPSHIRE
	Contact Person: SEAN ILLER	Zip: 03101
4. Facility Operator (if different from above)	Name:	Email:
	Street:	Telephone:
	City:	State:
	Zip:	
5. Current Permit Status	Has prior HYDROGP coverage been granted for the discharge(s) listed in the NOI?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	Permit number (if yes): NHG360013	
	Is the facility covered under an Individual Permit?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	Is there a pending NPDES application of file with EPA for the discharge(s)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	Date of Submittal (if yes): Click or tap to enter a date.	Permit Number (if known):
	Attach a topographic map indicating the locations. of the facility and outfall(s) to the receiving water	<input checked="" type="checkbox"/> Map Attached
	Number of turbines: 4	
	Combined turbine discharge (installed capacity) at:	Maximum capacity? 1670 cfs Minimum capacity? 880 cfs
	Is this facility operated as a pump storage project?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

B. Discharge Information

1. Name of Receiving Water(s): ANDROSCOGGIN RIVER		<input checked="" type="checkbox"/> Freshwater <input type="checkbox"/> Marine
2. Waterbody classification: <input type="checkbox"/> Class A <input checked="" type="checkbox"/> Class B <input type="checkbox"/> Class SA <input type="checkbox"/> Class SB		
3. Is the receiving water is listed in the State’s Integrated List of Waters (i.e., CWA Section 303(d))?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
4. If the applicant answered yes to B.2, has the applicant identified the designated uses that are impaired, any pollutants indicated, and whether a final TMDL is available for any of the indicated pollutants in a separate attachment to the NOI?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5. Attach a line drawing or flow schematic showing water flow through the facility including location of intake(s), operations contributing to effluent flow, treatment units, outfalls, and receiving water(s).		<input checked="" type="checkbox"/> Line Drawing Attached
6. List each outfall (numbered sequentially) discharging effluent from the following categories and provide an estimate of the average monthly flow (in gallons per day) for each discharge type. See Parts 1.1 through 1.5 (for MA) or Parts 2.1 through 2.5 (for NH) for descriptions and permit conditions for each discharge type.		
Equipment-related cooling water	Outfalls:	gpd
Equipment and floor drain water	Outfalls:	gpd
Maintenance-related water	Outfalls: 1, 2, 3	147.94 gpd
Facility maintenance-related water during flood/high water events	Outfalls:	gpd
Equipment-related backwash strainer water	Outfalls:	gpd

7. For each outfall listed above, provide the following information (attach additional sheets if necessary). Outfalls may be eligible for alternative pH effluent limits. See Parts 1.8 and 2.8 of the permit for additional information. Contact MassDEP or NHDES to determine the required information and protocol to request alternative pH effluent limits.		
Outfall No. 001	Latitude: N 44° 23' 20.6"	Longitude: W 71° 09' 53.1"
	Discharge is: <input type="checkbox"/> Continuous <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Seasonal	
	Maximum Daily Flow .000049 MGD	Average Monthly Flow .000025 MGD
	Maximum Daily Temperature Varies °F	Average Monthly Temperature Varies °F
	Maximum Daily Oil & Grease 15 mg/L	Average Monthly Oil & Grease >0 <15 mg/L
	Maximum Monthly pH 8.0 s.u.	Minimum Monthly pH 6.5 s.u.
	Alternative pH limits requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	State approval attached? <input type="checkbox"/> Yes <input type="checkbox"/> No
Outfall No. 002	Latitude: N 44° 23' 19.9"	Longitude: W 71° 09' 52.2"
	Discharge is: <input type="checkbox"/> Continuous <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Seasonal	
	Maximum Daily Flow .000049 MGD	Average Monthly Flow .000025 MGD
	Maximum Daily Temperature Varies °F	Average Monthly Temperature Varies °F
	Maximum Daily Oil & Grease 15 mg/L	Average Monthly Oil & Grease >0 <15 mg/L
	Maximum Monthly pH 8.0 s.u.	Minimum Monthly pH 6.5 s.u.
	Alternative pH limits requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	State approval attached? <input type="checkbox"/> Yes <input type="checkbox"/> No

Outfall No. 003	Latitude: N 44 23' 19.9"	Longitude: W 71 09' 52.2"
	Discharge is: <input type="checkbox"/> Continuous <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Seasonal	
	Maximum Daily Flow .000049 MGD	Average Monthly Flow .000025 MGD
	Maximum Daily Temperature Varies °F	Average Monthly Temperature Varies °F
	Maximum Daily Oil & Grease 15 mg/L	Average Monthly Oil & Grease >0 <15 mg/L
	Maximum Monthly pH 8.0 s.u.	Minimum Monthly pH 6.5 s.u.
	Alternative pH limits requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	State approval attached? <input type="checkbox"/> Yes <input type="checkbox"/> No

C. Best Technology Available for Cooling Water Intake Structures

Facilities that checked “equipment-related cooling” as one of the discharges in Part B. of this NOI are subject to the following requirements. Facilities that intake more than 2 MGD for use in the facility (i.e., not used in the turbines to generate power) and which use at least 25% of the intake volume exclusively for cooling are not eligible for permit coverage and must submit an individual permit application. See Part 3.3 of the HYDROGP.

1. Does the facility intake water for cooling purposes subject to the BTA Requirements at Part 4 of the HYDROGP?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If no, skip to Part D of this NOI.
2. If yes, indicate which technology employed to comply with the general BTA requirements at Part 4.1 of the HYDROGP:	
<input type="checkbox"/> A physical or behavioral barrier located at the first intake encountered by fish on the upstream side of the dam that directs fish towards a downstream passage which safely conveys fish over the dam without being exposed to the CWIS. Has the applicant attached a narrative description of the barrier and provided data to demonstrate that the downstream fish passage effectively transports live fish in a manner that minimizes the likelihood of becoming impinged or entrained at the cooling water intake? <input type="checkbox"/> Yes <input type="checkbox"/> No	

D. Chemical Additives

1. Does the facility use or plan to use non-toxic chemicals for pH adjustment?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. Does the facility use or plan to use chemicals for anti-freeze purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3. If the answer to D.2 is yes, provide the following for EACH chemical additive used for anti-freeze:	
Chemical Name and Manufacturer:	
Maximum Dosage Concentration Used:	Average Dosage Concentration Used:
Maximum Concentration in Discharge: mg/L	Average Concentration in Discharge: mg/L
Material Safety Data Sheet (MSDS) or other toxicity documentation for each chemical attached? <input type="checkbox"/> Yes <input type="checkbox"/> No	

E. Endangered Species Act Certification

Appendix 2 to the HYDROGP explains the certification requirements related to threatened and endangered species and designated critical habitat. Indicate under which criteria the discharge is eligible for coverage under the HYDROGP:	
1. ESA eligibility for species under jurisdiction of USFWS	<input checked="" type="checkbox"/> Criterion A: No endangered or threatened species or critical habitat are in proximity to discharges or related activities or come in contact with the “action area.” See Appendix 2, Part B for documentation requirements. Documentation attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	<input checked="" type="checkbox"/> Criterion B: Formal or informal consultation with the USFWS under Section 7 of the ESA resulted in either a no jeopardy opinion (formal consultation) or a written concurrence by USFWS on a finding that the discharges and related activities are “not likely to adversely affect” listed species or critical habitat. Has the operator completed consultation with USFWS and attached documentation? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If no, is consultation underway? <input type="checkbox"/> Yes <input type="checkbox"/> No

	<input type="checkbox"/> Criterion C: Using the best scientific and commercial data available, the effect of the discharges and related activities on listed species and designated critical habitat have been evaluated. Based on those evaluations, a determination is made by EPA, or by the operator and affirmed by EPA, that the discharges and related activities will have “no effect” on any federally threatened or endangered species or designated critical habitat under the jurisdiction of the USFWS. Has the applicant attached documentation of the “no effect” finding? <input type="checkbox"/> Yes <input type="checkbox"/> No
2. ESA eligibility for species under jurisdiction of NMFS	<p>Is the facility located on: the Connecticut River between the Massachusetts/Connecticut state line and Turners Falls, MA; the Taunton River; the Merrimack River between Lawrence, MA and the Atlantic Ocean; the Piscataqua River including the Salmon Falls and Cocheco Rivers; or a marine water?</p> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	If yes, was the applicant authorized to discharge from the facility under the 2009 HYDROGP? <input type="checkbox"/> Yes <input type="checkbox"/> No
	If the discharge is to one of the named rivers above or to a marine water <i>and</i> the facility was not previously covered under the 2009 HYDROGP, has there been any previous formal or informal consultation with NMFS? <input type="checkbox"/> Yes <input type="checkbox"/> No Documentation of consultation attached? <input type="checkbox"/> Yes <input type="checkbox"/> No

F. National Historic Properties Act Eligibility

1. Indicate under which criterion the discharge(s) is eligible for covered under the HYDROGP:
<input type="checkbox"/> Criterion A: No historic properties are present.
<input checked="" type="checkbox"/> Criterion B: Historic properties are present. The discharges and related activities do not have the potential to impact historic properties.
<input type="checkbox"/> Criterion C: Historic properties are present. The discharges and related activities have the potential to impact or adversely impact historic properties.

2.	Has the applicant attached supporting documentation for NHPA eligibility described in Appendix 3, Part C of the HYDROGP? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3.	Does supporting documentation include a written agreement from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or other tribal representative that outlines measures the operation will carry out to mitigate or prevent any adverse effects on historic properties? <input type="checkbox"/> Yes <input type="checkbox"/> No

G. Supplemental Information

Please provide any supplemental information, including antidegradation review information applicable to new or increased discharges. Attach any certifications required by the HYDROGP. Supplemental information attached? <input type="checkbox"/> Yes <input type="checkbox"/> No

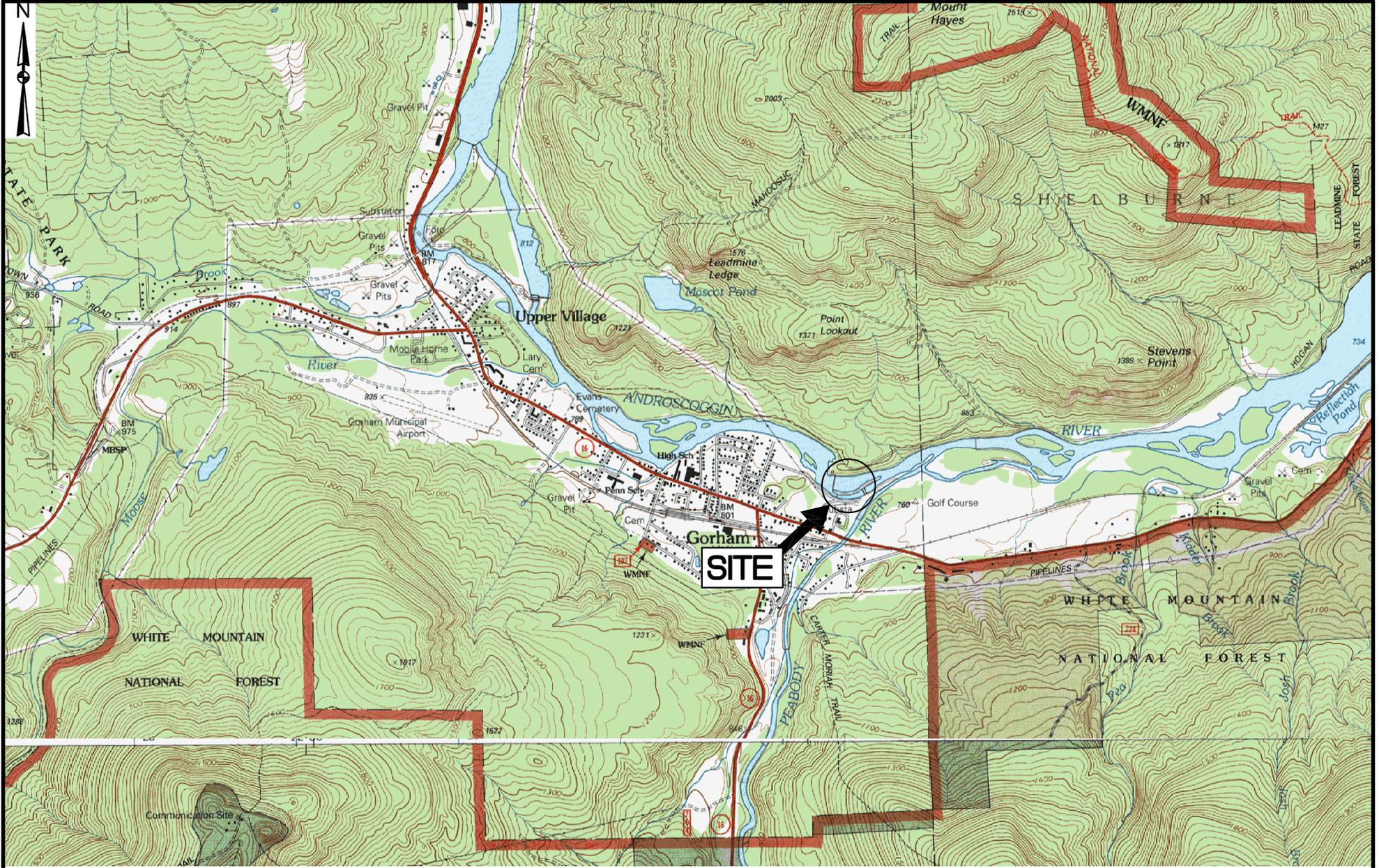
H. Signature Requirements

1.	The NOI must be signed by the operator in accordance with the signatory requirements of 40 C.F.R. § 122.22, including the following certification:	
	<i>I certify under penalty of law that no chemical additives are used in the discharges to be authorized under this General Permit except for those used for pH adjustment or anti-freeze purposes and that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.</i>	
2.	Notification provided to the appropriate State, including a copy of this NOI, if required?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Signature: 	Date: Click or tap to enter a date. <i>04-25-2023</i>
	Print Name and Title: <i>Sean J. Iller , EHS Manager</i>	

**Public Service Company of New Hampshire
Gorham Island Hydro Station**

Maintenance - Related Water

Outfall	Description	Location	Contributing Operations	Average Flow	Total Average Flow	Occasional or Consistent Discharge	Discharging Water	Sample Location or Representative Outfall	Possible Annual Sampling
001	Wheel Pit Drain for Generator 1 and Generator 2	N 44° 23' 20.6" W 71° 09' 53.1"	Wheel Pit Drain	9,000 GPY	9,000 GPY	Intermittent	Androscoggin River	Grab sample from wheel pit prior to discharge	Yes
002	Wheel Pit Drain for Generator 3	N 44° 23' 19.9" W 71° 09' 52.2"	Wheel Pit Drain	18,000 GPY	18,000 GPY	Intermittent	Androscoggin River	Representative Outfall 001	Yes
003	Wheel Pit Drain for Generator 4	N 44° 23' 19.9" W 71° 09' 52.2"	Wheel Pit Drain	18,000 GPY	18,000 GPY	Intermittent	Androscoggin River	Representative Outfall 001	Yes



SCALE IN MILES

PREPARED BY: **GZA GeoEnvironmental, Inc. Engineers and Scientists**
 380 HARVEY ROAD
 MANCHESTER, NEW HAMPSHIRE 03103
 (603) 623-3600

PREPARED FOR:
PUBLIC SERVICE OF NEW HAMPSHIRE

NPDES HYDROELECTRIC GENERATING FACILITIES GENERAL PERMIT GORHAM HYDROSTATION

PUBLIC SERVICE OF NEW HAMPSHIRE
 ROUTE 2, GORHAM NEW HAMPSHIRE 03581

LOCUS PLAN

PRQJ MGR:	KDB	DATE	FEB 2010
DESIGNED BY:	DSJ	PROJECT NO.	04.0024931.00
DRAWN BY:	MA	REVISION NO.	
CHECKED BY:	KDB		
SCALE:	AS SHOWN		

FIGURE
1
 SHEET NO.

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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 Records

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 Gorham Project on April 25, 1991. It prescribed a substantial and comprehensive water quality monitoring plan, which is included in the license as Article 405.

SECTION 18 - RESERVATION OF AUTHORITY TO PRESCRIBE FISHWAYS

The Department of the Interior requests that any license issued for the Gorham 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 the 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's 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 or 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

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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 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 Gorham Project, agency recommendations, and the no-action alternative as documented in the FEIS, we have selected issuing a new license for the Gorham 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 Public Service Gorham Project has an installed capacity of 2.15 MW and generates about 13.80 Gwh of energy per year. The annual operating cost of the existing project is about \$91,000 (6.61 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 \$1,048,000

- 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.

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- (3) the maximum intake approach velocity;
- (4) a bypass sluice;
- (5) a plunge pool located at the base of the dam;
- (6) the methods and a schedule for installing the facilities; and
- (7) a plan for the operation and maintenance of the facilities.

The Licensee shall prepare the aforementioned drawings and plan after consultation with the New Hampshire Fish and Game Department and the U.S. Fish and Wildlife Service. The Licensee shall include with the drawings and plan documentation of consultation and copies of comments and recommendations on the drawings, schedule, and completed plan after they have been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the Licensee's facilities. The Licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations prior to filing the drawings, schedule, and 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.

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

Article 407. 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 408. within one year from the effective date of this license, the Licensee shall develop and file, for Commission approval, a shore land protection plan. The plan shall be designed to protect the aesthetics of and public access to the project's shore lands.

The plan shall include, but not be limited to:

(1) maps delineating the shore land protective buffer zone area;

(2) the method by which the buffer zone would be maintained, including any cost and method of acquiring (fee or less-than-fee) the various land parcels that comprise the buffer, and the criteria used for selecting the buffer zone widths; and

(3) provisions for: (a) maintaining prescribed minimum-width, no tree-cutting, buffer zones around the project's shores, public roads, and private property; (b) carefully planning any timber clearing activities adjacent to the buffer zones, including giving special consideration to the scale and pattern of any areas where cutting is performed; (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 a 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

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need of screening or general clean-up, and subsequently take remedial action.

The Licensee shall prepare the plan after consultation with the Town of Gorham, 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 409. Within six months from the effective date of this license, the Licensee shall develop and file, for Commission approval, a recreation plan to provide additional public access to the south side of the impoundment and public access for those wishing to float down to the Shelburne impoundment.

The plan shall include, but not be limited to:

(1) provisions for adding informational signage at the existing parking area, at the Route 2 entry point, and along