



Environmental Protection Agency: Region 1
5 Post Office Square - Suite 100
Boston, MA 02109-3912

June 12, 2023

SUBMITTED ELECTRONICALLY, VIA EMAIL

Subject: Pembroke HYDROGP Permit Application: NHG360022

To whom it may concern:

Eagle Creek Northeast I, LLC herein submits a HYDROGP renewal application for the existing HYDROGP permit, NHG360022. The purpose of this request is to renew our existing HYDROGP Permit at the Pembroke Hydro Project (“the facility”) located in Suncook, New Hampshire.

Please find enclosed, one (1) copy of the completed HYDRO General Permit Notice of Intent (NOI) application for the facility with all required documents. Contained within this application package is:

- Complete HYDRO General Permit Notice of Intent (NOI)
- Flow Schematic Line Drawing
- USFWS Letter of No Effect Determination
- Topographic map

Please be assured of the Licensee’s continued cooperation in this matter. If you have any questions regarding this submittal, please contact myself at (973) 998- 8169 or erica.liguori@eaglecreekre.com.

Sincerely,

Erica Liguori

Erica Liguori
Environmental Coordinator
Eagle Creek Northeast I, LLC.

CC: Corey Colby; Regional Manager
Michael Craig; Divisional Manager

Mark Gross; Senior Vice President, Operations

Eagle Creek Renewable Energy
On behalf of affiliate: Eagle Creek Northeast I, LLC.
100-2 Main Street – Suncook, NH 03275, USA
Tel: (973) 998-8400 – Fax: (973) 998-8401
www.eaglecreekre.com

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:	
	Street:	
	City:	State:
	Zip:	SIC Code:
	Latitude:	Longitude:
	Type of Business:	
2. Facility Mailing Address (if different from Location)	Street:	
	City:	State:
	Zip:	
3. Facility Owner	Name:	Email:
	Street:	Telephone:

	City:	State:
	Contact Person:	Zip:
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 type="checkbox"/> Yes <input type="checkbox"/> No
	Permit number (if yes):	
	Is the facility covered under an Individual Permit?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Is there a pending NPDES application of file with EPA for the discharge(s)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Date of Submittal (if yes):	Permit Number (if known):
	Attach a topographic map indicating the locations. of the facility and outfall(s) to the receiving water	<input type="checkbox"/> Map Attached
	Number of turbines:	
	Combined turbine discharge (installed capacity) at:	Maximum capacity? cfs Minimum capacity? cfs
	Is this facility operated as a pump storage project?	<input type="checkbox"/> Yes <input type="checkbox"/> No

B. Discharge Information

1. Name of Receiving Water(s):		<input type="checkbox"/> Freshwater <input type="checkbox"/> Marine
2. Waterbody classification: <input type="checkbox"/> Class A <input 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 type="checkbox"/> Yes <input type="checkbox"/> No
4. If the applicant answered yes to B.3, 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 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 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:	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 1.7.1. and 2.7.1 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.	Latitude:		Longitude:			
	Discharge is: <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent <input type="checkbox"/> Seasonal					
	Maximum Daily Flow		MGD	Average Monthly Flow		MGD
	Maximum Daily Temperature		°F	Average Monthly Temperature		°F
	Maximum Daily Oil & Grease		mg/L	Average Monthly Oil & Grease		mg/L
	Maximum Monthly pH		s.u.	Minimum Monthly pH		s.u.
	Alternative pH limits requested? <input type="checkbox"/> Yes <input type="checkbox"/> No			State approval attached? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Outfall No.	Latitude:		Longitude:			
	Discharge is: <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent <input type="checkbox"/> Seasonal					
	Maximum Daily Flow		MGD	Average Monthly Flow		MGD
	Maximum Daily Temperature		°F	Average Monthly Temperature		°F
	Maximum Daily Oil & Grease		mg/L	Average Monthly Oil & Grease		mg/L
	Maximum Monthly pH		s.u.	Minimum Monthly pH		s.u.
	Alternative pH limits requested? <input type="checkbox"/> Yes <input type="checkbox"/> No			State approval attached? <input type="checkbox"/> Yes <input type="checkbox"/> No		

Outfall No.	Latitude:	Longitude:		
	Discharge is: <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent <input type="checkbox"/> Seasonal			
	Maximum Daily Flow	MGD	Average Monthly Flow	MGD
	Maximum Daily Temperature	°F	Average Monthly Temperature	°F
	Maximum Daily Oil & Grease	mg/L	Average Monthly Oil & Grease	mg/L
	Maximum Monthly pH	s.u.	Minimum Monthly pH	s.u.
	Alternative pH limits requested? <input type="checkbox"/> Yes <input 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.	
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 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 4.2.b of the HYDROGP:	
<input type="checkbox"/> An existing technology (e.g., a physical or behavioral barrier, spillway, or guidance device) that directs fish towards a downstream passage that minimizes exposure to the CWIS. Has the applicant attached a narrative description of the barrier 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	
<input type="checkbox"/> An effective intake velocity at the point of cooling water withdrawal, or alternatively, at the point where cooling water enters the penstock (for intakes located within the penstock), not to exceed 0.5 fps. Has the applicant attached a demonstration of compliance with this intake velocity through observation of live fish in the intake or calculation based on the maximum intake volume and minimum bypass flow? <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 type="checkbox"/> No
2. Does the facility use or plan to use chemicals for anti-freeze purposes?	<input type="checkbox"/> Yes <input 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 type="checkbox"/> Criterion A: No endangered or threatened species or critical habitat are in proximity to the discharges or related activities or come in contact with the “action area.” See Appendix 2, Part B for documentation requirements. Documentation attached? <input type="checkbox"/> Yes <input type="checkbox"/> No
	<input 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 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	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 Cochecho Rivers; or a marine water? <input type="checkbox"/> Yes <input 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 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 type="checkbox"/> No After reviewing the National Park Service's National Register Database, there are no historic properties present.

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? Yes 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? Yes 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 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.

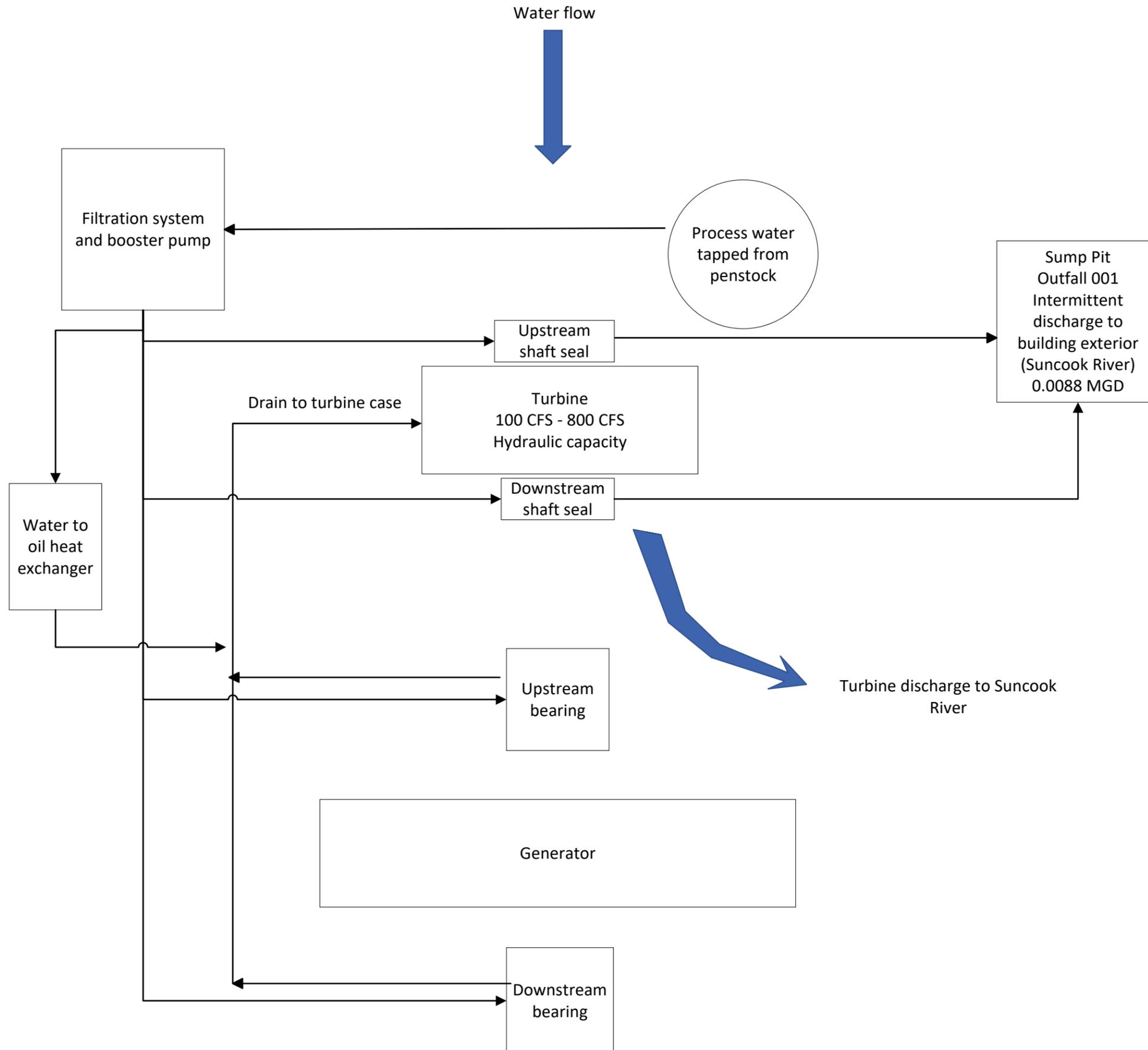
2. Notification provided to the appropriate State, including a copy of this NOI, if required? Yes No

Signature:

Date:

Print Name and Title:

Pembroke Hydroelectric Generating Station
Flow Schematic
2023





United States Department of the Interior



FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104

In Reply Refer To:
Project code: 2023-0070096
Project Name: Pembroke

April 17, 2023

Federal Action Agency (if applicable):

Subject: Record of project representative's no effect determination for 'Pembroke'

Dear Erica Liguori:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on April 17, 2023, for 'Pembroke' (here forward, Project). This project has been assigned Project Code 2023-0070096 and all future correspondence should clearly reference this number. **Please carefully review this letter.**

Ensuring Accurate Determinations When Using IPaC

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into the IPaC must accurately represent the full scope and details of the Project. Failure to accurately represent or implement the Project as detailed in IPaC or the Northern Long-eared Bat Rangewide Determination Key (Dkey), invalidates this letter.

Determination for the Northern Long-Eared Bat

Based upon your IPaC submission and a standing analysis, your project has reached the determination of "No Effect" on the northern long-eared bat. To make a no effect determination, the full scope of the proposed project implementation (action) should not have any effects (either positive or negative), to a federally listed species or designated critical habitat. Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may

include consequences occurring outside the immediate area involved in the action. (See § 402.17).

Under Section 7 of the ESA, if a federal action agency makes a no effect determination, no consultation with the Service is required (ESA §7). If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required except when the Service concurs, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat [50 CFR §402.02, 50 CFR§402.13].

Other Species and Critical Habitat that May be Present in the Action Area

The IPaC-assisted determination for the northern long-eared bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Monarch Butterfly *Danaus plexippus* Candidate

You may coordinate with our Office to determine whether the Action may affect the animal species listed above and, if so, how they may be affected.

Next Steps

Based upon your IPaC submission, your project has reached the determination of “No Effect” on the northern long-eared bat. If there are no updates on listed species, no further consultation/coordination for this project is required with respect to the northern long-eared bat. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location of the Project changes (includes any project changes or amendments); 2) new information reveals the Project may impact (positively or negatively) federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions occurs, additional coordination with the Service should take place to ensure compliance with the Act.

If you have any questions regarding this letter or need further assistance, please contact the New England Ecological Services Field Office and reference Project Code 2023-0070096 associated with this Project.

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

Pembroke

2. Description

The following description was provided for the project 'Pembroke':

2750 kW Hydroelectric Generation located on the Suncook River, NH. Applying for renewal of HYDROGP.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@43.13043625,-71.45382578810506,14z>



DETERMINATION KEY RESULT

Based on the information you provided, you have determined that the Proposed Action will have no effect on the Endangered northern long-eared bat (*Myotis septentrionalis*). Therefore, no consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required for those species.

QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of the northern long-eared bat or any other listed species?

Note: Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

No

2. The proposed action does not intersect an area where the northern long-eared bat is likely to occur, based on the information available to U.S. Fish and Wildlife Service as of the most recent update of this key. If you have data that indicates that northern long-eared bats are likely to be present in the action area, answer "NO" and continue through the key.

Do you want to make a no effect determination?

Yes

PROJECT QUESTIONNAIRE

IPAC USER CONTACT INFORMATION

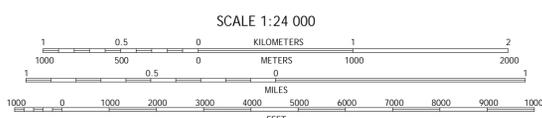
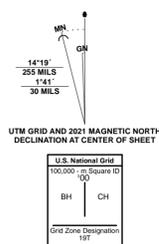
Agency: Eagle Creek Northeast I LLC
Name: Erica Liguori
Address: 65 Madison Ave
Address Line 2: Suite 500
City: Morristown
State: NJ
Zip: 07960
Email: erica.liguori@eaglecreekre.com
Phone: 9739988169



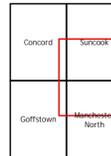
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QUADRANGLE LOCATION



7.5-MINUTE TOPO, NH
2023

ADJACENT QUADRANGLES