



MassWildlife

Commonwealth of Massachusetts

Division of Fisheries & Wildlife

Wayne F. MacCallum, *Director*

June 4, 2014

Dana Hall, Deputy Director
Low Impact Hydropower Institute
34 Providence Street
Portland, ME
04103

RE: Ice House Power Project
FERC No. P-12769-000

Dear Ms. Hall:

The Department of Fish and Game (“DFG”) hereby submits the following comments on the Low Impact Hydropower Institute’s (“LIHI”) Pending Application for the proposed LIHI re-certification of the Ice House Power Project FERC No P-12769-000 located on the Nashua River, in Ayer, Massachusetts.

DFG is submitting these comments to LIHI in order to fulfill the requirements of the Massachusetts Department of Energy Resources (“DOER”) Renewable Energy Portfolio Standard Regulations (225 CMR 14.00; “RPS I” and 225 CMR 15.00; “RPS II”). The RPS I and RPS II regulations were promulgated by DOER on January 1, 2009 and require that any hydroelectric project wishing to qualify as either a RPS I or RPS II generator first obtain LIHI certification. These regulations also require all relevant regulatory agencies to comment on the pending LIHI application.

PROJECT

The Ice House Power Project consists of the existing facilities:

- (1) the 300-foot-long, 10-foot-high Ice House Dam consisting of a 210-foot-long spillway topped with flashboards;
- (2) a 137-acre reservoir with a normal full pond elevation of 215 feet National Geodetic Vertical Datum;
- (3) a 50-foot-wide, 600-foot-long power canal;
- (4) a restored powerhouse containing two generating units with a total installed capacity of 270 kilowatts; and
- (5) appurtenant facilities.

The project has an average annual generation of 2,500 megawatt-hours.

FISH AND WILDLIFE RESOURCES

The Nashua River supports fish and aquatic resources, including a number of resident fish species, and freshwater mussels. Restoration of anadromous fish populations are ongoing in the basin.

IMPACTS AND MITIGATION

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Division of Fisheries and Wildlife

Field Headquarters, One Rabbit Hill Road, Westborough, MA 01581 (508) 389-6300 Fax ()
An Agency of the Department of Fisheries, Wildlife & Environmental Law

Run-of-river Operation

The project operates in a true run-of-river mode, with inflow equal to outflow on an instantaneous basis. Maintaining natural flow through the project protects the existing habitat which benefits fish and wildlife species. Downstream habitats also benefit from run-of-river operation. The resulting stable flow regime supports the riverine assemblage in the free-flowing sections of river below the project.

Bypass Flows

The project has a 300 foot bypass reach (the section of river between the dam and the project tailrace), however backwater from the river normally reaches upstream to a bedrock outcrop which is less than 100 feet from the dam. IHP have agreed to release a minimum flow of 1 million gallons per day via a notch in the dam flashboards. Visual observations of the bypass reach during the low flow period by Division personnel have determined that this discharge is sufficient to maintain water quality and habitat in the bypass reach.

Migratory fish

American eel have been documented upstream of the project site, therefore passage for American eel has been mandated by FERC and an upstream eelway is in place and operates seasonally. The US Fish and Wildlife Service has a river herring restoration program in place on the Nashua River and passage for river herring may be required in the future.

Endangered Species

A review by the Division's Natural Heritage and Endangered Species Program (NHESP) found that operation of the project within the terms and conditions set out in the FERC license will not result in "adverse effects" to the actual Resource Area habitat or a "take" of rare species and thus will not require a Conservation and Management permit pursuant to 321 CMR 10.23. However, the NHESP did require compliance with several conditions to avoid harm to state-listed species:

1. All non-emergency draw-downs shall occur during the rare-turtle activity period of 15 April through 31 October.
2. Due to the presence of the Triangle Floater mussel, the FERC mandated minimum flow of 1 mgd must be maintained in the project bypass reach, particularly during the months of July through August.
3. Should routine inspections identify areas of concern or if additional work should occur within the project area, then details of the proposed work shall be provided in writing to the NHESP.

COMMENTS

During the last five years the project has operated within the terms and conditions of its FERC exemption and NHESP conditions, and the Division has no objection to its re-certification as a "low Impact" facility.

Thank you for this opportunity to comment.

Sincerely,



Caleb Slater, Ph.D.
Anadromous Fish Project Leader