



MassWildlife

Commonwealth of Massachusetts

Division of Fisheries & Wildlife

Wayne F. MacCallum, *Director*

April 5, 2011

Mr. Fred Ayer, Executive Director
Low Impact Hydropower Institute
34 Providence Street
Portland, ME
04103

RE: The Gardners Falls Hydroelectric Project
FERC No. P-2234

Dear Mr. Ayer:

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 certification of North American Energy Alliance, LLC’s (“NAEA”) Gardners Falls Hydroelectric project, located on the Deerfield River, in the Towns of Buckland and Shelburne, in Franklin County 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.

The Department does not support NAEA’s application for LIHI Certification of the Gardners Falls Hydroelectric Project for the reasons outlined below.

PROJECT

Project consists of: (1) a concrete gravity dam, 337 feet long with a maximum height of 30 feet at permanent crest elevation 332.79 feet mean sea level (msl) and flashboard elevation 334.79 feet msl, (2) an impoundment 3,200 feet long, with a surface area of 21 acres, 190 acre-feet gross storage and 37.2 acre-feet usable storage, (3) a brick and concrete powerhouse equipped with four turbine-generator units with total capacity 3.58 MW, (4) a 1,300-foot power canal 31 feet wide and 15 feet deep, and (5) a double circuit 13.8 KV transmission line connecting the Gardner Falls project to the Montague substation.

The Gardners Falls project is situated among nine other hydroelectric facilities located on the Deerfield River. All of the other nine facilities are owned and operated by an affiliate of TransCanada Corporation, and eight are licensed as one project (“Deerfield River Project,” FERC No. 2323). The Deerfield River Project consists of one storage facility (Somerset Development) and seven hydroelectric facilities (Searsburg, Harriman, and Sherman Developments, and the Deerfield No. 5, No. 4, No. 3 and No. 2 Developments). A pumped-storage project (Bear Swamp Project), owned by Bear Swamp Power Company, LLC and operated by Brookfield Renewable Power, is licensed by the FERC as Project No. 2669 and is located below the Deerfield No. 5 development. The Deerfield River Project (FERC No. 2323) also underwent FERC relicensing at the same time as the Gardners Falls project.

FISH AND WILDLIFE RESOURCES

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An Agency of the Department of Fish and Game

The Deerfield River System in MA includes over 100 recognized Cold Water Fishery Resource waters including many of the Deerfield's major tributaries such as the North, South, Cold, Bear, and Chickley Rivers. The Deerfield River supports a diverse fish community of both resident and migratory fish. The Deerfield River has been stocked with juvenile Atlantic salmon for 23 years (600,000 per year at current rates) as part of the multistate Connecticut River Atlantic Salmon Restoration Program.

In Massachusetts, the entire Deerfield River corridor has been identified as "priority habitat" for rare species under the Massachusetts Endangered Species Act (MESA).

IMPACTS AND MITIGATION

FLOWS

Run-of-river Operation

NAEA states that the Gardners Falls project is operated in a "limited pond-and-release mode", utilizing the small storage capacity (37.2 acre-feet) afforded by a maximum 1.8-foot pond drawdown to accommodate the flows caused by the upstream peaking operations.

Flows into the Gardners Falls project, which is located between Deerfield Developments 3 and 2, are dependent upon flow releases from TransCanada's upstream projects which operate in a daily peaking mode.

Bypass reach

The project's FERC license guarantees a minimum flow of 150 cfs or inflow (Guaranteed 100cfs from upstream projects) is released into the project's 1,300 foot long bypass reach.

FISH PASSAGE

The Gardners Falls project operates downstream fish passage facilities for Atlantic salmon smolts.

COMMENTS

The Department does not support NAEA's application for LIHI Certification of the Gardners Falls Project. This project, with its daily peaking operations contributes to dramatic changes to the nature of the Deerfield River and can not be described as "Low Impact". While it is true that much of the flow alteration is caused by upstream projects not owned or operated by NAEA, the department believes that until such time as these other projects are operated in a significantly more environmentally sensitive manner, neither Gardner Falls nor any other hydro project on the Deerfield River is deserving of LIHI certification.

Thank you for this opportunity to comment.

Sincerely,

A handwritten signature in black ink, appearing to read "Caleb Slater". The signature is fluid and cursive, written over a light blue horizontal line.

Caleb Slater, Ph.D.
Anadromous Fish Project Leader