

Memorandum

To: Michael Sale, Executive Director, LIHI
From: Jeffrey Cueto, P.E.
Date: November 5, 2015
Re: Woronoco Hydroelectric Project – LIHI Certificate #68
Recertification Request

This memorandum contains my recommendation for recertification of the Woronoco Hydroelectric Project (Project), located on the Westfield River in Russell, Massachusetts and owned by Woronoco Hydro, LLC. LIHI publicly noticed the application on June 1, 2015 for two months, and no comments were received.

I. Recertification Standards.

Sections 2.5, 2.24 and 2.25 of LIHI's Certification Handbook (Updated April 2014) address the process for recertification applications. The first step in the process, after receipt of an application and assignment to an Application Reviewer, provides for an intake review by the Application Reviewer to make an initial determination as to whether there has been either 1) a material change at the facility that would affect the certification or 2) a material revision in the LIHI criteria subsequent to the original certification action. With a determination of no material change, renewal of the certification is granted. Should a determination be made that there has been a material change, the application is subject to a full review following a process similar to the initial application.

II. No further application review is recommended.

I reviewed the materials submitted by Woronoco Hydro, LLC in support of its application. I also read the original LIHI reviewer report (April 1, 2010) and reviewed files contained in FERC eLibrary from April 2010 to present to determine what project changes have occurred, if any, and what the compliance track record is. Based on this information and my understanding that no relevant material changes in the LIHI criteria, or criteria interpretations, have been adopted since the original review, I concluded that it is not necessary to directly solicit input from resource agencies and licensing stakeholders. In my opinion, the aforementioned materials are sufficient to support a conclusion that a recertification decision can be made based on this Intake Review, that a Full Review is unwarranted, and that recertification should be granted for a five-year term.

III. There have been no “material changes” at the facility that would affect the certification.

With respect to material changes at the facility, I reviewed the record for instances of non-compliance related either to the federal license or the special conditions contained in the LIHI grant of certification and/or new or renewed issues of concern that are relevant to LIHI’s criteria. I find that there are neither instances of significant non-compliance nor new or renewed issues of concern.

The Project was granted a state water quality certification on August 30, 2000 and relicensed by FERC on April 30, 2002; the license runs for a 40-year term through April 1, 2042. At the time LIHI was first considering the facility for certification, the U.S. Fish and Wildlife Service (USFWS), the Massachusetts Division of Fish and Wildlife (MDFW), and the Massachusetts Department of Environmental Protection recommended against certification until such time as the Project came into compliance with the Atlantic salmon and American eel fish passage requirements set forth in the federal license and stipulated that a license amendment to install flashboards would not be pursued (due to expected impacts on impoundment-associated wetlands and other ecological values). LIHI, however, granted certification but subject to several non-standard conditions:

The LIHI certification is conditioned, as set forth below, upon the applicant in 2011 commencing and completing, on a pre-established schedule and using pre-approved methods and sample sizes, downstream fish passage effectiveness testing for at its facility for Atlantic salmon and American eel, and demonstrating to LIHI from the results of that effectiveness testing that the downstream fish passage measures in place at the facility are appropriately protective of the Atlantic salmon and American eel that are attempting to move through the facility area.

I. To this end, the applicant shall file with LIHI by March 31, 2011:

A. A copy of a *Final 2011 Downstream Fish Passage Effectiveness Testing Plan for Atlantic Salmon and American Eel*, containing, inter alia, the methodology, sample size, frequency of testing, and schedule for staging, testing, data sharing, data analysis, final reporting of results, and agency comments on those results;

B. Evidence that the Massachusetts Division of Fisheries and Wildlife and the U.S. Fish and Wildlife Service are of the opinion that this *Final 2011 Downstream Fish Passage Effectiveness Testing Plan for Atlantic Salmon and American Eel*, if implemented according to the Plan, will be sufficient to allow these agencies to determine whether the downstream fish passage measures at the Woronoco facility are appropriately protective of Atlantic salmon and American eel passing downstream; and

C. A proposed schedule under which the applicant will report to LIHI and the resource agencies on a regular basis as to the progress of the effectiveness testing, analysis and evaluation as set forth in the *Final 2011 Downstream Fish Passage Effectiveness Testing Plan for Atlantic Salmon and American Eel*. LIHI reserves the right to add to or amend the applicant’s proposed schedule should it conclude that doing so is necessary for LIHI

to make timely determinations regarding the applicant's compliance with these certification conditions.

II. Thereafter, and pursuant to the schedule set forth in I.C. above:

Applicant-generated reports with LIHI that (1) document the progress and then the completion of its downstream effectiveness testing, (2) provide the results therefrom, and (3) demonstrate that the downstream fish passage measures at the Woronoco facility are appropriately protective of Atlantic salmon and American eel passing downstream.

LIHI reserves the right to terminate this certification should it conclude either that the testing plan is not adequate, is not being followed, or that the results of testing plan demonstrate that the existing downstream fish passage measures at the facility are not appropriately protective of Atlantic salmon and American eel that are, or soon may be attempting to move through the facility area.

By email dated June 23, 2015, Caleb Slater, PhD, MDFW, stated, based on the present status of fish passage, that MDFW would not oppose re-certification. The applicant has installed three eelways to accommodate upstream passage and a full-depth exclusionary trashrack and integrated bypass at the forebay to accommodate safe outmigration past the dam. Dr. Slater also indicated that the Project's mussel-protection plan is being followed during impoundment drawdowns; mussel species of concern are discussed in the original reviewer report. The facility is operated as a run-of-river facility, and annual maintenance drawdowns were obviated when a stoplog structure was installed to enable isolation of the forebay area for repair work. Consequently, no drawdowns have occurred during the last five years according to the recertification questionnaire.

The USFWS has abandoned efforts to restore Atlantic salmon to the Connecticut River watershed. The Westfield River is a major tributary of the Connecticut River. As part of the restoration program, salmon smolts were stocked in the watershed upstream of the Project dam, at River Mile 18.5, through 2013. To accommodate outmigration of previously stocked salmon, the applicant agreed to operate downstream passage through 2015. (FERC letter, January 30, 2013)

Eel passage efficiency testing was completed in 2011, and approved through a FERC order issued on November 15, 2012.

While the recertification application suggests that there are no cultural [historic] resources at the Project site, the FERC license states that the project powerhouse and the Strathmore Paper Mill complex are both eligible for listing on the National Register of Historic Places. Article 407 requires consultation with the Massachusetts State Historic Preservation Officer and development of a historic resources protection plan should any historic resources be encountered during operation or maintenance of the Project, including alteration of either the project powerhouse or the Strathmore Paper Mill complex.

No documentation of any substantive license violations were found during the eLibrary records review, which encompassed the last five years. The most recent FERC regional office dam safety inspection occurred on July 18, 2013; FERC, in July 31 follow-up letter asked that the boater warning sign upstream of the dam be relocated in order to be visible and that signs or sirens be installed downstream to warn recreationalists of rising water levels during unit startups. Since the eLibrary contained no subsequent related correspondence, I inquired as to status and the applicant confirmed by email (attached) that it had implemented the measures requested by FERC.

FERC's regional office also completed an environmental inspection in 2013 (June 18). The inspection report indicates substantial compliance with the license's environmental and recreational requirements.

The most recent FERC submittal (April 4, 2011) in eLibrary as related to annual minimum flow compliance was for 2010.

IV. LIHI's certification criteria have not been revised since the original certification became effective, December 3, 2009.

It is my understanding that LIHI's criteria, or the Board's interpretation of one or more criterion, that are applicable to the circumstances the Project have not changed in meaningful ways since the date of the original certification.

V. Conclusion.

In light of the above, I recommend recertification of the Woronoco Hydroelectric Project for a term of five years. Since eel passage has been fully implemented and testing completed, and since salmon passage is no longer being sought by the agencies, I there is no need to carry forward any of the prior non-standard conditions. The original certification was extended to expire December 31, 2015 by letter dated July 8, 2015.

From: Martha Brennan [mailto:mbrennan@swiftrivercompany.com]
Sent: Wednesday, November 04, 2015 9:40 AM
To: Peter Clark; Jeffrey Cueto (ompompanoo@aol.com)
Subject: RE: Woronoco LIHI review

Hi Jeff,

Woronoco Hydro has installed the signs as highlighted in the 2013 Dam safety inspection. Normally the open items are checked at the next inspection but I note that there was not an inspection this year. I have asked the operators to take some photos of the new signs so that we can update the Dam safety group on this item.

Please let me know if you have any further questions.

Martha

Martha Brennan
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mbrennan@swiftrivercompany.com

From: Peter Clark
Sent: Sunday, November 01, 2015 4:41 PM
To: Martha Brennan
Subject: Fwd: Woronoco LIHI review

FYI for tomorrow. Peter

Sent from my iPhone

Begin forwarded message:

From: Jeffrey Cueto <ompompanoo@aol.com>
Date: November 1, 2015 at 3:04:37 PM EST
To: Peter Clark <PClark@swiftrivercompany.com>
Subject: **Woronoco LIHI review**

Hi, Peter. I am reviewing the recertification application for LIHI.

I note that FERC in July 2013 asked your company to relocate the upstream boater warning signs and to install signs or sirens downstream to warn river users of rising water levels when units are brought on line. I don't find any confirmation in FERC eLibrary that these measures were completed. Can you give me the status?

Thanks.

Jeff