



**Low Impact Hydropower Institute
Recertification Review
Winooski One/Chace Mill
Winooski River, Vermont (LIHI Certificate No. 16)**

July 15, 2014

By Dana Hall
LIHI Deputy Director

Background

On April 3, 2014, the Low Impact Hydropower Institute (LIHI) received an application from Winooski One Partnership (Applicant) for a third term of Certification of its 7.3 MW Chace Mill hydroelectric generating station (Project). The Project is located in Chittenden County, Vermont, on the Winooski River as it flows between the cities of Burlington and Winooski, Vermont. The original five-year LIHI Certification was granted on July 29, 2004, and was renewed for a second term effective July 29, 2009. Consultant, Gabriela Goldfarb, performed the two previous application reviews. The Project operates under a License from the Federal Energy Regulatory Commission (FERC) as Project No. 2756; issued on 11/03/88 and expiring on 10/31/28.

Project Description

The Project facility is located at lower Winooski Falls on the Winooski River ten miles upstream of its confluence with Lake Champlain, between the city of Winooski, on the north bank, and the city of Burlington, on the south bank. This run-of-river facility has a refurbished spillway with crest gates abutting a historic timber crib dam that dates from 1876. The dam is on the National Register of Historic Places as part of the Winooski Falls Mill District. There are two plant species listed by the state as threatened and endangered in the vicinity of the project that were the subject of mitigation and protection activities at the time of the facility's construction. The applicant also constructed fish passage facilities and a riverside park and trail as part of the project.

The Project, constructed in 1991-93, consists of a 200-foot-long, 35-foot-high concrete dam situated immediately downstream and abutting the timber-crib dam surmounted by a 100-foot-long, eight-foot-high bascule gate with crest elevation of 136 feet NGVD; a 36-foot-long bascule

gate located at the right abutment; a 5.7 acre reservoir; a 70-foot-long intake powerhouse containing one 6.5 MW turbine generator; a 45-foot-wide, 125-foot-long tailrace; a fish trap facility; a riverside park; an underground transmission cable; and an access road. Project owner Winooski One Partners leases the site and water rights from the City of Burlington. The City of Burlington has the option to buy the facility in the 20th year of the license; the license is held jointly by Winooski One Partners and the city.

Recertification Standards

The Low Impact Hydropower Institute (LIHI)'s Certification Handbook (Updated April 2014) regarding Applications for Recertification ("Recertification Standards") provides that a "request for renewal of a previously-issued LIHI certification ("re-certification") will be granted at the conclusion of the term of the existing certification if re-certification is desired by the certificate holder, subject to re-certification review. Re-certification review focuses solely on determining the answers to the following two questions:

1) Has there been a material change in circumstances since the original certification was issued?

For purposes of recertification review, a "material change in circumstances" will mean one or both of the following:

(a) Non-compliance: Since receiving its last certification from LIHI, the certificate holder/applicant has not implemented, or has delayed implementing, or has done an inadequate job of implementing obligations at or near the facility that are of relevance to LIHI's criteria. These obligations could be in the form of terms and conditions of license(s), settlement agreements, resource agency recommendations or agreements, LIHI conditions of certification including annual notifications, agreements with local municipalities or other third parties or similar relevant obligations; or

(b) New or renewed issues of concern that are relevant to LIHI's criteria: Since receiving its last certification from LIHI, either new issues of concern and relevance to LIHI's criteria have emerged that did not exist or were not made known to LIHI at the time of certification, or there continues to be ongoing problems with previously known issues that appeared to LIHI to be resolved or on the road to resolution at the time of certification but in fact are not resolved, and are ongoing at the time of the re-certification application. If a new license, settlement agreement, prescription, biological opinion or other similar regulatory decision has been made since the original recertification, these documents will be evaluated to determine if new or renewed issues have been raised.

2) Have any of LIHI's criteria, or the Board's interpretation of one or more criterion, changed in meaningful ways since original certification that are applicable to the circumstances of the facility seeking re-certification?

The re-certification review procedures also provide that "[i]f the Application Reviewer can definitively determine from the submitted application materials, a review of the LIHI file containing the past certification decision(s), any public comments received during the

application process, and any limited reviewer-initiated questioning by LIHI of the applicant and/or third parties, that the answer to both questions above is “no,” the Application Reviewer will recommend re-certification approval to LIHI’s Executive Director, and there will be no further application review.

Further Review Not Warranted

I have reviewed the materials submitted by the Applicant in support of its application for a third term dated April 3, 2014. In my opinion, the materials provided and described below are sufficient to make a recommendation on re-certification and no further application review is needed.

With their application to re-certify, Winooski One submitted information regarding the location of other dams on the Winooski River (marked as Attachment 1 in application materials). In addition, Winooski One submitted letters from Jeff Cueto, former Hydrologist for the Vermont Agency of Natural Resources Water Quality Division indicating continued support for LIHI certification of the Project (dated 12/21/12); a letter of support from Steve Parren, Wildlife Diversity Program Director of the Vermont Fish and Wildlife Department (dated 1/2/13); a letter of support from Nicholas Staats, Fisheries Biologist of the USFWS; and a published Associated Press article about the success of the salmon run in Lake Champlain in 2011 (All are included in Attachment 2 in application materials).

When LIHI’s initial Application Reviewer for the Project, Gabriela Goldfarb prepared her report for the initial certification in mid-2004, she offered the following observation about the Project Owners:

Nearly every one of the federal, state, and local agency staff contacted in the course of this review commented that the applicant had demonstrated extraordinarily good corporate citizenship in carrying out and often exceeding the requirements associated with the project’s construction and operation.

Ms. Goldfarb repeated this recommendation in 2009, for the second term of LIHI Certification.

I also reviewed the LIHI file containing the past certification and re-certification decisions and FERC’s public information file on the Project. In a review of the FERC docket, the only recent activity on the docket was during 2012, when Winooski One Partnership submitted a request for a temporary, minor, and accidental deviation from their required minimum flows in the 300 long bypass reach of their project under P-2756 on April 30, 2012. On September 12, 2012, FERC responded with a letter informing Winooski One Partnership that the minimum flow deviation that occurred on 4/12/12 will not be considered a violation of License Article 404 and 405 for the Chace Mill/Winooski One Project under P-2756.

In July 2013, Winooski One Partnership received a written authorization from Brian Fitzgerald, Streamflow Protection Coordinator of the Vermont Department of Environmental Conservation to suspend the bypass flows at the Project during icing conditions.

I also solicited comments from state and federal agencies knowledgeable of the Project, none of which reported any changes, known compliance issues or new concerns associated with the Project. The detail of my communications is attached as Schedule 1.

Public Comment

LIHI received only one comment letter from the public, from Professor Michael Dworkin, of Vermont Law School. Professor Dworkin spoke extremely favorably about the Chace Mill operation, describing it as “environmentally outstanding”, having “an open door policy”, and “reinvest[ing] ... in high quality operations, with strong maintenance programs and consistently excellent environmental compliance” - along with several other ringing endorsements.

Answer to Question 1)

I have examined the past re-certification reviews, compliance submittals and the requirements of Certification for Winooski One, and find that there has been no material change in circumstances. It appears that the Applicant is in compliance with all obligations of certification and any license, settlement agreements or other similar obligations.

Answer to Question 2)

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

Conclusion

In light of the fact that there have been no material changes affecting Project compliance with LIHI criteria, and the Winooski One Partnership continues to meet all of the criteria, I recommend recertification of the Winooski One Hydroelectric Project for a term of five years, effective July 29, 2014 and expiring on July 29, 2019.

Please contact me if you have any questions.

Sincerely,



Dana Hall
LIHI Deputy Director
Application Reviewer

**SCHEDULE 1
RECORD OF CONTACTS**

Date of Conversation: June 2014
Application Reviewer: Dana Hall, LIHI Deputy Director
Person Contacted: John Warner and Andrew French
Telephone/email: John.Warner@fws.gov; andrew.french@fws.gov
Areas of Expertise: Endangered Species

2004 Gabriella Goldfarb: In response to my 9/2/04 email to Michael Amaral, USFWS, I received the following email response from his staff person Tony Tur:

As requested, we reviewed our records to determine if endangered species may be effected by the hydroelectric facility located in Winooski, Vermont. Our records indicate that no known occurrences, other than transient bald eagles, are documented at or downstream of the facility.

Update 11-9-09 – Gabriela received a call from Tony this morning and he confirmed the situation had not changed.

Update 6/13/14 - Dana emailed Andy French and John Warner. John wrote back the following:
No change at this time - except that the bald eagle is no longer on the Endangered Species List - so reference to it in the context of the federal ESA listing is no longer accurate.

Date of Conversation: June 2014
Application Reviewer: Dana Hall, LIHI Deputy Director
Person Contacted: Scott Dillon, VT Div. Historic Preservation
Telephone/email: Scott.Dillon@state.vt.us
Areas of Expertise: Historic Preservation

2004 - Gabriela Goldfarb: Asked [Giovanna Peebles] about facility's compliance with cultural resource protection requirements of FERC license, and any other concerns. Ms. Peebles performed a review of the Division's Winooski files and confirmed that the facility complied with all its cultural resource protection requirements.

2014 – Dana Hall: Ms. Peebles is retiring and suggested contacting Scott Dillon, I emailed him on 6/11/14,

Date of Conversation: June 12, 2014
Application Reviewer: Dana Hall
Person Contacted: Katherine "Deac" Decarreau, City Manager

City of Winooski
Telephone/email: 802-655-6410
deac@winooski.vt.org
Areas of Expertise: City Natural Resource and Historic Preservation Concerns

2004 - Gabriela Goldfarb: Mr. Trzepacz confirmed that Winooski One Partners met and exceeded their obligations under the FERC license in terms of both historic preservation and recreation, including payment of required \$150,000, maintenance of public access and landscaping (maintain some city-owned parcels adjacent). He reports them to be excellent corporate citizen.

Update 11-09-09 – Jim confirmed what he had said four years ago. They are still excellent corporate citizens.

Update 06-12-14 – left voice message for Katherine Deac, followed up with email. She replied as follows:

The City agrees with Mr. Trzepacz's position. Winooski One remains an excellent corporate citizen, meeting all of their obligations. Thank you for asking - KR Decarreau (Deac).

Date of Conversation: September 13, 2004
Application Reviewer: Gabriela Goldfarb, Consultant
Person Contacted: Jeff Cueto, VT Water Quality Division
Telephone/email: 802-241-3758
Areas of Expertise: Water Quality, Flows, 401 cert

Cueto explained that the physical attributes of the Winooski project leads him to believe that the facility has remained in compliance with its bypass flow requirements. These are that 1) since the flows are spilled over the flashboards, their absence would be noted in this heavily urbanized context and reported; 2) the river flow is large relative to the project size; 3) the bypass reach is very short, with a backwater created from the tailrace up to the dam itself, such that no habitat can be dewatered. Cueto explained that the critical reason for the flow requirement was reaeration due to dissolved oxygen concerns. The applicant performed the post-construction water quality study required by the certification, and no additional measures were warranted. Cueto confirmed that the river is now classified as a "Class B" water as identified by the applicant in his application (there no longer are any Vermont waters classified as Class C, as was the case in 1987 and as was reflected in the 401 certification). To date, the project has not sought to de-silt. The facility has done drawdowns for repairs, and has always notified and gotten approval for such activities. The stretch of Winooski River occupied by the facility is in a waste management zone due to discharges from wastewater facilities. The river is 303(d) listed only for mercury (as are all VT rivers); the facility is not a contributor of that pollutant.

Update June 17, 2009 (Jeff Cueto, VT ANR) - Regarding the licensee's request for LIHI re-certification, the Vermont Agency of Natural Resources is of the opinion that the subject project continues to be operated in conformance with the LIHI environmental and recreational criteria. Insofar as we are aware, it is being operated in full compliance with the conditions of the Agency's water quality certification. The licensee continues to cooperatively participate in the Winooski River trap-and-truck operation.

Update 2014- (Jeff Cueto, December 21, 2012) Jeff wrote a letter of support.
