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**Recertification Review
Tallassee Shoals
Middle Oconee River, Georgia
(LIHI Certificate No. 12)**

By Dana Hall
LIHI Deputy Director, Project Reviewer

Background

On December 17, 2013, the Low Impact Hydropower Institute (“LIHI”) received an application from Tallassee Shoals LLC (“Applicant”) for a third term of certification of its 2.3 MW hydroelectric generating station (“Project”). The Project is located one half mile south of Georgia Highway 330 on the Middle Oconee River in Clarke and Jackson counties, Georgia. The original five-year LIHI Certification became effective on April 23, 2004, and was renewed for a second term in 2009. The Project operates under a 40 year License from the Federal Energy Regulatory Commission (“FERC”) as Project No. 6951; issued on 10/24/1983.

Project Description

The run-of-river Project is located on the Middle Oconee River, near Athens, Georgia. The plant is equipped with two turbine/generators; a fixed Kaplan 100 KW unit installed within the dam and an adjustable Kaplan 2.3 MW unit located several hundreds yards downstream. The large turbine is of typical construction with a headrace, penstock, and tailrace. The project consists of: a concrete dam; a 1,400-foot long and 20-foot wide headrace and 2 eight-foot diameter penstocks (60 and 100 feet long, respectively); a powerhouse with 2 generating units with a combined installed capacity of 2.3 MW, and a 750 foot tailrace. The bypass reach is 2,100 feet long. The reservoir's surface area is 37 acres at the normal operating pool level of 645 feet above mean sea level, and its official storage capacity is 350 acre-feet. The project was built in 1984-85 and began operation in 1986; it was constructed against the existing face of an old dam built in 1902 and retired in 1964. The facility ceased operations in early 2000 while under the ownership of the original licensee due to mechanical problems with the turbines. Since the 2009 Recertification, Tallassee LLC has completed all upgrading and repairing of the generating units and both units are now fully operational.

Recertification Standards

LIHI's Certification Handbook (Updated December 2013) 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

The Tallassee Shoals Recertification Application were received on April 3, 2014. The Applicant submitted material in support of its application for recertification including a newly filled out Questionnaire, sworn statement, maps and an excel spreadsheet with flow data. A notice to stakeholders was posted on April 9, 2014 on the LIHI website and emailed to interested parties, inviting comment.

In addition, LIHI received letters from U.S. Fish and Wildlife Service (“USFWS”) and the Georgia Department of Natural Resources – Wildlife Resources Division (“GADNR”), all indicating continued support for LIHI certification of the Project.

In addition to my review of the submitted material, I also extended communications to various stakeholders, as described in Appendix A. A FERC e-library search was also conducted to verify claims in the Recertification Application. The docket search was confined to the period after the start of the previous LIHI certification, which began on April 23, 2009, for FERC docket number P-6951, and did not uncover any evidence that the Applicant has not been in compliance with their FERC license.

In my opinion, the materials provided and described below are sufficient to make a recertification recommendation and no further application review is needed.

Answer to Question 1)

I have examined the past Re-certification reviews and the requirements of Certification for Tallassee Shoals, in order to determine if there has been no material change in circumstances, such that the Applicant is in compliance with all obligations of certification and any license, settlement agreements or other similar obligations. This section of the review will quickly describe the record pertaining to the specific criteria addressed in the most recent agency letters, as follows:

Fish Passage

The Tallassee Shoals project was certified in 2009 with the following condition:

On an annual basis beginning with the first anniversary of the effective LIHI Low Impact certification date, the applicant must submit documentation relating to the status of any recovery activities and compliance or non-compliance for any prescribed requirements of the Project for robust redhorse and anadromous or catadromous fisheries in the Oconee River watershed.

The USFWS Field Supervisor Donald Imm wrote to LIHI on May 29, 2014 in response to our request for comment. Regarding fish passage and protection, Mr. Imm stated that they are not aware of post construction location records for diadromous fish species above a series of hydroelectric facilities that are located downstream of the project. He stated that there is an American Shad Management plan for the Altamaha River Basin, and a Robust Redhorse

Management Plan for the Oconee River, and while the robust redhorse and American shad are not currently in the project area, they likely could have been in the area historically and future recovery activities may include reintroducing those species in the area. He recommends that the Applicant continue to submit documentation relating to the status of robust Redhorse and American shad.

Similarly, Mr. John Biagi of the GADNR wrote to LIHI on June 2, 2014, and explained that the combination of a group of dams located below the Tallassee project form a barrier that effectively blocks upstream migration of all diadromous species into the Tallassee tailrace, but that if future recovery activities include reintroducing the American shad species, that the Applicant should be required to monitor the status of American shad recovery and submit documentation to LIHI relating to recovery efforts. With regard to robust redhorse, GADNR explained that a recent survey indicated that the population has declined during the last 10-15 years, and that in order to mitigate population decline, , the species may be introduced into the Oconee River above the Barnett Shoals Dam where they could migrate into the Tallassee tailrace. GADNR recommends that the Applicant monitor the status of robust redhorse recovery efforts and submit documentation to LIH relating to recovery efforts as appropriate.

Based on these comments from both agencies, I recommend that we continue the condition pertaining to fish passage and protection that was applied to the 2009 certificate.

Flows

Regarding flows, Mr. Biagi of GADNR explained in his June 2, 2014 letter that Article 29 of the operating license provides for permanent minimum flow release of 70 cubic feet per second (cfs) in the project's 2100 foot long bypass reach and an interim release of 138 cfs as measured below the project tailrace during the month of May to protect centrarchid spawning. He recommended that the Applicant provide LIHI with a description of the current methods used for calculating flows downstream of the project, as well as records of compliance with existing flow requirements.

Similarly, Mr. Imm of the Service recommended that LIHI require the Applicant to provide documentation on how minimum flows are calculated at the Project, as well as records of their compliance with those minimum flows.

Mr. Walter Puryear responded to these dual requests with the submittal of a data log file converted to Excel format verifying FERC's minimum flow requirements of 70 cfs, and an explanatory note as follows:

Our sensors are calibrated by utilizing data from USGS sites above (Arcade 02217475) and below (Athens 02217500) our facility. Just under 1.9 inches corresponds to 70 cfs and the datum is recorded every 15 minutes with the target being 2.0 inches. Athens-Clarke County has a pumping station just upstream of our facility which supplies Big Bear Reservoir. When their pumps go online, you will see a dip in values which is quickly corrected by computer control. Likewise, when the pumps cease operation there is a rise in value which is also corrected. Should you like data files from any time period, please let us know.

Threatened and Endangered Species Protection

Mr. Imm stated that the Service does not expect this Project to affect the federally listed species in Clarke and Jackson Counties, Georgia. With respect to the Althamaha shiner (*Cyprinella xaenura*), the Service has been petitioned to list this species along with the robust redhorse under the ESA, and has issued a positive 90-day finding stating that a status review is warranted. He reiterated that LIHI should verify the Applicant's compliance with FERC minimum flow requirements, because the Project along with other reservoirs have cumulatively contributed to elimination of riverine habitat, fragmentation of habitat and aquatic populations and altered flows, thereby putting the Altamah shiner at greater risk.

Recreational Access

The GADNR inspected the Project with respect to the provision of downstream public access with signage, trails and an access easement from the parking area to the river in the area adjacent to Big Bear Road, and found that the signage was suitable and properly maintained and that the trail and steps along the easement were also in good condition. Mr.. Biagi recommended that the Applicant be required to submit photos and other documentation of functioning access on an annual basis, to demonstrate compliance.

Mr. Biagi also explained that GADNR supports what FERC wrote to Tallassee on January 23, 2014 reminding them of their license obligation to gather recreational use data for a 12-month period beginning no later than March 15, 2014 and to file a License Hydropower Development Recreation Report (FERC Form No. 80) by April 1, 2015.

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 Tallassee Shoals 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 Tallassee Shoals Partnership continues to meet all of the criteria, I recommend recertification of the Tallassee Shoals Hydroelectric Project for a term of five years, effective April 23, 2014 and expiring on April 23, 2019, with a continuation of the project-specific condition related to fish protection that applied to this certificate in the previous term.



Dana Hall
LIHI Deputy Director, Project Reviewer

**APPENDIX A
RECORD OF CONTACTS**

Date of Communication: June 2014
Application Reviewer: Dana Hall, LIHI Deputy Director
Person Contacted: Donald Imm, USFWS Field Supervisor
Type of Contact: Letter
Areas of Expertise: Flows, Fish Passage and Protection, Threatened and Endangered Species Protection

Date of Communication: June 2014
Application Reviewer: Dana Hall, LIHI Deputy Director
Person Contacted: John Biagi, Georgia Department of Natural Resources (GADNR)
Type of Contact: Letter
Areas of Expertise: Flows, Fish Passage and Protection, Recreational Access

(See explanation in report above)

Date of Communication: July 29, 2014
Application Reviewer: Dana Hall
Person Contacted: Wayne King, Regional Engineer, FERC Office of Energy Projects, Division of Dam Safety and Inspections (Atlanta Regional Office)
Telephone/email: 678-245-3075, wayne.king@ferc.gov
Areas of Expertise: Dam Safety
Type of Contact: Telephone conversation

Mr. King said that the Tallassee Shoals project is a low hazard, run-of-river project that is in compliance with their license. He suggested that we be sure to ask the Applicant for a copy of their most recent Dam Safety Report, which was issued in June of 2012. At the time of the 2012 inspection the project was not operating, however it was operating throughout the year. There were no issues of note in the report.
