



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Asheville Field Office
160 Zillicoa Street
Asheville, North Carolina 28801
February 21, 2012

Mr. Marshall Olson,
APGI – Tapoco Project,
P.O. Box 576
Badin, NC 28009

Subject: Comments on LIHI recertification, Tapoco Hydroelectric Project (FERC No. P-2169)

Dear Marshall:

The purpose of this letter is to provide information for Alcoa Power Generating Inc (APGI) to use in its application for recertification by the Low Impact Hydropower Institute (LIHI). On July 25, 2005, the LIHI certified Alcoa's Tapoco Hydroelectric Project as Low Impact. That certificate is set to expire July 25, 2013. The Tapoco project consists of four powerhouses and four dams in eastern Tennessee and western North Carolina totaling 350 megawatts (MW) of electric generation capacity, which power Alcoa Tennessee Operations near Knoxville. The project is located on the Little Tennessee and Cheoah Rivers and is owned and operated by Alcoa Power Generating Inc.

The Tapoco Project includes four developments - Santeetlah Development, Cheoah Development, Calderwood Development, and Chilhowee Development. The Tapoco Project extends along the Little Tennessee River from about River Mile 33 to just above RM 60, downstream of the Tennessee Valley Authority Fontana Dam. Chilhowee, Calderwood and Cheoah developments and Santeetlah Powerhouse are located on the Little Tennessee River. Santeetlah Dam and Reservoir are located on the Cheoah River, a tributary to the Little Tennessee River. The Project Boundary encompasses much of the Cheoah River corridor downstream of the Santeetlah Dam.

Background

USFWS Participation. The Fish and Wildlife Service was an active participant in the collaborative relicensing process. The collaborative process resulted in numerous resource studies and identified a range of alternatives for operation over the next 40 years. Since the license was issued, we have continued to work with the group to craft a comprehensive Settlement Agreement. During the relicensing of the Tapoco Hydroelectric Project, the USFWS made recommendations, terms, and conditions, and prescriptions. Highlights of these recommendations included those for a seasonally-variable flow regime at the previously bypassed Cheoah River, provisions for We also recommended development of a shoreline management plan.

Settlement Agreement. The Department of Interior, including the Fish and Wildlife Service, is party to the Relicensing Settlement Agreement (RSA). We have remain involved in the implementation of the RSA, and other aspects of license implementation, compliance monitoring, and review. The Fish and Wildlife Service worked, along with other bureaus of the Department of the Interior and the other parties, to develop the final language of the RSA, to include provisions and articles that:

- ☐ Protect and contribute to the recovery of endangered aquatic and terrestrial species.
- ☐ Promote biological diversity.
- ☐ Control exotic (nonnative) aquatic and terrestrial species.
- ☐ Maintain a flow regime in the Little Tennessee River system, in general, and in the Cheoah River and Calderwood bypass reaches, in particular, which maintains ecological processes and enhances natural aquatic assemblages.
- ☐ Manage vegetation to enhance natural communities (animal and plant) within project boundaries and rights-of-ways.
- ☐ Reduce and mitigate the effects of project-induced habitat fragmentation, both riverine and upland.
- ☐ Enhance tribal, cultural, and public recreational opportunities of the natural resources in the project area.
- ☐ Adjust reservoir levels seasonally to optimize aquatic and terrestrial habitats and recreational needs.
- ☐ Ensure adequate fish passage around dams for native species.
- ☐ Protect against entrainment and impingement of fish species by project facilities.
- ☐ Protect water quality.

Endangered Species. The License and RSA addresses the needs of many rare, threatened, and endangered species that occur in or adjacent to the project area.

SPECIES	TAXA	STATUS
Appalachian elktoe	Mussel	Endangered
Spotfin chub	Fish	Threatened
Duskytail darter	Fish	Endangered
Yellowfin madtom	Fish	Threatened
Smoky madtom	Fish	Endangered
Indiana bat	Mammal	Endangered
Virginia spiraea	Plant	Threatened

Bypass Flows. The RSA and License returned seasonally variable flow regimes to a 9.1-mile reach of the Cheoah River and a 1-mile reach of the lower Little Tennessee River, which had been bypassed by project operations. The Settlement Agreement adequately balances the flow needs to attain the aquatic and riparian restoration objectives while maintaining the ongoing use of the reservoir inflow for hydroelectric production. These restored flows provide adequate protection and enhancement of the native biological diversity, including rare species (Appalachian elktoe, Virginia spiraea, Junaluska salamander, spotfin chub) and recreationally important species (smallmouth bass, rock bass). Scheduled high flows are proving compatible with aquatic biodiversity while providing recreational opportunities.

Fishway. The Fish and Wildlife Service filed a §18 fishway prescription that addressed the passage needs of four endangered and threatened fishes at the Chilhowee Development. The objective of the fishway prescription is to maintain the long-term genetic diversity of the populations of yellowfin madtom, smoky madtom, duskytail darter, and spotfin chub at Abrams Creek and Citico Creek, tributaries to the Little Tennessee River that are separated by the Chilhowee Dam and reservoir. The fishway consists of a program to capture and move individuals of these species between these streams each generation.

Status of the Project

The Fish and Wildlife Service maintains a continued high level of participation at the Project, attending meetings, engaging in shoreline and flow consultations, and monitoring the response of biota to the improvements under the RSA and License terms.

I would like to confirm that the Licensee is in compliance with all requirements (flows to bypass reach, high flow releases, License articles). Further, we regularly recognize the good work of APGI, especially with research and restoration under the Tallassee Fund and Cheoah River Fund, information sharing, and comprehensive land conservation, as examples for other projects to follow. I support the recertification of the Tapoco Hydroelectric Project by LIHI's as Low Impact.

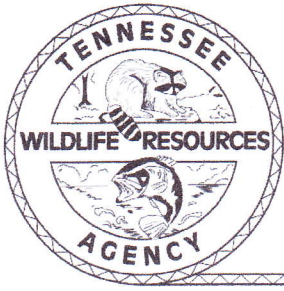
Summary

I appreciate the tremendous effort put into operation of the Tapocoo Hydroelectric Project by APGI and the RSA team. I hope that we continue in the cooperative spirit. I look forward to continued implementation of the RSA and high level of compliance with the License Articles. If there are any questions, please contact at 828/258-3939, Ext. 227, or mark_a_cantrell@fws.gov.

Sincerely,

- original signed -

Mark A. Cantrell
Fish & Wildlife Biologist



TENNESSEE WILDLIFE RESOURCES AGENCY

ELLINGTON AGRICULTURAL CENTER
P. O. BOX 40747
NASHVILLE, TENNESSEE 37204

February 20, 2012

Mr. Fred Ayer
Low Impact Hydropower Institute
34 Providence Street
Portland, Maine 04103

RE: Tapoco Hydroelectric Project (FERC No. 2169)
Low Impact Hydropower Institute Recertification

Dear Mr. Ayer:

It is our understanding that Alcoa Power Generating Inc.'s (APGI) Tapoco Hydroelectric Project is currently certified by the Low Impact Hydropower Institute (LIHI), this certification expires in 2013, and APGI is seeking early recertification. We are writing in support of APGI's recertification application.

The Tennessee Wildlife Resources Agency (TWRA) is responsible for managing Tennessee's fish and wildlife and their habitats. Additionally, TWRA has responsibility for all wildlife-related enforcement activities and fosters safe use of the State's waters through a program of law enforcement, education, and access. TWRA was an active participant in and formal party to the Federal Energy Regulatory Commission (FERC) relicensing of the Tapoco Project during the period 1998-2005. The relicensing process culminated in several Agreements in Principle (AIP) and a comprehensive Relicensing Settlement Agreement (RSA). TWRA was a signatory to the AIPs and the RSA. TWRA is a member of the Tallassee Fund Board and currently serves as the grant making fiduciary.

During the relicensing, TWRA staff made recommendations in the fish passage and protection, watershed protection, and recreation resource areas. The RSA/license requirements that TWRA has a particular interest in include: fish and benthic macroinvertebrate monitoring below Chilhowee Dam, fish stocking in Calderwood and Chilhowee reservoirs; fish translocation above/below Chilhowee Dam; the land conveyances of the Bulge and Corridor lands, as well as the term and permanent riparian easements; the establishment of the Tallassee Fund, which supports various natural resource stewardship activities; and recreational access at Calderwood and Chilhowee reservoirs, including safety patrols.

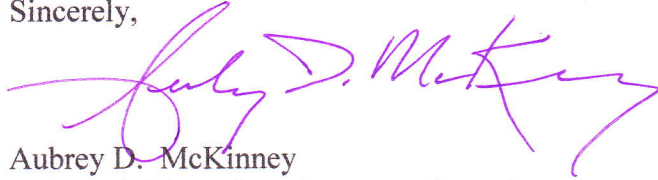
The State of Tennessee

IS AN EQUAL OPPORTUNITY, EQUAL ACCESS, AFFIRMATIVE ACTION EMPLOYER

TWRA has a positive and cooperative working relationship with APGI. TWRA meets with APGI about twice annually, at a minimum, to discuss the implementation of the Project's Recreation Plan (July) and to discuss the work of the Tallassee Fund Board (November). TWRA and APGI meet at other times throughout the year, as necessary. In the years since the issuance of the new Project license (2005) APGI has consistently and without fail met its obligations in the RSA and Project license. We are not aware of any instance of non-compliance and have no concerns regarding license implementation and compliance.

In closing, I would like to reiterate TWRA's support of APGI's recertification application. If you have any questions or would like to discuss this topic further, please feel free to contact me at dave.mckinney@tn.gov or 615-781-6577.

Sincerely,



Aubrey D. McKinney
Chief, Division of Environmental Services

cc: Marshall L. Olson, APGI Tapoco
Steve Patrick, TWRA Assistant Chief

ADM/ds



United States
Department of
Agriculture

Forest
Service

National Forests in North Carolina
Supervisor's Office

160 ZILLICOA ST STE A
ASHEVILLE NC 28801-1082
828-257-4200

File Code: 2770

Date: February 27, 2012

Fred Ayer
Low Impact Hydropower Institute
34 Providence Street
Portland, ME 04103

RE: Tapoco Hydroelectric Project (FERC No. 2169)
Low Impact Hydropower Institute Recertification

Dear Mr. Ayer:

It is my understanding that Alcoa Power Generating Inc.'s (APGI) Tapoco Hydroelectric Project is currently certified by the Low Impact Hydropower Institute (LIHI), this certification expires in 2013, and APGI is seeking early recertification. I am writing in support of APGI's recertification application.

The U.S. Forest Service (USFS) was an active participant in and formal party to the Federal Energy Regulatory Commission (FERC) relicensing of the Tapoco Project during the period 1998-2005. The relicensing process culminated in several Agreements in Principle (AIP) and a comprehensive Relicensing Settlement Agreement (RSA). The USFS was a signatory to the AIPs and the RSA. USFS recommendations included in the RSA and Project license include:

- Restoration of flow to the Cheoah River and Calderwood bypass;
- Improvement of aquatic communities (fish, mussels, benthic macroinvertebrates);
- Protection of rare, threatened, and endangered species;
- Vegetation management to enhance natural communities;
- Construction of new and enhancement of existing recreational facilities, as well as the creation of opportunities for whitewater boating;
- Protection of historic properties (including tribal and cultural resources); and
- Land conservation and watershed protection.

Additionally, the USFS filed Section 4(e) conditions with FERC, which were also incorporated into the new Project license. In summary, the USFS recommended the 4(e) conditions require annual consultation with the USFS and the establishment of mitigation trust funds to support natural resource stewardship activities at the Project.

The USFS maintains a high level of participation in the implementation of the RSA and Project license. We have positive and cooperative working relationship with APGI. In the years since the issuance of the new Project license, APGI has consistently met its obligations in the RSA and Project license. We are not aware of any instance of non-compliance and have no concerns regarding license implementation and compliance.



In closing, I would like to reiterate our support of APCI's recertification application. If you have any questions or would like to discuss this topic further, please contact Julie Moore at juliedmoore@fs.fed.us or by phone at 828-257-4859.

Sincerely,


for DIANE RUBIACO
Acting Forest Supervisor

cc: Marshall Olson, APCI



North Carolina Department of Environment and Natural Resources

Division of Water Resources

Beverly Eaves Perdue
Governor

Thomas A. Reeder
Director

Dee Freeman
Secretary

February 29, 2012

Mr. Marshall Olson
APGI – Tapoco Project
P.O. Box 576
Badin, NC 28009

Mr. Olson:

The N.C. Division of Water Resources (NCDWR) is providing this letter in response to APGI's request for comments regarding recertification of the Tapoco project (FERC license #2169) by the Low Impact Hydropower Institute (LIHI).

DWR was the lead agency representing the N.C. Department of Environment & Natural Resources (NCDENR) during the relicensing and settlement process for the Tapoco hydroelectric project. Our focus was on the Santeetlah facility and the associated bypassed reach of the Cheoah River, since the other facilities covered by this license are located in Tennessee.

Studies were conducted during relicensing to evaluate the effect of flows in the Cheoah River bypassed reach on aquatic habitat and whitewater recreation. NCDWR staff were active participants in study design, data collection, review of results, development of recommendations, and negotiation of the relicensing settlement agreement. The Secretary of NCDENR signed the settlement agreement on behalf of our Department.

The Relicensing Settlement Agreement (RSA) included several items that are very beneficial to natural resources and the citizens of North Carolina. Recommendations by our agency that were incorporated in the RSA included:

- Maintenance of seasonally varying base flows for aquatic habitat in the 9-mile bypassed reach of the Cheoah River.
- A low inflow protocol to manage releases and reservoir levels during periods of low water availability.
- Scheduled high flow releases to the Cheoah bypassed reach that benefit aquatic habitat and are also valued for whitewater recreation.
- A stream flow gage in the Cheoah River bypassed reach to monitor compliance with various requirements.

- Establishment of the Cheoah River Fund for ecosystem enhancement projects in the Cheoah River watershed. Projects include: rearing and re-introduction of endangered fish and mussels; adding gravel for substrate enhancement in the bypassed reach; and control of invasive species. The board has also funded and reviewed research to evaluate the effectiveness of enhancement projects.

NCDWR continues to be very involved in the implementation of the license and RSA terms and conditions. Our staff participates in annual meetings to review the effectiveness of the preceding high flow release events and to plan the upcoming high flow release schedule. NCDWR is also one of the five agencies represented on the Cheoah Fund Board. This board reviews project proposals for funding by the Cheoah River Fund, oversees contracts, and tracks the progress of the work undertaken. The current chair of the board is from NCDWR and this is the second time our staff has served in this capacity.

We are pleased to say that APGI continues to be an active and committed partner in the implementation of the RSA as well as complying with the requirements of the FERC license.

Please contact me at 919/707-9019 or jim.mead@ncdenr.gov if you have any questions about NCDWR and our involvement and perceptions with regards to the settlement agreement and FERC license for the Tapoco project.

Sincerely,



Jim Mead
Environmental Supervisor

cc: Steve Reed & Fred Tarver – DWR
Chris Goudreau – WRC
Jody Smet – EA Engineering, Science, & Technology



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES
7TH FLOOR, L&C ANNEX
401 CHURCH STREET
NASHVILLE, TENNESSEE 37243-1534

March 8, 2012

Marshall Olson, APCI-Tapoco Project
P.O Box 576
Badin, North Carolina 28009

RE: Tapoco Hydroelectric Project (FERC No. 2169)
Application for Low Impact Hydropower Certification

Dear Mr. Olson:

I understand that the Tapoco Division of Alcoa Power Generating Inc. has submitted an application for Low Impact Hydropower Certification with the Low Impact Hydropower Institute. I am further aware that there are concerns about the water quality in the reach immediately below the Calderwood Dam. I am the Manager of our Natural Resources Section and represented the Division in the FERC relicensing process for the Tapoco projects. The Division issued a §401 Water Quality Certification on April 29, 2004 that specified terms and conditions under which operation of the project would not cause violations of state water quality standards. To my knowledge, the project has continued to operate in compliance with the Water Quality Certification. Therefore, I believe that the Tapoco Project is appropriately protective of water quality in the bypass reach below Calderwood Dam.

Sincerely,

Daniel C. Eagar, Manager
Natural Resources Section