

Low Impact Hydropower Institute

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LOW IMPACT HYDROPOWER QUESTIONNAIRE APPLICANT FORMAT

[Excerpted from Part VI, Section E of the Low Impact Hydropower Certification Program. Words in italics are defined in Part VI, Section C, and line-by-line instructions are available in Section D of the program, available on-line in PDF format at <http://www.lowimpacthydro.org>.

Background Information	
1) Name of the Facility.	TALLASSEE SHOALS HYDROELECTRIC PROJECT
2) Applicant's name, contact information and relationship to the Facility. If the Applicant is not the Facility owner/operator, also provide the name and contact information for the Facility owner and operator.	FALL LINE HYDRO COMPANY, INC. 390 TIMBER LAUREL LANE LAWRENCEVILLE, GA 30043 770-277-4790 <u>ATTN: ROBERT DAVIS</u>
3) Location of Facility by river and state.	MIDDLE OCONEE RIVER, GEORGIA
4) Installed capacity.	2322 KW
5) Average annual generation.	6,500,000 KWH
6) Regulatory status.	FERC LICENSE #6951 PROJECT IN GOOD STANDING
7) Reservoir volume and surface area measured at the high water mark in an average water year.	RESERVOIR VOLUME: 368 ACRE-Feet SURFACE AREA: 37 ACRES
8) Area occupied by non-reservoir facilities (e.g., dam, penstocks, powerhouse).	34 ACRES
9) Number of acres inundated by the Facility.	37 ACRES
10) Number of acres contained in a 200-foot zone extending around entire impoundment.	27 ACRES
11) Please attach a list of contacts in the relevant Resource Agencies and in non-governmental organizations that have been involved in Recommending conditions for your Facility.	SEE ATTACHMENTS
12) Please attach a description of the Facility, its mode of operation (i.e., peaking/run of river) and a map of the Facility.	SEE ATTACHMENTS

<p>Questions For "New" Facilities Only:</p> <p>If the Facility you are applying for is "new" i.e., an existing dam that added or increased power generation capacity after August of 1998 please answer the following questions to determine eligibility for the program</p>		
<p>13) When was the dam associated with the Facility completed?</p>		
<p>14) When did the added or increased generation first generate electricity?</p>		
<p>15) Did the added or increased power generation capacity require or include any new dam or other diversion structure?</p>		
<p>16) Did the added or increased capacity include or require a change in water flow through the facility that worsened conditions for fish, wildlife, or water quality, (for example, did operations change from run-of-river to peaking)?</p>		
<p>17 (a) Was the existing dam recommended for removal or decommissioning by resource agencies, or recommended for removal or decommissioning by a broad representation of interested persons and organizations in the local and/or regional community prior to the added or increased capacity?</p> <p>(b) If you answered "yes" to question 17(a), the Facility is not eligible for certification, unless you can show that the added or increased capacity resulted in specific measures to improve fish, wildlife, or water quality protection at the existing dam. If such measures were a result, please explain.</p>		
<p>A. Flows</p>	<p>PASS</p>	<p>FAIL</p>
<p>1) Is the Facility in <i>Compliance with Resource Agency Recommendations</i> issued after December 31, 1986 regarding flow conditions for fish and wildlife protection, mitigation and enhancement (including in-stream flows, ramping and peaking rate conditions, and seasonal and episodic instream flow variations) for both the reach below the tailrace and all bypassed reaches?</p>	<p>YES = Pass, Go to B N/A = Go to A2</p> <p><u>YES</u></p> <p>SEE 2/7/89 LETTER</p>	<p>NO = Fail</p>
<p>2) If there is no flow condition recommended by any Resource Agency for the Facility, or if the recommendation was issued prior to January 1, 1987, is the Facility in Compliance with a flow release schedule, both below the tailrace and in all bypassed reaches, that at a minimum meets Aquatic Base Flow standards or "good" habitat flow</p>	<p>YES = Pass, go to B NO = Go to A3</p>	

E. Threatened and Endangered Species Protection		PASS	FAIL
1) Are threatened or endangered species listed under state or federal Endangered Species Acts present in the Facility area and/or downstream reach?	YES = Go to E2 NO = Pass, go to F <i>SEE 4/2/04 LETTER</i>		
2) If a recovery plan has been adopted for the threatened or endangered species pursuant to Section 4(f) of the Endangered Species Act or similar state provision, is the Facility in Compliance with all recommendations in the plan relevant to the Facility?	YES = Go to E3 N/A = Go to E3		NO = Fail
3) If the Facility has received authority to incidentally Take a listed species through: (i) Having a relevant agency complete consultation pursuant to ESA Section 7 resulting in a biological opinion, a habitat recovery plan, and/or (if needed) an incidental Take statement; (ii) Obtaining an incidental Take permit pursuant to ESA Section 10; or (iii) For species listed by a state and not by the federal government, obtaining authority pursuant to similar state procedures, is the Facility in Compliance with conditions pursuant to that authority?	YES = Go to E4 N/A = Go to E5		NO = Fail
4) If a biological opinion applicable to the Facility for the threatened or endangered species has been issued, can the Applicant demonstrate that: a) The biological opinion was accompanied by a FERC license or exemption or a habitat conservation plan? Or b) The biological opinion was issued pursuant to or consistent with a recovery plan for the endangered or threatened species? Or c) There is no recovery plan for the threatened or endangered species under active development by the relevant Resource Agency? Or d) The recovery plan under active development will have no material effect on the Facility's operations?	YES = Pass, go to F		NO = Fail
5) If E.2. and E.3. are not applicable, has the Applicant demonstrated that the Facility and Facility operations do not negatively affect listed species?	YES = Pass, go to F		NO = Fail
F. Cultural Resource Protection		PASS	FAIL
1) If FERC-regulated, is the Facility in Compliance with all requirements regarding Cultural Resource protection, mitigation or enhancement included in the FERC license or exemption?	YES = Pass, go to G N/A = Go to F2 <u>YES</u> <i>SEE 3/5/04 LETTER</i>		NO = Fail
2) If not FERC-regulated, does the Facility owner/operator have in place (and is in Compliance with) a plan for the protection, mitigation or enhancement of impacts to Cultural Resources approved by the relevant state or federal	YES = Pass, go to G		NO = Fail

agency or <i>Native American Tribe</i> , or a letter from a senior officer of the relevant agency or Tribe that no plan is needed because Cultural Resources are not negatively affected by the Facility?		
G. Recreation	PASS	FAIL
1) If FERC-regulated, is the Facility in Compliance with the recreational access, accommodation (including recreational flow releases) and facilities conditions in its FERC license or exemption?	YES = Go to G3 N/A = Go to G2 <u>YES</u>	NO = Fail
2) If not FERC-regulated, does the Facility provide recreational access, accommodation (including recreational flow releases) and facilities, as Recommended by Resource Agencies or other agencies responsible for recreation?	YES = Go to G3	NO = Fail
3) Does the Facility allow access to the reservoir and downstream reaches without fees or charges?	<u>YES = Pass, go to H</u>	NO = Fail
H. Facilities Recommended for Removal	PASS	FAIL
1) Is there a Resource Agency Recommendation for removal of the dam associated with the Facility?	<u>NO = Pass, Facility is Low Impact</u>	YES = Fail

TALLASSEE SHOALS HYDROELECTRIC PLANT



LOOKING UPSTREAM AT DAM



POWERHOUSE, HEADRACE, & TAILRACE

TALLASSEE SHOALS HYDROELECTRIC PROJECT

Agencies/Organizations involved in recommending conditions for Tallassee Shoals Hydroelectric Project:

**U.S. Department Of the Interior
Fish and Wildlife Service
247 South Milledge Avenue
Athens, GA 30605**

**Project Contact: Alice Palmer
706-613-9493**

**Georgia Department Of Natural Resources
Wildlife Resources Division
2070 Hwy. 278 S.E.
Social Circle, GA 30025**

**Project Contact: John Biagi
Assist. Fisheries Chief
770-918-6406**

**Georgia Department Of Natural Resources
Environmental Protection Division
4220 International Parkway**

**Project Contacts:
Kathy Methier / Water Quality 404-675-1657
Bob McClelland / Water Allocation 404-657-6011
Keith Parsons / Water Protection 404-675-1631**

**Georgia Department Of Natural Resources
Historic Preservation Office
156 Trinity Ave., S.W.
Suite 101
Atlanta, GA 30303**

**Project Contact:
404-656-2840**



United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE

247 South Milledge Avenue
Athens, Georgia 30605

West Georgia Sub Office
P.O. Box 52560
Ft. Benning, Georgia 31995-2560

Coastal Sub Office
4270 Norwich Street
Brunswick, Georgia 31520

APR 02 2004

Mr. Robert Davis
Fall Line Hydro Company Incorporated
390 Timber Laurel Lane
Lawrenceville, GA 30043

Re: Tallassee Shoals Hydroelectric Project, FERC # 6951
FWS Log No. NG-04-277-FERC

Dear Sir:

The U.S. Fish and Wildlife Service (Service) has reviewed your February 9, 2004, request regarding the Tallassee Shoals Hydroelectric Project (TSHP). Fall Line Hydro Company, Inc., the licensee of the TSHP, requested comments on March 31, 2004 from the Service regarding the eligibility of this project for certification as a "Low Impact Hydroelectric Facility" by the Low Impact Hydro Institute (LIHI). The LIHI is a non-governmental, non-profit organization. Certification would allow electricity produced by the facility to be marketed and sold as "green power." The project is located on the Middle Oconee River in Clarke and Jackson Counties, Georgia. We submit the following comments and recommendations under the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*), the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*), and the Federal Power Act (16 U.S.C. 791a, *et seq.*).

Your February 9, 2004, letter requests our comments concerning minimum flow rates, threatened and endangered species, and the presence (or non-presence) of migrating fish in the project area. There are no federally-listed aquatic species in the project area. Additionally, it seems that several dams downstream of the TSHP serve as present-day barriers to upstream passage of migratory fish species. The American eel (*Anguilla rostrata*) is a migratory species that in many cases can eventually achieve passage past hydroelectric facilities, although passage is not safe, timely, or effective. American eel occupy a diversity of habitats, including headwater streams (Helfman, Bozeman, and Brothers, 1984), and are able to reach the extreme upper portions of river systems (ASMFC, 1999). We are not aware of post-construction location records for American eel or any other diadromous fish species above a series of large hydroelectric facilities that are located downstream of the project (Sinclair and Wallace Dam Projects), and it is thought that these dams and associated large reservoirs are serving as a barrier to American eel upstream migration (Freeman and Marcinek, 2002; John Biagi, GDNR, 2004, pers. comm.).

Our office does not have a file on the TSHP, and therefore we have limited information on minimum flow violations and protectiveness of these flows on downstream resources. All of the following information was obtained from electronic documents accessible through the Federal Energy Regulatory Commission's (FERC) website. However, many documents are not of public domain because they contain confidential critical energy infrastructure information. In addition, electronic documents pertaining to TSHP on FERC's website cannot be accessed prior to 1995. Therefore, as stated before, our knowledge is limited.

In the October 24, 1983, TSHP license, Article 29 provides for a permanent minimum flow release of 70 cubic feet per second (cfs) from the project dam; an interim release of 138 cfs as measured below the project tailrace during the month of May; and a minimum flow study to assess the relationship between streamflows and available aquatic habitat below the project. The study results were meant to provide the basis for further instream flow negotiations between the licensee at that time, Oglethorpe Power Corporation (OPC), and the resource agencies. In the FERC's August 20, 1990, Order Denying Request To Amend Article 29, FERC states that the licensee submitted a May 21, 1984, minimum flow study report, and requested the minimum flow requirement be reduced to 53 cfs. In a September 18, 1989, letter, the Service disagreed with the licensee, and stated the data from the study did not support the licensee's request to amend the minimum flows. After reviewing the variable study conditions in the licensee's study plan that resulted in variable fish capture efficiency, and the October 24, 1983, license conditions, FERC denied the licensee's request to amend Article 29, and ordered the original license requirements to stay in effect due to a lack of data. By accessing FERC's electronic documents, the Service is aware of one minimum flow requirement violation reported to FERC by OPC in a December 15, 1997 Flow Report. The flow was 30-40 cfs for a duration of 39 minutes.

We appreciate the opportunity to comment on this project. If you have any questions, please contact staff biologist Alice Palmer at (706) 613-9493 ext. 22.

Sincerely,



Sandra S. Tucker
Field Supervisor

cc: file
Magalie R. Salas, FERC, Washington, DC
Fred Air, LIHI, Portland, ME
John Biagi, GDNr, Social Circle, GA
Sue Cielinski, USFWS, Atlanta, GA
Prescott Brownell, NMFS, Charleston, SC

References

Atlantic States Marine Fisheries Commission. 1999. Interstate Fishery Management Plan for American Eel (*Anguilla rostrata*). November 1999, Fisheries Management Report #36, page 9.

Freeman, M., and P. Marcinek. 2002. Effects of instream flow depletion on biological integrity of stream fish communities in the Georgia Piedmont. Project Report to Georgia Department of Natural Resources, Wildlife Resources Division, Fisheries Section. 79 pp.

Helfman, G.S., Bozeman, E.L., and E.B. Brothers. 1984. Size, Age, and Sex of American Eels in a Georgia River. Transactions of the American Fisheries Society 113:132-141, page 132.

Georgia Department of Natural Resources

Environmental Protection Division, Water Protection Branch
4220 International Parkway, Suite 101, Atlanta, Georgia 30354
Water Protection Branch
404/675-6232
FAX: 404/675-6245

March 25, 2004

Mr. Robert A. Davis
Project Manager
Fall Line Hydro Company, Inc.

Re: Tallassee Shoals Hydroelectric Plant
FERC Project No. 6951
Clarke/Jackson Counties

Dear Mr. Davis:

The Georgia Environmental Protection Division (EPD) has reviewed your request to provide comment regarding operational compliance of the referenced FERC licensed facility.

In reply to your request, EPD provides the following comments:

B.1.b)

The river reach of the Middle Oconee River is designated as "Fishing" in the Georgia Water Quality Rules and Regulations. Operation of the facility does not require the FERC licensee to obtain a NPDES from the Georgia EPD. The facility is operated within the parameters dictated in the FERC permit and therefore meets necessary water quality standards and provides adequate flows to support and protect aquatic species downstream.

B.2)

The project lies within a river reach of the Middle Oconee River that has been identified as failing to meet water quality standards for fecal coliform bacteria and is subsequently listed for noncompliance pursuant to Section 303(d) of the Federal Clean Water Act.

B.3)

The existence and operation of the FERC licensed hydropower facility is not a cause, nor does it contribute to the determination of noncompliance of water quality standards.

The Robust Redhorse, *Moxostoma robustum*, is a sucker fish historically indigenous to certain southeastern river basins including the Oconee River basin. Once thought extinct, it was rediscovered in the early 1990s. It could have been placed on the federal endangered species list at that time. Through agreement with a broad group of stakeholders including state and federal agencies, environmental and conservation interests, the hydropower industry and others, an agreement was reached not to list the fish if a concerted recovery plan was developed and implemented.

I have discussed your request with Mr. Jimmy Evans, Georgia DNR Fisheries recovery team leader and Dr. Bud Freeman, University of Georgia, Institute of Ecology. The Oconee River above the Tallassee Shoals Hydropower project has suitable habitat for reintroduction of the Robust Redhorse, though it has not yet been reintroduced at this time. It is unlikely that normal operations of the hydropower project would adversely effect a population if reintroduced above the facility.

Because of peaking flows and minimum low flow allowances in the existing FERC permit for the Tallassee Shoals Hydropower project, it is inconclusive as to whether the river reach below the facility would support reintroduction of this species or whether it will remain extirpated from this reach of its historical range.

Should you have additional questions regarding these statements, please contact me at 404/675-1631.

Sincerely,



Keith Parsons

Cc: Mr. Fred Ayers
Ms. Kathy Methier
Mr. Jimmy Evans
Dr. Bud Freeman

Georgia Department of Natural Resources

Lonice C. Barrett, Commissioner

Historic Preservation Division

W. Ray Luce, Division Director and Deputy State Historic Preservation Officer
156 Trinity Avenue, S.W., Suite 101, Atlanta, Georgia 30303-3600
Telephone (404) 656-2840 Fax (404) 657-1040 <http://www.gashpo.org>

MEMORANDUM

TO: Robert A. Davis
Project Manager
Fall Line Hydro Company, Inc.
390 Timber Laurel Lane
Lawrenceville, Georgia 30043

FROM: Serena G. Bellew SGG
Environmental Review Coordinator
Historic Preservation Division

RE: **Finding of "No Historic Properties Affected"**

PROJECT: **Tallassee Shoals Hydroelectric Plant, FERC NO. 6951**
Federal Agency: FERC
HP 040217-008

COUNTIES: **Clarke and Jackson Counties, Georgia**

DATE: March 5, 2004

The Historic Preservation Division has reviewed the information received concerning the above-referenced project. Our comments are offered to assist federal agencies and project applicants in complying with the provisions of Section 106 of the National Historic Preservation Act.

Based on the information submitted, HPD has determined that no historic properties or archaeological resources that are listed in or eligible for listing in the National Register of Historic Places will be affected by this undertaking. Please note that historic and/or archaeological resources may be located within the project's area of potential effect (APE), however, at this time it has been determined that they will not be impacted by the above-referenced project. Furthermore, any changes to this project as proposed will require further review by our office for compliance with the Section 106 process.

If we may be of further assistance contact me at (404) 651-6624. Please refer to the project number assigned above in any future correspondence regarding this project.

SGB:mcv

cc: Burke Walker, Northeast Georgia RDC

Georgia Department of Natural Resources

Environmental Protection Division, Water Protection Branch
4220 International Parkway, Suite 101, Atlanta, Georgia 30354
404/675-6232
FAX: 404/675-6247

January 28, 2004

Mr. Robert Davis
Fall Line Hydro Company
390 Timber Laurel Lane
Lawrenceville, Georgia 30043

RE: Middle Oconee River (Jackson/Clarke Counties)

Dear Mr. Davis:

In response to your request, I have reviewed the available water quality trend monitoring data for the Middle Oconee River from site locations in Jackson and Clarke Counties. Based on exceedences of the State's Water Quality Standard for fecal coliform bacteria, an approximate extent of 23 miles of the Middle Oconee River from Mulberry River to McNutt Creek has been identified as impaired on Georgia's 2002 Final 305(b)/303(d) Listing of Waters for fecal coliform bacteria. This listing is based on data collected during the calendar year 1999. During the 1999 sampling year, all other water quality standards, with the exception of fecal coliform bacteria, were met for the parameters tested (which included field parameters such as water temperature, dissolved oxygen and pH).

If you should have any additional questions, do not hesitate to contact me at 404/675-1657.

Sincerely,



Kathleen Methier
Environmental Program Manager I
Ambient Monitoring Unit
Watershed Planning & Monitoring Program

Cc: Keith Parsons, EPD

Georgia Department of Natural Resources

205 Butler Street, S.E., Suite 1252, Atlanta, Georgia 30334
J. Leonard Ledbetter, Commissioner
404/656-3500

August 7, 1989

Mr. Clay Doherty
Environmental Specialist
Oglethorpe Power Corporation
P. O. Box 1349
Tucker, Georgia 30085-1349

SUBJECT: Aquatic Study, Tallassee Shoals
Hydroelectric Project (FERC Project
Number 6951)

Dear Mr. Doherty:

As discussed by telephone, I am submitting the Department of Natural Resources follow-up comments regarding the above subject project.

As stated in the FERC license, the Department of Natural Resources concurred with Oglethorpe Power's proposed 53 cfs minimum flow release in earlier comments on the project. Our concurrence was based on the understanding that any impacts to the fishery could be offset by providing additional fisherman access; at an earlier time it was thought that the question of fisherman access was unsettled. The issue of fisherman access has now been resolved, and we now have no reason to alter our earlier position on the minimum flow.

We have no objection to a 53 cfs minimum continuous release being made a permanent condition of the FERC license for this project.

Sincerely,

Collis O. Brown

Collis O. Brown
Sr. Technical Assistant

COB:lc

cc: Chuck Coomer

RECEIVED

AUG 07 1989