MEMORANDUM

Date: July 18, 2009

From: Fred Ayer, Executive Director
To: LIHI Governing Board and Advisory Panels

Subject: **Application Review LIHI Re-Certification**
Tallassee Shoals Hydroelectric Project (GA)

The Tallassee Shoals Hydroelectric Project (FERC No. 6951) was certified as Low Impact by the Low Impact Hydropower Institute on April 23, 2004 for five years. This review of the Tallassee Shoals Project relies heavily on the attached report which was prepared by Application Reviewer, Gabriela Goldfarb in 2004.

Note on Ownership Change - On August 18, 2008 the FERC approved the transfer of the 1.9-megawatt Tallassee Shoals Project license (FERC No. 6951) from Fall Line Hydro Company, Inc. (Fall Line) to Tallassee Shoals, LLC ("Tallassee" or "Applicant"). The project is located on the Middle Oconee River in Clarke and Jackson Counties, Georgia. FERC's public notice of the application was issued on June 13, 2008, setting July 12, 2008, as the deadline for filing comments, protests, and motions to intervene. No motions to intervene or comments were filed. Transferee has agreed to accept all of the terms and conditions of the license and to be bound by the license as if it were the original licensee. The Applicant's contact person for this application is:

Walt Puryear
Tallassee Shoals LLC
2399 Tallassee Road
Athens, Georgia 30607
706-540-7621

Our review has focused on confirming that the Tallassee Shoals Project continues to meet the requirements of all eight LIHI criteria. I believe the conclusion reached in the 2004 review is still valid and changes that may have occurred at the project have no affect on its ability to pass each of the LIHI criteria. At the end of each criteria I have inserted notes (in italics) reflecting the

results of this re-certification review. I have also summarized Gabriela's 2004 conclusions and my update for each of the eight criteria.

Flow – Because the facility is not operating, all flows are going through gated structures or over the dam, exceeding the required minimum bypass flow of 70 cubic feet per second (cfs). An assessment of operational compliance cannot be made until the project is once again in service.

Update: *(2/25/09) LIHI issued a request for comments regarding the eligibility of the project for re-certification and the US Fish and Wildlife Service (USFWS) in an April 25, 2009 letter, noted a typographical error in our notice which stated that the minimum required flow was 58cfs., which was incorrect. The correct minimum flow is 70cfs, and this was confirmed by the Applicant.*

The Tallassee Shoals project has two turbine/generators: a fixed Kaplan 100kw unit installed within the dam and an adjustable Kaplan 2.3 MW unit located several hundred yards downstream. As of February 2009, the 2.3 MW turbine is operational, but limited to 500KW output as the runner blade adjustment is not functioning. Repair will be performed during the summer low flow months. The 100KW unit is in the process of being rebuilt and is scheduled to be fully operational by mid-summer 2009. In the interim, the Applicant maintains a one-inch flow over dam to ensure 70cfs flow in the area between the dam and tailrace.

Water Quality – A March 25, 2004 letter from the GDNR states that the facility "meets necessary water quality standards." The designated use is "fishing."

The waters in the project area are "identified as failing to meet water quality standards for fecal coliform bacteria" and are included on the state's Clean Water Act Section 303(d) list according to GDNR's March 25, 2004 letter. GDNR stated in its March 25, 2004 letter that the facility is not a cause of the failure to meet water quality standards.

Update: *(6/10/09) I called Keith Parsons, author of the 2004 water quality letter and left a message regarding the Tallassee Shoals Project.*

Update: *(6/11/09) I left a second message for Keith Parsons.*

Update: *(6/15/09) I had a good conversation with Keith and asked him if there was anything changed that would affect the determination he made in his March 25, 2004 letter which states that the facility "meets necessary water quality standards." The designated use is "fishing." Also whether the waters in the project area are "identified as failing to meet water quality standards for fecal coliform bacteria" and are included on the state's Clean Water Act Section 303(d) list. GDNR stated in its March 25, 2004 letter that the facility is not a cause of the failure to meet water quality standards. Keith said there was nothing he could think of that would change the determination made in his 2004 letter, particularly if the project was run-of-river and the project passed the 70cfs minimum flow.*

Fish Passage and Protection - There are no mandatory fish passage prescriptions for upstream and downstream passage of anadromous and catadromous fish. In discussions and written correspondence both federal and state natural resource agency staff agreed that the presence on the main stem of the Oconee River of preexisting large hydroelectric facilities and reservoirs that block passage to the Middle Oconee River explain why fish passage was not raised as an issue in the licensing of the facility.

FWS in its April 2, 2004 letter indicated that the historic range of the catadromous American eel would likely have included the facility area, but that large hydroelectric facilities downstream of the project were responsible for blocking passage.

At present there are no prescriptions for upstream or downstream passage of riverine fish. However, as implementation of robust redhorse recovery efforts move forward, the Middle Oconee may be identified as a location suitable for reintroduction of this fish. It is unknown whether resource agencies will deem fish passage desirable or necessary. Little is known about the species' migratory habits.

There are no resource agency recommendations or FERC license requirements relating to fish entrainment protection.

Update*: (2/25/2009) LIHI received a letter from the US Fish and Wildlife Service (USFWS) which updates issues of concern and confirms that nothing that affects the certifiablity of the project has changed since they commented in 2004. The issues discussed in their letter includes: River Flows, Fish Passage and Protection, and Threatened and Endangered Species. The USFWS recommends that the Applicant continue to submit documentation relating to the status of the robust redhorse and American shad recovery activities as they may or may not affect the facility*

Update: *6/10/2009 – Mr. Biagi, Fisheries Chief, GDNR, said that from what he knew not much had changed. He reiterated and confirmed his earlier comments regarding American eel and their ability to get by a Tallassee sized dam without passage. He agreed that it would be a good idea to have the Applicant continue to monitor the Robust redhorse recovery effort.*

Update: *6/10/2009 – According to Jimmy Evans, GDNR's robust redhorse expert, the robust redhorse Management Plan is about "95% Complete." The Plan has objectives regarding restoration efforts of the robust redhorse one of which is a stocking program that would put ready to spawn adults from other rivers in the stretch of river between Tallassee Shoals and the next downstream dam. Should the stocking program be successful, it is possible that there would be fish passage requirements. JimmyEvans felt that stocking would be likely to occur in the next 5 years. He felt it would be a good idea to have the Applicant check in with the GDNR, specifically with Jimmy, as they had done over the last five years. I said that I would recommend continuing the condition that the Board had required during the initial certification application.*

Watershed Protection - There are no resource agency recommendations or FERC license requirements relating to watershed protection.

Update: *No change*

Threatened and Endangered Species - In its April 2, 2004 letter FWS stated that "[t]here are no federally-listed aquatic species in the project area." FWS staff have not yet responded to a request for confirmation that there are no non-aquatic listed species in the project area, or that any such species would not be adversely affected by the facility. Any additional information received on this issue will be presented to the LIHI Governing Board at its meeting to consider certification of this facility.

Update*: (2/25/2009) LIHI received a letter from the US Fish and Wildlife Service (USFWS) which had the following comments regarding T&E species:*

> *The Service would not expect the continuing operations of this existing project to affect federally-listed species in Clarke and Jackson Counties, Georgia. However, the State-listed Altamaha shiner (Cyprinella xaenura) is currently found in Clarke County. The Georgia Department of Natural Resources (770.918.6411) can be contacted for more information regarding this species.*

Update: *(7/14/09) LIHI sent a note to GDNR asking about this shiner's presence in the project area and the impact of the project. We received the following letter:*

Yes, we can confirm the presence of the Altamaha Shiner in the Middle Fork Oconee River. It is known from very recent collections both upstream and downstream of the project site. Since the Altamaha Shiner is persisting downstream of the dam, I don't believe that continued operation of the project will negatively affect this species. The dam is almost certainly a barrier to movement for the species and results in population fragmentation. However, given other barriers in the system and the lack of info on the ecology and population structure of the Altamaha Shiner, this is really only a theoretical impact at this point.

I am attaching a species account for the Altamaha shiner from our website, just as an FYI.

http://georgiawildlife.dnr.state.ga.us/assets/documents/gnhp/cyprinella_xaenura.pdf

Thanks for coordinating with us,
Brett Albanese, Ph.D.
Georgia Department of Natural Resources
Nongame Conservation Section
Wildlife Resources Conservation Center

Cultural Resources – GDNR's Historic Preservation Division confirmed in a March 5, 2004 letter that "no historic properties or archaeological resources that are listed or eligible for listing in the National Register of Historic places will be affected by this undertaking." FERC license provisions were limited to requirements associated with cultural resource protection during facility construction.

Update: No change

Recreational Resources - The applicant is currently in compliance with recreational access requirements, as documented in a June 7, 2004 report by the applicant to FERC confirming its compliance and including photographs documenting the presence of required signage. There are no fees or other restrictions.

Update: (6-15-09) - During my interview with John Biagi, GDNR, where we were discussing fishery issues, he mentioned that there was an unresolved access issue at the site and he was going to talk with his staff member (Chris Canalos) to get an update on the status of the access issue. Chris had the opportunity to meet with the Applicants and sent John the following email report:

John - I met with both members of Tallassee LLC, owners of the Tallassee Shoals hydroelectric facility (Nancy Stangle and Walt Puryear) this morning on site. An agreement was reached to 1) move the sign that is near the plant and behind a gate closer to Tallassee Road so that the public wouldn't have to drive through a gate to the plant to see the sign and 2) place signage at the small parking lot adjacent to the access easement notifying the public that this is where the access is and to respect the neighboring private property. This latter sign would also make note that the access from the parking lot down to the river is pedestrian, not vehicular.

Nancy and Walt were very helpful in quickly settling this matter and I suggest informing the Institute that the public access requirements of the FERC license are being met. It is up to the Institute, but recertification probably could be granted based on this morning's discussion. If photographs of the installed signage are needed prior to recertification, that can be provided after installation, but I'm of the opinion that they will follow through quickly and the recertification shouldn't be held up. Access to fishing in the Middle Oconee River below the project site will be enhanced by the actions of these new owners who take the requirement of public access at the site seriously – Chris Canalos, GIS Specialist, Georgia DNR Nongame Conservation Section

Facilities recommended for removal - There have been no recommendations for removal of the facility.

Reviewer's Recommendation – I found nothing in my review to indicate that the Project has experienced changes which would affect the certifiability of the Tallassee Shoals Project. Therefore, I recommend Re-Certification with the following non-standard condition:

On an annual basis beginning with the first anniversary of the effective LIHI Low Impact re-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.

Review of Low Impact Hydropower Institute Application for Low Impact Hydropower Certification: Tallassee Shoals Hydroelectric Project Annotated by Fred Ayer, Executive Director

Introduction and Overview

This report reviews the application submitted by Fall Line Hydro, Inc. (applicant) to the Low Impact Hydropower Institute (LIHI) for Low Impact Hydropower Certification for the Tallassee Shoals Hydroelectric Project (project or facility) in Clarke and Jackson Counties, Georgia. The Federal Energy Regulatory Commission (FERC) licensed the facility in 1983 (FERC 6951) to the project's previous owner. FERC transferred the license to the applicant September 9, 2003.

Project and site characteristics. The run-of-the-river project is located on the Middle Oconee River and 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. However, the facility ceased operations in early 2000 while under the ownership of the original licensee due to mechanical problems with the turbines. The applicant expects to complete repairs and commence operation of the facility in late 2004 or early 2005.

Average annual flow at the facility is 530 cubic feet per second (cfs). The drainage basin of the Middle Oconee River upstream from the facility is 358 square miles. The facility is in the Georgia Piedmont above the so-called "fall line" where the hilly uplands give way to the coastal plain. Most of Georgia's population lives in the Piedmont region.[1] The project is upstream of numerous dams and hydroelectric facilities. Two relatively large hydroelectric projects on the main stem of the Oconee River, Wallace (321 MW, licensed 1969) and Sinclair (45 MW relicensed 1996), are notable for their impacts to habitat through inundation and creation of slack water, and as barriers to migratory fish species. In the case of Sinclair Dam, during relicensing the U.S. Fish and Wildlife Service (FWS) and National Marine Fisheries Service reserved authority to prescribe fishways in the future. Two aquatic species of interest in the Middle Oconee, as identified by FWS and the Georgia Department of Natural Resources (GDNR), are the American eel and the robust redhorse.

With respect to the catadromous American eel, the two large dams on the main stem Oconee River mentioned above and their associated large reservoirs are barriers to passage of this fish to

[1] New Georgia Encyclopedia. "Environmental Regions of Georgia: Overview." *Land and Resources*. 18 July 2003. http://www.georgiaencyclopedia.org/ (Accessed 5 July 2004).

upriver locations, including the Middle Oconee.[2] (Other dams and impoundments between these two dams and the facility were not identified as primary obstacles to fish passage.)

The robust redhorse is a sucker fish that was thought to be extinct for over 100 years throughout its range in North and South Carolina and Georgia until the identification of wild populations of the fish in the Oconee River in 1991 (and subsequently in other rivers in the region). Though eligible for listing under the Endangered Species Act (ESA), a group of stakeholders including the states of North Carolina, South Carolina, and Georgia, federal agencies, industry representatives, and conservation organizations signed a 1995 memorandum of understanding creating the Robust Redhorse Conservation Committee (RRCC) to carry out recovery efforts instead of listing.[3] Migration patterns of the robust redhorse are not well understood, and in any case GDNR staff report that there are no plans to pursue improved fish passage at the Sinclair and Wallace dams downstream from the Tallassee Shoals facility. GDNR staff is preparing for the RRCC an Oconee Management Plan component to the Robust Redhorse Conservation Strategy. The management plan may recommend measures to evaluate the habitat suitability of the Middle Oconee River for stocking the robust redhorse; a draft plan is not anticipated until fall 2004.[4]

As a matter of background information (with implications for LIHI in regard to long term and future facility certifications on the Eastern seaboard), according to a senior National Oceanic and Atmospheric Administration fisheries biologist, diadromous shad, herring, striped bass (rockfish), eel, and sturgeon were at one time "present in all the 'swimmable' reaches of the Atlantic Coast river basins to the upper Piedmont physiographic province " according to evidence found in "historical literature and land exchange records." These populations were extirpated in drainages like the Middle Oconee as a result of habitat loss and barriers to fish passage resulting from agricultural, industrial, and dam development starting in the 1700s. He believes that after a post-WWII era in which awareness of these historic populations and fish passage concerns waned, there may be an increased focus on these issues as dams constructed in the 1900s will have to be repaired, replaced, removed, or relicensed.[5]

Public comment. There was no public comment on this application.

General conclusions. The Tallassee Shoals Hydroelectric Project is a facility that appears not to raise significant issues of concern to the relevant resource agencies for two reasons. First is that it is a small facility in a basin and sub-basin that is already highly fragmented by both permitted and unpermitted impoundments.[6] Second is that the two largest dams downstream from the

[2] Tucker, Sandra S., Field Supervisor, U.S. Fish and Wildlife Service. Letter to Robert Davis, Fall Line Hydro, Inc. FWS Log. No. NG-04-277-FERC. April 2, 2004.

[3] Robust Redhorse Conservation Committee. *Robust Redhorse Conservation Strategy*. February 25, 2003.

[4] Biagi, John, Assistant Fisheries Chief, Wildlife Resources Division, Georgia Department of Natural Resources. Personal communication. July 2, 2004.

[5] Brownell, Prescott, Atlantic fishery Coordinator, National Oceanic and Atmospheric Administration. Personal communication. 6 July 2004 (email) and 7 July 2004 (telephone).

[6] University of Georgia Institute of Ecology, River Basin Science and Policy Center. *Reservoirs in Georgia: Meeting Water Supply Needs While Minimizing Impacts.* Athens, GA. May 2002.

facility preclude the possibility that this facility could impact diadromous fish. At the time of FERC licensing resource agency recommendations addressed only flow and recreation concerns. The resource agency staff contacted in reviewing this application raised no concerns over these priorities or any new issues or concerns save that robust redhorse recovery efforts in the region may one day have implications for the facility at some future date.

Recommendation. Based on my review of information submitted by the applicant, my review of additional documentation, and my consultations with resource agency staff, I believe the Tallassee Shoals Hydroelectric Project at present meets all of the criteria to be certified and I recommend certification. However, I would further recommend that:

1) in the short term, certification be contingent upon submittal of proof of compliance with minimum bypass flow requirements at some appropriate period after the facility commences operation.
2) in the medium term, if the applicant applies for renewal of the facility's certification, that the applicant in particular submit documentation relating to the status of robust redhorse recovery activities as they may or may not affect the facility.
3) in the long term, if the applicant applies for renewal of the facility's certification, that the applicant in particular submit documentation relating to the status of possible recovery activities for historic anadromous fisheries as they may or may not affect the facility.

Low Impact Certification Criteria

A. Flows:

Criteria

1) Is the facility in Compliance with Resource Agency Recommendations issued after December 31, 1986 regarding flow conditions for fish and wildlife protection, mitigation and enhancement (including in-stream flows, ramping and peaking conditions, and seasonal and episodic instream flow variations) for both the reach below the tailrace and all bypassed reaches?

YES (QUALIFIED).

Because the facility is not operating, all flows are going through gated structures or over the dam, exceeding the required minimum bypass flow of 70 cubic feet per second (cfs). An assessment of operational compliance cannot be made until the project is once again in service.

DISCUSSION

Though licensed in 1983, final resource agency recommendations regarding flows were issued in 1989. At the time of licensing the original facility owner pressed for a minimum bypass flow of 53 cfs. While GDNR concurred with this level of flow (contingent on mitigation in the form of expanded access for recreational fishers), FWS disagreed, saying that minimum flows of 70 cfs (138 cfs in the month of May) were required to protect aquatic resources. FERC decided in favor

of the FWS, incorporating the FWS levels in Article 29 of the license (the May flow on an interim basis) and requiring that the licensee conduct a study to assess pre- and post-construction impacts on aquatic resources below the project. After the study concluded in 1988 the licensee asserted that its results justified a 53 cfs permanent minimum flow. In a 1989 letter FWS disputed the licensee's interpretation of the data from the study and argued for the retention of its original recommended flows. FERC again found in favor of FWS, denying the licensee's 1990 amendment request and making the FWS recommended flows permanent requirements.[7] FERC records document the then licensee's compliance with the mandated flows.

If yes, go to B.

PASS.

B. Water Quality:

1) Is the Facility either:
a) In compliance with all conditions issued pursuant to a Clean Water Act Section 401 water quality certification issued for the facility after December 31, 1986? Or
b) In Compliance with the quantitative water quality standards established by the state that support designated uses pursuant to the federal Clean Water Act in the Facility area and in the downstream reach?

YES.

A March 25, 2004 letter from the GDNR states that the facility "meets necessary water quality standards." The designated use is "fishing."

If yes, go to B2.

2) Is the Facility area or the downstream reach currently identified by the state as not meeting water quality standards (including narrative and numeric criteria and designated uses) pursuant to Section 303(d) of the Clean Water Act?

YES.

The waters in the project area are "identified as failing to meet water quality standards for fecal coliform bacteria" and are included on the state's Clean Water Act Section 303(d) list according to GDNR's March 25, 2004 letter.

If yes, go to B3.

[7] Federal Energy Regulatory Commission. Oglethorpe Power Corporation, Project No. 6951-007: Order Denying Request to Amend Article 29. 20 August 1990.

3) If the answer to question B.2. is yes, has there been a determination that the Facility is not a cause of that violation?

YES.

GDNR stated in its March 25, 2004 letter that the facility is not a cause of the failure to meet water quality standards.

If yes, go to C.

PASS.

C. Fish Passage and Protection:

1) Is the facility in compliance with Mandatory Fish Passage Prescriptions for upstream and downstream passage of anadromous and catadromous fish issued by Resource Agencies after December 31, 1986?

NOT APPLICABLE.

There are no mandatory fish passage prescriptions for upstream and downstream passage of anadromous and catadromous fish.

DISCUSSION

In discussions and written correspondence both federal and state natural resource agency staff agreed that the presence on the main stem of the Oconee River of preexisting large hydroelectric facilities and reservoirs that block passage to the Middle Oconee River explain why fish passage was not raised as an issue in the licensing of the facility. (By comparison, on the nearby Ocmulgee River, which meets with the Oconee River to form the Altamaha River, efforts are underway to construct fish passage at that river's East Juliette Dam in order to pass shad, herring, and striped bass.)[8]

If not applicable, go to C2.

2) Are there historic records of anadromous and/or catadromous fish movement through the facility area, but anadromous and/or catadromous fish do not presently move through the Facility area (e.g., because passage is blocked at a downstream dam or the fish run is extinct)?

YES.

[8] Brownell, Prescott, Fisheries Biologist, National Marine Fisheries Service. "Ocmulgee the focus of Diadromous fish restoration efforts." *Rare and Endangered Species in the Altamaha River*. Altamaha Riverkeeper website. <http://www.altamahariverkeeper.org/wildlife/fish.asp> (Accessed 3 July 2004).

An April 2, 2004 letter from FWS implies that there would be upstream migration of American eel in the Middle Oconee River absent the barriers to passage presented by large hydroelectric facilities downstream from the Tallassee Shoals project. In a telephone conversation GDNR staff expressed the belief that historically there would have been American eel habitat above the facility, and concurred that today they are blocked by the Sinclair and Wallace dams.

While FWS and GDNR staff did not raise any other diadromous fish issues in their letters or in initial telephone and email contacts, according to research conducted in the preparation of this review there apparently were historic populations of sturgeon, shad, herring, and striped bass in the Piedmont region of the Southeast. Time did not allow further research to confirm whether there were populations in the Middle Oconee River, and FWS and GDNR staff have not yet responded to inquiries about this issue. Any additional information will be presented to the LIHI Governing Board at its meeting to consider certification of this application.

If yes, go to C2a.

a) If the fish are extinct or extirpated from the Facility area or downstream reach, has the Applicant demonstrated that the extinction or extirpation was not due in whole or part to the Facility?

YES.

FWS in its April 2, 2004 letter indicated that the historic range of the catadromous American eel would likely have included the facility area, but that large hydroelectric facilities downstream of the project were responsible for blocking passage. (Note: because the applicant indicated that there were no historic records of anadromous and/or catadromous fish in answering C.2, the application itself included no information clearing the facility of contributing to the extirpation of the American eel from the upstream reaches of the Middle Oconee.)

DISCUSSION

This represents the most difficult issue in terms of fidelity to LIHI criteria. Neither FWS nor GDNR raised fish passage concerns in their recent letters regarding the facility's compliance with its regulatory requirements and consistency with LIHI criteria. In writing (in the case of FWS) and in telephone conversations staff of both agencies were unequivocal in stating that large hydroelectric facilities downstream from the project were responsible for blocking passage of catadromous fish. They cited this fact as the reason they do not have fish passage concerns now, and as the likely reason fish passage was not raised at the time of facility licensing. As a consequence, they apparently do not deem relevant the question of whether the Tallassee Shoals facility may have contributed in part to that extirpation. In a telephone conversation GDNR staff did express the belief that if the downstream barriers did not exist, American eel would be able to pass above the existing project without fish passage facilities, at least to some degree, based on

experience with the species passing a larger dam on an adjacent river system with similar habitat conditions.[9]

If yes, go to C2b.

b) If a Resource Agency Recommended adoption of upstream and/or downstream fish passage measures at a specific future date, or when a triggering event occurs (such as completion of passage through a downstream obstruction or the completion of a specified process), has the Facility owner/operator made a legally enforceable commitment to provide such passage?

NOT APPLICABLE

If not applicable, go to C3.

3) If, since December 31, 1986:

a) Resource Agencies have had the opportunity to issue, and considered issuing, a Mandatory Fish Passage Prescription for upstream and/or downstream passage of anadromous or catadromous fish (including delayed installation as described in C2a above), and

b) The Resource Agencies declined to issue a Mandatory Fish Passage Prescription,

c) Was a reason for the Resource Agencies' declining to issue a Mandatory Fish Passage Prescription one of the following: (1) the technological infeasibility of passage, (2) the absence of habitat upstream of the Facility due at least in part to inundation by the Facility impoundment, or (3) the anadromous or catadromous fish are no longer present in the Facility area and/or downstream reach due in whole or part to the presence of the Facility?

NOT APPLICABLE

The applicant incorrectly answered "no" to this question; it is "not applicable" because the facility was licensed prior to December 31, 1986.

If not applicable, go to C4.

4) If C3 was not applicable:

a) Are upstream and downstream fish passage survival rates for anadromous and catadromous fish at the dam each documented at greater than 95% over 80% of the run using a generally accepted monitoring methodology? Or

[9] Biagi, John, Assistant Fisheries Chief, Wildlife Resources Division, Georgia Department of Natural Resources. Telephone conversation. July 2, 2004.

b) If the Facility is unable to meet the fish passage standards in 4.a., has the Applicant demonstrated, and obtained a letter from the US Fish and Wildlife Service or National Marine Fisheries Service confirming that demonstration, that the upstream and downstream fish passage measures (if any) at the Facility are appropriately protective of the fishery resource?

NOT APPLICABLE.

This criterion is not applicable because American eel are extirpated from the facility area and downstream reach.

If not applicable, go to C5.

5) Is the Facility in Compliance with Mandatory Fish Passage Prescriptions for upstream or downstream passage of riverine fish?

NOT APPLICABLE.

There are no mandatory fish passage prescriptions for riverine fish.

DISCUSSION

At present there are no prescriptions for upstream or downstream passage of riverine fish. However, as implementation of robust redhorse recovery efforts move forward, the Middle Oconee may be identified as a location suitable for reintroduction of this fish. It is unknown whether resource agencies will deem fish passage desirable or necessary. Little is known about the species' migratory habits.

If not applicable, go to C6.

6) Is the facility in Compliance with Resource Agency Recommendations for Riverine, anadromous and catadromous fish entrainment protection, such as tailrace barriers?

NOT APPLICABLE.

There are no resource agency recommendations or FERC license requirements relating to fish entrainment protection.

If not applicable, pass, go to D.

PASS.

D. Watershed Protection:

Criteria:

1) **Is the Facility in Compliance with Resource Agency Recommendations, or, if none, with license conditions, regarding protection, mitigation or enhancement of lands inundated by the Facility or otherwise occupied by the Facility, or regarding other watershed protection, mitigation and enhancement activities?**

NOT APPLICABLE.

There are no resource agency recommendations or FERC license requirements relating to watershed protection.

PASS.

E. Threatened and Endangered Species Protection:

1) **Are threatened or endangered species listed under state or federal Endangered Species Acts present in the Facility area and/or downstream reach?**

NO.

In its April 2, 2004 letter FWS stated that "[t]here are no federally-listed aquatic species in the project area." FWS staff have not yet responded to a request for confirmation that there are no non-aquatic listed species in the project area, or that any such species would not be adversely affected by the facility. Any additional information received on this issue will be presented to the LIHI Governing Board at its meeting to consider certification of this facility.

If no, go to F.

PASS.

F. Cultural Resource Protection:

Criteria:

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.

GDNR's Historic Preservation Division confirmed in a March 5, 2004 letter that "no historic properties or archaeological resources that are listed or eligible for listing in the National Register of Historic places will be affected by this undertaking." FERC license provisions were limited to requirements associated with cultural resource protection during facility construction.

If yes, go to G.

PASS.

G. Recreation:

Criteria:

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.

The applicant is currently in compliance with recreational access requirements, as documented in a June 7, 2004 report by the applicant to FERC confirming its compliance and including photographs documenting the presence of required signage.

If yes go to G3.

3) Does the Facility allow access to the reservoir and downstream reaches without fees or charges?

YES.

There are no fees or other restrictions.

PASS.

H. Facilities Recommended for Removal:

1) Is there a Resource Agency recommendation for removal of the dam associated with the Facility?

NO.

There have been no recommendations for removal of the facility.

PASS.

FACILITY IS LOW IMPACT

RECORD OF CONTACTS WITH RESOURCE AGENCY STAFF

Date of Conversation:	June 30, 2004
Application Reviewer:	Gabriela Goldfarb, Consultant
Person Contacted:	Alice Palmer, U.S. Fish and Wildlife Service
Telephone/email:	706-613-9493
Areas of Expertise:	Contact person identified in FWS 4/2/94 letter.

Ms. Palmer confirmed the contents of the FWS April 2, 2004 letter to the applicant, explained that there are virtually no FWS files on the facility, and that they may have been lost when during an office move some time ago. I asked about the robust redhorse issue, and she described FWS role in approving the MOU and Candidate Conservation with Assurances agreement signed with stakeholders. She referred me to the GDNR expert on the topic, but also said there are no plans at present to reintroduce the robust redhorse in the vicinity of the facility.

Update: June 9, 2009 *– Alice is now Alice Lawrence. She has not heard of any problems regarding this project and she was aware of a new owner. She is hopeful that the management plan for robust redhorse will be complete this year. The team that put the plan together would like to see if there is a remnant population of robust redhorse and whether or not it would be worthwhile to re-stock.*

Date of Conversation:	July 2, 2004
Application Reviewer:	Gabriela Goldfarb, Consultant
Person Contacted:	Jimmy Evans, GDNR
Telephone/email:	478-825-6151
Areas of Expertise:	Robust Redhorse

Mr. Evans stated that populations of the robust redhorse were probably extirpated above the fall line in the 18th and 19th century, likely initially due to sedimentation resulting from cotton farming-related sedimentation of waterways; however, he said there is no way of knowing for sure if there were historic populations specifically in the Middle Oconee. Stocking of the fish in the facility area could possibly happen, but is not foreseeable now. He is preparing for the Robust Redhorse Conservation Committee an Oconee river Management Plan component to the Robust Redhorse Conservation Strategy that may suggest evaluating habitat in the Middle Oconee for suitability for stocking. He referred me to Professor Bud Freeman, University of Georgia, as an expert on the robust redhorse and the Oconee basin. He stated that there is little known about the migratory habits of the fish, and that there are no plans under the conservation strategy to require fish passage on the large dams (Sinclair and Wallace) owned by Georgia Power, or any other Oconee basin dams.

Update: June 9, 2009 *– Jimmy was on the river, so I left a message and my phone number with his secretary.*

Update: June 10, 2009 *– I spoke with Jimmy and most of our conversation was about the Robust redhorse and efforts to reestablish populations in several rivers. He verified that because of the large downstream dams (Sinclair and Wallace), fish like American shad would require major fish passage construction at both Sinclair and Wallace, but at this time fish passage did not seem imminent for those species. The redhorse Management Plan is about "95% Complete" according to Jimmy. The Plan has objectives regarding their restoration efforts of the robust redhorse one of which is a stocking program that would put ready to spawn adults from other rivers in the stretch of river between Tallassee Shoals and the next downstream dam. Should the stocking program be successful, it is possible that there would be fish passage requirements. Iasked Jimmy if that would be likely to occur in the next 5 years. He thought a minute and said that was possible, perhaps not plausible. He felt it would be a good idea to have the Applicant check in with the GDNR, specifically with Jimmy, as they had done over the last five years. I said that I would recommend continuing the condition that the Board had required during the initial certification application.*

Date of Conversation:	July 2, 2004
Application Reviewer:	Gabriela Goldfarb, Consultant
Person Contacted:	Robert (Bob) Davis, Fall Line Hydro
Telephone/email:	Telephone call.
Areas of Expertise:	Facility owner.

Mr. Davis explained in response to my questions that the facility ceased operations in 2000 while under previous ownership due to mechanical problems with the turbines, and that operations may start within the next months or in early 2005. He said the small unit, which is a 100 kw unit used to capture energy from the minimum flow release, is operational. The large unit is still undergoing repairs. He confirmed his intention to comply with the FERC license requirement of 70 cfs minimum bypass flow, and that he has no plans to request a lowering of that amount. He said that to his knowledge there were no historic populations of anadamous/catadromous fish. When asked about the reference in GDNR/Water Protection Branch letter to uncertain downstream impacts on possible future introductions of robust redhorse due to "peaking" (and minimum flows), Davis said he was perplexed about the reference to peaking, since the run of river mode of operation is further guaranteed by the fact that the small reservoir is almost completely silted in, resulting in almost no storage capacity.

Date of Conversation:	July 2, 2004
Application Reviewer:	Gabriela Goldfarb, Consultant
Person Contacted:	John Biagi, Asst. Fisheries Chief, GDNR
Telephone/email:	770-918-6406
Areas of Expertise:	Middle Oconee River fishery issues.

I asked him about the American eel. He said that the two large hydro projects (Sinclair and Wallace) on the Oconee river below the project were responsible for blocking passage of this species. He said he believes the American eel would be able to get over a small dam the size of the Tallassee Shoals project because they are able to pass a larger dam that has similar habitat in

another drainage. He did not think the robust redhorse recovery efforts would impact the project for the foreseeable future. He said he had no concerns with any fishery issues related to the project. He confirmed that the applicant is now in compliance with recreation requirements; there had been a problem with compliance with signage requirements when Fall Line Hydro took ownership in fall, 2003, but that all problems had been resolved. The current fishery consists of sunfish, catfish, and bass.

Update: June 10, 2009 – *Mr. Biagi said that from what he knew not much had changed. He reiterated and confirmed his earlier comments regarding American eel and their ability to get by a Tallassee sized dam without passage. He agreed that it would be a good idea to have the Applicant continue to monitor the Robust redhorse recovery effort. I asked him whether he had had any problems with the owner. He said no, but there had been an issue concerning access and signage. He said he would check with his field staff and get back to me by e-mail. He was not aware that there was a new owner of the Tallassee Shoals Project.*

Update: June 11, 2009 *– John sent me the following email: "…we are investigating a public access signage issue at the subject project. I expect to be able to provide a final recommendation to you by the end of next week."*

Update: June15, 2009 *– John sent the following email:*

"Fred, See details of our discussions with Tallassee Shoals Hydro project owners below. ***[email note from Chris Canalos, GIS Specialist, Georgia DNR Nongame Conservation Section]***
Looks like the owners are willing to address signage issues that address public access. Therefore, we have no outstanding issues with fish passage or public access at the facility. Thanks for the opportunity to provide input.

John - I met with both members of Tallassee LLC, owners of the Tallassee Shoals hydroelectric facility (Nancy Stangle and Walt Puryear) this morning on site. An agreement was reached to 1) move the sign that is near the plant and behind a gate closer to Tallassee Road so that the public wouldn't have to drive through a gate to the plant to see the sign and 2) place signage at the small parking lot adjacent to the access easement notifying the public that this is where the access is and to respect the neighboring private property. This latter sign would also make note that the access from the parking lot down to the river is pedestrian, not vehicular.

Nancy and Walt were very helpful in quickly settling this matter and I suggest informing the Institute that the public access requirements of the FERC license are being met. It is up to the Institute, but recertification probably could be granted based on this morning's discussion. If photographs of the installed signage are needed prior to recertification, that can be provided after installation, but I'm of the opinion that they will follow through quickly and the recertification shouldn't be held up. Access to fishing in the Middle Oconee River below the project site will be enhanced by the actions of these new owners who take the requirement of public access at the site seriously."

Date of Conversation:	June 15, 2009
Application Reviewer:	Fred Ayer, Executive Director
Person Contacted:	Keith Parsons, Water Protection
Telephone/email:	404-675-1631
Areas of Expertise:	Middle Oconee Water Quality

Update: *(6/10/09) I called Keith Parsons, author of the 2004 water quality letter and left a message regarding the Tallassee Shoals Project.*

Update: *(6/11/09) I left a second message for Keith Parsons.*

Update: *(6/15/09) I had a good conversation with Keith and asked him if there was anything changed that would affect the determination he made in his March 25, 2004 letter which states that the facility "meets necessary water quality standards." The designated use is "fishing." Also whether the waters in the project area are "identified as failing to meet water quality standards for fecal coliform bacteria" and are included on the state's Clean Water Act Section 303(d) list. GDNR stated in its March 25, 2004 letter that the facility is not a cause of the failure to meet water quality standards. Keith said there was nothing he could think of that would change the determination made in his 2004 letter, particularly if the project was run-of-river and the project passed the 70cfs minimum flow.*