

Land & Water Associates, Inc.

David A. Van Wie

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October 27, 2004

Fred Ayer, Executive Director Low Impact Hydropower Institute 34 Providence Street Portland, Maine 04103

REVISED FINAL CERTIFICATION REVIEW – HOOSIC RIVER PROJECT

Dear Fred,

Attached is Land & Water Associates, Inc.'s revised report for the Hoosic River Project, based on the comments from the Board meeting of October 21, 2004.

Revisions are in red. I will send along a final copy upon your approval of these changes.

Sincerely,

David A. Van Wie

David A. Van Wie Principal

Low Impact Hydropower Institute Certification Review

Hoosic River Project FERC #2616 Schaghticoke and Johnsonville, New York

Introduction:

An application for Low Impact Hydro Certification was filed with the Low Impact Hydro Institute (LIHI) in June 2004 by Erie Boulevard Hydropower, LP (Reliant Energy), for its 18.2 MW Hoosic River Hydroelectric Project (FERC No. 2616), in eastern New York State. A copy of the application was posted on the LIHI website July 9, 2004, with a public comment period ending September 9, 2004. No comments were received.

The Hoosic River Project is located in upstate New York northeast of Albany and Troy. The project includes two developments, a dam and generating facility located in Schaghticoke (RM 7.1), and a dam and generating facility at Johnsonville (RM 13.3), which are licensed together as one project. A hydropower facility at Valley Falls (Thompson Project) operated by a different owner is situated in between two Erie-owned projects, and a fourth project (not owned by Erie) is located upstream of Johnsonville in Hoosic Falls.

A new FERC license was issued for the Hoosic Project on November 6, 2002. The license was issued following an Offer of Settlement signed in June 2002 by Erie and twelve other parties¹, which was filed with FERC on August 16, 2002. The Project was previously owned by the Niagara Mohawk Power Corporation, and was originally licensed in 1969. In 1992, New York State Department of Environmental Conservation (NYSDEC) denied without prejudice Niagara Mohawk's application for a Section 401 Water Quality Certification. Niagara Mohawk appealed the certification, and settlement negotiations ensued to resolve issues pertaining to issuance of the certification and the new license. The original FERC license expired in 1993 and the project operated under an annual license in the interim period until the settlement negotiations were completed and the new license was issued. FERC issued a draft environmental assessment (EA) in 1996, and following comments by several parties, a final EA was issued on June 30, 2000, noting that the water quality certification appeal was ongoing.

At the time of license issuance, according to the FERC order, the Schaghticoke Development included a 28 foot high, 700 foot long concrete gravity dam topped with 2.5 foot high wooden flashboards; a reservoir with a 150 acre surface area²; a 2,300 foot-long open canal; a forebay; a

Land & Water Associates, Inc.

¹ Erie, Adirondack Mountain Club (ADK), American Rivers, American Whitewater, New York Rivers Union, New York State Conservation Council, New York State Department of Conservation, Rensselaer County Conservation Alliance, Town of Schaghticoke, Trout Unlimited, US Fish & Wildlife Service, US National Park Service, Village of Schaghticoke.

² The Schaghticoke impoundment includes three connected waterbodies, the main impoundment and two connected ponds: Electric Lake and Fisherman's Lane Pool, and one unconnected pool. The main impoundment is a long, narrow, slow flowing, riverine habitat. The connected ponds are relatively shallow and heavily vegetated (reportedly with invasive aquatic plants including water chestnut).

pipeline intake equipped with 2.5 inch clear-spaced vertical trashracks; an 820 foot-long 12.5 foot diameter steel pipeline; a surge tank; five penstocks; and a powerhouse containing four turbine generators with a total installed capacity of 16,200 kilowatts (kW). The canal, forebay, pipeline and penstocks create a two-mile bypassed reach between the dam and the powerhouse. The bypassed reach is a gorge that drops about 150 feet over two miles.

The Johnsonville Development included a 39 foot high, 529 foot long concrete gravity dam topped with 2.5 foot high wooden flashboards; a 450 acre reservoir; a sluice gate; a forebay structure; an intake structure equipped with 2 inch clear-spaced vertical trashracks; a powerhouse containing two turbine generators with a total installed capacity of 2,100 kilowatts (kW). The Johnsonville facility has no bypass reach.

Environmental Context

The Hoosic River begins in Massachusetts where if flows northwest past North Adams and Williamstown, MA, then further northwest through the southwest corner of Vermont into New York State. It flows northwest through Hoosick Falls and Buskirk, then west through Johnsonville and Schaghticoke before emptying into the Hudson River near Stillwater, NY. The Hudson River flows south into Long Island Sound.

The Hoosic River and its tributaries drain an area of 730 square miles, comprised of rural areas of forest and farmland dotted by small villages. The project area rises from the Hudson Valley into the foothills of the Taconic Range, the Green Mountains and the Berkshires. The project is a short drive from Albany, Troy, Schenectady and Saratoga regions, where almost a million people reside within a two hour drive.

The area experiences cold, snowy winters and hot summers. Annual precipitation is about 39 inches. Summertime stream flow is typically near 350 cfs, while spring high flows may exceed 2,500 cfs. Floodplains in the lower river are narrow due to the steeper topography, while the upper project area has broader, flatter floodplains and several wetlands connected to the Johnsonville project.

General Description of the Hoosic River Project Settlement

Key issues in the Settlement Agreement include limiting the pond level fluctuations (0.25 ft in summer and 0.5 feet in other months at Johnsonville, and 0.5 feet year-round at Schaghticoke), providing upstream passage structures for American eels and downstream passage and protection measures for American eels and riverine fish, and providing bypass flows and dependable base flows. Pond level control will be improved by installation (now underway) of pneumatic flashboards on a portion of the Schaghticoke dam. Fish protection will be provided to prevent entrainment seasonally by recently constructed 1.5 inch perforated plates overlaying the trashracks.

Also, the settlement includes requirements for maintaining and improving recreation access, and implementing scheduled whitewater releases for boating in the Schaghticoke Gorge bypass reach. The settlement also requires flow and water level monitoring and visible gages.

By limiting pond level fluctuation and requiring instream flows and baseflows, the Settlement Agreement allows the project to operate more efficiently in pulsing mode.

Issues Resulting from the Certification Review

During interviews conducted by Land & Water Associates, the resource agencies and interested parties expressed a consistently positive attitude toward the Settlement Agreement and new FERC License, and satisfaction with Erie's implementation of the requirements in the Agreement and FERC. With only a few minor delays for reasonable "real life" issues, Erie has reportedly met the timetables established for completing plans, conducting agency coordination, and construction of facility improvements.

There appear to be no significant issues that conflict with the Settlement Agreement, the FERC License and the Low Impact Criteria.

Public Comment:

There were no public comments received outside of the interview process by the reviewer.

Board Comments:

During its review of the Hoosic application, the Board noted that the habitat conditions in the project impoundment above the Schaghticoke dam favor an existing infestation of water chestnut, and possibly other invasive aquatic plants. While this issue was not raised by NYSDEC, it was noted that the problem with water chestnut could lead to local water quality degradation, specifically low dissolved oxygen. The Board noted that this issue should be monitored, and appropriate actions taken by the project owner to manage the plant population to prevent localized water quality problems.

Conclusion:

Based on our review of project documents filed by the applicant, and available from FERC, and on the interviews conducted with knowledgeable parties, I conclude that this project meets the current criteria for Low Impact Hydropower Certification. I therefore recommend certification.

Independent Reviewer:

David A. Van Wie Land & Water Associates, Inc.

Low Impact Certification Criteria:

A. Flows [PASS]

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 rate conditions, and seasonal and episodic instream flow variations) for both the reach below the tailrace and all bypassed reaches?

YES = Pass, Go to B N/A = Go to A2 NO = Fail

Yes. PASS

The relevant resource agency recommendations were provided in the form of the Settlement Agreement and were incorporated into both the state's 401 Water Quality Certification, dated September 19, 2002, and the FERC Order, dated November 6, 2002. The required flows were implemented as of February 2004 using interim controls (FERC letter dated June 17, 2004), and construction of the pneumatic flashboards at Schaghticoke is currently underway to allow better control of flows and water levels. The pneumatic flashboards, thus maintaining a consistent pond level. Erie expects to complete by September 2004 the construction of the flashboards for downstream fish passage flows (to be included in the bypass minimum flow), and a minor streambed modification to bedrock below the Schaghticoke dam to direct the downstream flow. All required plans were filed and approved by FERC after appropriate consultation with resource agencies (January 15, 2004 FERC Order; May 10, 2004 FERC Order; June 17, 2004 FERC Approval letter).

Minimum flows are as follows:	U	60 cfs or inflo no bypass rea	21	
Baseflow requirements below powerhouse:		Schaghticoke Johnsonville		
Maximum daily reservoir fluctuations:		Schaghticoke Johnsonville	0.25 ft	earround June 1 to Sept 30 Oct 1 to May 31

The Settlement Agreement and FERC Order also include requirements for filing and implementing a plan for monitoring headwater and tailwater elevations, base flows and minimum flows. This plan was approved by FERC Order dated March 8, 2004, and is being implemented.

Annual whitewater releases have been implemented according to the Settlement Agreement and FERC license. During the first ever scheduled whitewater release into the gorge in April 2004, the ramping rates were approved in consultation with NYSDEC.

2) Not applicable

3) Not applicable

B. Water Quality [PASS]

- 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

Yes.

L&WA has confirmed, through interviews with NYSDEC, that the Hoosic River Project is in compliance with all conditions contained in the Clean Water Act - Section 401 Water Quality Certification (WQC) issued for the project on September 19, 2002. The Section 401 WQC specifically includes and incorporates the terms of the Settlement Agreement. (Nearly all provisions of the Settlement Agreement are also incorporated specifically into the FERC Licenses with three specific exclusions). Therefore, compliance with the WQC implies compliance with the *entire* Settlement Agreement, including the provisions that were specifically excluded from the FERC license. We have found no instances to date where the applicant has failed to meet the terms of the Settlement Agreement. One of the terms included in the Settlement Agreement, but excluded from the FERC license is the Fisherman's Lane Fishing and Boat Access provision, which has not yet been completed. However, there was no deadline provided in the Settlement Agreement and planning for that project continues.

The WQC contains standard provisions related to erosion and sediment control for project maintenance and construction activities. The NYSDEC has confirmed that Erie has properly consulted with the Department whenever there is any construction at the project that triggers 401 certification conditions. The most recent occurrence was for a drawdown of the reservoir this year to install the trashrack overlays, and for some minor concrete repair work on a bridge footing below the dam. The streambed modification is expected to be conducted with hand tools in ledge (bedrock), and coordination for planning this project has occurred.

There has been no maintenance dredging, and there is none planned. Provisions in the FERC license require sediment testing and consultation with resource agencies before any planned impoundment drawdowns, disturbance or dredging of sediments.

Habitat conditions in the project impoundment above the Schaghticoke dam favor an existing infestation of water chestnut, and possibly other invasive aquatic plants. While this issue was not raised by NYSDEC, it was noted that the problem with water

Hoosic River Application --Low Impact Hydro Certification Revised Final Report, October 27, 2004 Land & Water Associates, Inc.

chestnut could lead to local water quality degradation, specifically low dissolved oxygen. This issue should be monitored, and appropriate actions taken by the project owner to manage the plant population to prevent localized water quality problems.

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 = Go to B2 NO = Fail

N/A

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 = Go to B3 NO = Pass

Yes. Johnsonville Reservoir is on the NYSDEC 2002 303(d) list of waterbodies that fail to attain one or more applicable water quality standards.

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 = Pass NO = Fail

Yes. PASS

The 2002 NYSDEC 303(d) list indicates that the Hoosic River and the Johnsonville Reservoir are in non-attainment of water quality standards (fish consumption) due to PCB contamination in sediments. The contaminated sediments are widely considered to be legacy pollutants from past industrial discharges into the river upstream of the project, and the FERC EA indicates that NYSDEC has not attributed this contamination to the Hoosic Project, so we conclude that the Facility is not a cause of the violation.

C. Fish Passage and Protection [PASS]

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?

YES = Go to C5N/A = Go to C2

NO = Fail

Yes.

The 2002 Settlement Agreement and the subsequent FERC license contain the relevant prescriptions by Resource Agencies for fish passage. The Agreement and the FERC License require the phased installation of seasonal upstream eel conveyance and downstream fish movement systems at both Schaghticoke and Johnsonville. There are no prescriptions for passage of anadromous fish, because the falls below the Schaghicoke dam limit the upstream movement of most fish species (FERC Final EA, June 2000, pg 46). The Resource Agency representatives confirm that Erie is in compliance with the required fish passage provisions. An eel conveyance structure with associated flows is in place at Schaghticoke. Permanent downstream passage provisions are under construction at Schaghticoke and are expected to be completed by September 2004. Similar facilities will be required at Johnsonville by the end of 2006.

Further, the US Departments of Interior and Commerce have also reserved their authority to prescribe fish passage facilities for the Hoosic Project, and Article 408 of the FERC license reserves FERC authority to require construction, operation and maintenance of any such prescribed fish passage facilities.

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 = Go to C2aNO = Go to C3

No.

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 = Go to C2bN/A = Go to C2bNO = Fail

N/A.

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? YES = Go to C5N/A = Go to C3NO = Fail

YES. The USFWS and NYSDEC participated in the settlement negotiations and supported the requirement that upstream and downstream fish passage for American eels at Johnsonville be delayed until 2006 to allow eels to make use of the facilities at Schaghticoke. Erie is legally bound to implement these measures as a condition of the License (enforceable by FERC) and Settlement Agreement.

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?

NO = Go to C5 N/A = Go to C4 YES = Fail

No.

- 4) Skip.
- 5) Is the Facility in Compliance with Mandatory Fish Passage Prescriptions for upstream and/or downstream passage of *Riverine* fish?

YES = Go to C6N/A = Go to C6NO = Fail

Yes. The Settlement Agreement and FERC license requirements for downstream fish passage at both developments are intended to provide for both American eels and riverine fish. There

are no mandatory prescriptions (section 18 or similar) for the upstream passage of riverine fish. L&WA has confirmed that Erie is in compliance with the fish passage requirements.

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

YES = Pass, go to D N/A = Pass, go to D NO = Fail

Yes.

The Settlement Agreement and FERC License require the phased installation of 1.5-inch diameter perforated plates over the existing trash racks at both developments. The plates are installed at Schaghticoke, and are scheduled to be installed at Johnsonville by the end of 2006, according to the Settlement Agreement.

D. Watershed Protection [PASS]

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, and regarding other watershed protection, mitigation and enhancement activities?

YES and N/A= Pass NO = Fail

Yes.

A key issue in the Settlement Agreement was to limit and better control pond level fluctuations at both projects to control shoreline erosion. The FERC license and WQC also require erosion and sediment control plans for any new construction, maintenance and management facilities on project lands. According to the FERC license, conveyance of land rights to other parties also requires standards and protocols for protection, maintenance and enhancement of surrounding lands. Recent inspections by FERC staff and interviews with resource agency staff confirm that Erie is in compliance with these provisions of the FERC license.

E. Threatened and Endangered Species Protection [PASS]

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

No.

The Settlement Agreement, which is signed by NYSDEC, USFWS and other knowledgeable parties, states that:

"Consultation with NYSDEC and the USFWS has established that, except for some transient individuals, there are no federally- or state-listed threatened or endangered species in the area of the Johnsonville or Schaghticoke developments at this time. However, any ground or vegetation disturbance in conjunction with recreational or other mitigation or enhancement effort will conform to an Endangered Species Management plan requiring the licensee to assess the presence of the Karner Blue butterfly or its obligate host species, the Blue Lupine."

According to NYSDEC and USFWS, bald eagles may occasionally visit or overwinter in the project area. The FERC EA declares that operation of the project and recreational measures would not affect bald eagles. There are no provisions related to the bald eagle in the Settlement Agreement or the FERC license.

Erie was required by the FERC license to complete a survey to determine if the project area contained Karner blue butterflies or their preferred plant species, blue lupine. This survey was conducted in consultation with US Fish and Wildlife Service, who indicated by letter from David Stillwell dated November 14, 2003 that no Karner blue butterflies or blue lupine were found in the project area, and that the project would not likely adversely affect the butterflies. By letter dated February 18, 2004, FERC acknowledged that Erie had met its requirement in the FERC license.

By letter dated, July 15, 2004, NYDEC Natural Heritage Program indicated that its databases contain no records of state threatened or endangered.

- 2) N/A
- 3) N/A
- 4) N/A
- 5) N/A

F. Cultural Resource Protection [PASS]

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 NO = Fail

Yes.

Erie is complying with the requirement in the FERC License to implement the "Programmatic Agreement" signed in 1996 by Niagara Mohawk (previous project owner), FERC, the Advisory Council on Historic Preservation, and the New York State Historic Preservation Officer (SHPO) for managing historic properties that may be affected by licensing of hydroelectric projects in upstate New York. Erie is preparing a Cultural Resources Management Plan in consultation with the SHPO, and has been granted an extension until October 1, 2004 to file the plan with FERC.

G. Recreation [PASS]

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 G3N/A = Go to G2NO = Fail

Yes.

Land & Water Associates has confirmed that the recreation facility improvements required in the FERC license have been completed in a timely manner. The required whitewater release study was completed with cooperation of boating interests to select the best flow levels. The whitewater boating interests were especially happy with the cooperation and support they have received from Erie, and with the first whitewater release in April 2004.

No agency or party to the settlement we contacted expressed any problems with compliance with the License or Settlement recreation requirements.

The only recreation facility not completed per the Settlement Agreement (but not included in the FERC license) is the Fisherman's Lane Fishing and Boat Access provision, which is still in the planning stages. No deadline for planning, construction or completion was included in the Settlement Agreement. Planning for this facility is underway.

H. Facilities Recommended for Removal [PASS]

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

NO = Pass YES = Fail **No.** The Settlement Offer does not include any provisions relating to decommissioning or dam removal of the subject project in whole or part. The Settlement Agreement states that "no Party to this settlement offer has, or is advocating decommissioning of any of the project facilities at this time, nor does evidence currently exit which would suggest the need to advocate for decommissioning during the term of the new license. If and when the subject project is decommissioned or retired during the term of any new license, the Parties will be entitled to take such positions on decommissioning issues at that time as they find appropriate".

Mark Woythal NYSDEC (Albany Office)

> Bruce Carpenter NY Rivers United

Betty Lou Bailey Adirondack Mountain Club

Tom Carlo Village of Schaghticoke

Steve Patch, Project Biologist US Fish and Wildlife Service

> Andrew Fahlund American Rivers

William Moxon Rensselaer County Conservation Alliance

> David Culligan, Project Manager Erie Boulevard Hydropower

HOOSIC PROJECT Report of Contact

Date of Conversation:	July 21, 2004
Person Contacted:	David Culligan, Project Manager – Hoosic Project
Affiliation:	Erie Boulevard Hydropower, LLC
Telephone Number:	315-413-2792
Reviewer:	David Van Wie

Summary of Discussion:

I called Mr. Culligan to introduce myself as the reviewer, and to get some updates and further background on information contained in the application.

Pneumatic flashboards - June 21, 2004 letter from FERC authorized construction, so required plans have been submitted and approved. These flashboards will be installed on the "straight" section of the dam, while wooden flashboards will be on the curved section. The pneumatic flashboards are designed to be operated such that they will prevent the annual failure of the wooden boards (failure rate expected to be more like once every 10 years, rather than once or more per year). Also they will allow lake level to be better controlled.

Pneumatic and wooden flashboards are expected to be completed by September, at which time the location of the "streambed" modification will be determined, based on the location of the opening (orifice) where the 60 cfs will be passed. Some handwork cutting of the bedrock ledge below the dam will be completed to direct the flows as necessary.

Eel conveyance - The upstream eel conveyance is in place. It is similar to a "cable tray" with an astro-turf-like product along the bottom, with a small flow.

Trashrack Overlay Plate – has been in place since April or May. Installation was done in consultation with NYSDEC.

Water level monitoring plan was filed and should be available on the FERC elibrary site.

Recreational enhancements – Had a recent FERC safety and environmental inspection, that reviewed the required projects. Access points are completed.

The only remaining item in the agreement is the fishing access at Fisherman's Lane. They are still working with the Town of Schagticoke on an agreement for location and layout. They expect to have it done this summer. Contact at town is Tom Carlo.

Whitewater studies and releases – The study was completed in 2003. It looked at different flows in the various reaches to determine what best flows would be for boating.

First release was April 21, and it went "extremely well". Duration was from 4 to 7 pm with ramp up and ramp down as approved by resource agencies. 45 people signed in, and "can't wait to do it again next year". Report filed with FERC May 10, 2004 describing how things went. Beyond scheduled releases, boaters may use the area when there is spillage anticipated.

Cultural Resources – 1996 Programmatic Agreement required Erie to develop an approved plan within certain time frame. A draft is in hand and they have requested an extension of time from FERC to get SHPO review.

ESA Plan - Erie was awaiting some updated information from NYSDEC regarding occurrence of threatened or endangered species, as the letters in application were dated. Erie received letter July 15 stating that no ESA issues are known for the projects, but this does not mean that no issues exist due to limitations of field records. David Culligan will send a copy of letter to me and to Fred Ayer.

Dredging/WQ - Water quality language in 401 certification and FERC order are "boilerplate". No dredging has occurred and none is planned at this time. Erie doesn't consider the "streambed modification" requirement to be dredging, as it is a very small amount of hand work in bedrock. NYSDEC is reviewing the plans and will oversee the work. (Mark Woythal)

Follow Up Call – 7/25/04 :

Property easements, transfers, etc. - David said there are no major issues with property transfers, easements, or use. A stormwater drain easement was handled routinely, and others like it will be handled on a case by case basis. He didn't see the need for formal procedures at this time. There are no major projects (marinas, seawalls, etc.) that would require this issue to be elevated. This was confirmed by Tom Carlo.

I asked about the Johnsonville boat ramp (per Betty Lou Bailey's comment that it wasn't in place in April). He said it was completed shortly after that, and the FERC report indicates as much.

The drawdown for the trashrack overlay installation was done with NYSDEC oversight. Ramping rates were determined in advance with NYSDEC who was closely involved in the project. There have been no other significant disturbances of sediment, and none are planned.

Date of Conversation:	July 22, 2004
Person Contacted:	Betty Lou Bailey
Affiliation:	Adirondack Mountain Club
Telephone Number:	518-355-0604
Reviewer:	David Van Wie

Summary of Discussion:

A retired engineer, Ms. Bailey is an active paddler and is familiar with the whitewater studies, the first public release, and other recreation related projects on the Hoosic. She had no major concerns about the project.

She witnessed the whitewater studies last year, and participated in the April 21 release, paddling the lower part. She noted that an RPI student has set up a website regarding the April release.

She is generally satisfied with how Erie has followed through after issuance of the license. She said that Dave Culligan likes to get things done, and is quite diligent in implementing the settlement offer.

She said "it took 10 to 12 years, and we are still finalizing access issues." The company did not want to wrap up all the details before the license was issued, so there are still things being worked out. When she was there in April or May, the portage site at Johnsonville was not in. But with this being construction season, she expects it is likely in as noted by Erie.

She said the project is expected to be sold again... to Brascan, so not sure how responsive they will be.

Date of Conversation:	July 29, 2004
Person Contacted:	Mark Woythal
Affiliation:	NYSDEC
Telephone Number:	518-402-8847
Reviewer:	David Van Wie

Summary of Discussion:

Erie has been cooperative since the license has been issued. Things seem to be moving forward quite well at the Hoosic Project. Pneumatic flashboards are well in process. They are in compliance with the 401 Water Quality Certification.

Erie had to do some concrete rehabilitation work on the footings of a bridge below the dam. They received necessary approvals, ramped the flow down, and sandbagged the area to complete the work quickly. No impacts, and everything was done cooperatively and according to license and WQC standards.

Bypass channel flow modification - Next is the modification of the ledge below the dam, after the flashboards are up. This will likely be handwork in bedrock, so no disturbance of sediments will take place. Erie is in close contact with NYSDEC and they expect this to go smoothly.

Trash-rack overlay screen - in the drawdown, the biggest concern was stranding fish in small ponds created during low flow, but they ramped the flow down slowly and only had to assist two or three fish into the channel, with insignificant disturbance of sediment.

Eel passage - A remaining question is what number of eels will be passed, and what is appropriate for the watershed ecosystem, relative to what populations might have occurred prior to dam construction. The US FWS prescribed eel passage, and NYSDEC did not object, but there was some concern about whether passing eels upstream in large numbers will help the ecosystem, and whether passing eels and then exposing them to possible entrainment would be a net benefit to the eel population. NYSDEC does not expect there to be large numbers of eels, so they don't believe this will be a major issue. It was noted that a characteristic of the settlement agreement process is that not all issues get fully resolved, but the parties may agree that the package is acceptable and expedient, even if not every issue is optimal.

All in all, Mark feels the Schaghticoke and Johnsonville projects are on track with the requirements, that the environmental issues in the LIHI criteria were reasonably resolved. He has no concerns that the project is inconsistent with the LIHI criteria.

Date of Conversation:	July 29, 2004
Person Contacted:	Andrew Fahlund
Affiliation:	American Rivers
Telephone Number:	202-347-9230 ext 3022
Reviewer:	David Van Wie

Summary of Discussion:

Andrew noted right away that he is on the Board of the Low Impact Hydropower Institute, so he did not want to create any appearance of conflict in his roles. He said Bruce Carpenter did most of the negotiating on the Hoosic and Raquette projects, and if familiar with the issues on those rivers.

I asked if he could identify any general issues, without specific comment or opinion of his own, which I should delve into, simply as a matter of priority or interest. He said that he knew of no issues of concern on the Hoosic Project, but that he was not as familiar with the Hoosic as the Raquette.

Date of Conversation:	July 25, 2004
Person Contacted:	Tom Carlo
Affiliation:	Village of Schaghticoke
Telephone Number:	518-753-6100
Reviewer:	David Van Wie

Summary of Discussion:

Tom said that the town had received a letter saying that Erie was working on the air bladders (pneumatic flashboards). He had no issues regarding the project. He was not sure what the plans were for the Fisherman's Lane project. He noted that in Electric Lake there is a major problem with invasive aquatic plants (water chestnut), and they wished something could be done. The town wants to put a boat launch in, but the plants are a problem. He didn't view this as Erie's issue, but just a general issue for many ponds.

Date of Conversation:	July 30, 2004
Person Contacted:	Bruce Carpenter
Affiliation:	New York Rivers United
Telephone Number:	315-339-2097
Reviewer:	David Van Wie

Summary of Discussion:

Bruce has no issues with the project, or the settlement agreement. He said that Erie has been very cooperative, and timely in completing obligations. Bruce has some wariness about the implications of so many transfers of the licenses, that as people less familiar with the settlement process are involved, there is more uncertainty. But he said the local operators are very knowledgeable and helpful.

He said the settlement was a good outcome for environmental issues, and it allows for adjustments as time goes on. He noted that balancing interests, even among the resource agencies, can be a challenge. Fish passage was a concern, and it appeared that the State had priorities related to game fish while US FWS and others were more focused on non-game and emerging concerns about the fitness of the American eel population. As the eel returns are monitored, this issue can be revisited.

Date of Conversation:	July 30, 2004
Person Contacted:	Steve Patch
Affiliation:	US Fish & Wildlife Service, Cortland, NY
Telephone Number:	607-753-9334
Reviewer:	David Van Wie
Summary of Discussion:	

Steve has no concerns about the implementation of the FERC license and settlement agreement at the Hoosic. Erie is doing things pretty well on time, and very much consistent with agreements. He feels they built in sufficient provisions to allow resource agencies to monitor and assess progress with fish passage and other issues, and if necessary, to seek modifications through the Settlement Agreement process.

Date of Conversation:	August 4, 2004
Person Contacted:	Bill Moxon
Affiliation:	Rensselaer County Conservation Alliance (RCCA)
Telephone Number:	315-339-2097
Reviewer:	David Van Wie
Summary of Discussion:	

Bill had no issues or concerns. He had heard things were going smoothly and that his affiliate organizations had no complaints.