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May 4, 2011

Mr. Fred Ayer, Executive Director
Low Impact Hydropower Institute
34 Providence St.
Portland, ME 04103

RE: Application Reviewer Report Automatic Hydroelectric Project

Dear Fred:

Attached please find my reviewer's report regarding the application by Kennebec Water District for certification of the Automatic Hydroelectric Project by the Low Impact Hydropower Institute (LIHI).

Sincerely,

s// Ron

Ronald A. Kreisman

Attachment

REVIEW OF LOW IMPACT HYDROPOWER INSTITUTE APPLICATION FOR LOW IMPACT HYDROPOWER CERTIFICATION: AUTOMATIC HYDROELECTRIC PROJECT

Introduction

This report provides a review of the application by the Kennebec Water District ("applicant") to the Low Impact Hydropower Institute (LIHI) for Low Impact Hydropower Certification of its Automatic Hydropower Project. The review was completed according to the current (September, 2004) LIHI Certification Program rules and criteria.

Project Description & Operation

The Automatic Hydroelectric facility is located on Messalonskee stream in Waterville, Maine, and is one of four hydropower facilities between Messalonskee Lake dam and the Kennebec River. The other three facilities on the river -- Union Gas, Rice Rips, and Oakland -- were certified, with conditions, as low impact by LIHI in October 2010, and are currently licensed together under a separate FERC license.[1] The Automatic facility is owned by the quasi-municipal Kennebec Water District, while the other three projects are privately owned by Messalonskee Stream Hydro LLC, a subsidiary of Essex Hydro.

The Automatic facility is situated approximately 1.6 miles upstream from the first-on-river Union Gas project (which is, in turn, 1 mile upstream from the confluence of Messalonskee Stream with main stem of the Kennebec River). The Automatic impoundment stretches upstream approximately 4.5 miles to the tail race of the next dam, the Rice Rips facility.

The Automatic facility was originally constructed in 1924 and consists of: (1) an 81-foot-long, 33-foot-high concrete gravity dam with (a) a 33-foot-long non-overflow section, (b) a 20-foot-long by 2-foot-wide gated section with one Taintor gate, 14 feet high by 16 feet wide, (c) a 30-foot-long spillway section topped with 2-foot-high flashboards, (d) an intake section beneath the spillway and (e) an earthen section containing a 30-foot-long retaining wall; (2) a concrete and brick powerhouse, 63 feet high by 19 feet wide by 31 feet long, housing one horizontal Francis turbine and General Electric generator combination with a rated capacity of 800 kW.

The operation of the Automatic facility is dependent on discharge from the upstream Oakland and Rice Rips Hydroelectric projects, which in turn are dependent on outflows from Messalonskee Lake. When inflow to Messalonskee Lake is greater than approximately 570 cfs, Automatic is operated as a run-of-river project. When inflow is less than approximately 570 cfs the project is cycled. 15 cfs is discharged at all times through the Automatic project as well as the upstream Oakland and Rice Rips hydroelectric projects and the downstream Union Gas hydroelectric project. All additional water that does not go through the turbines is discharged over the spillway; there is no bypass.

[1] The LIHI certification reports for these projects contain a full description of their operations, as they relate to the Automatic facility.

Regulatory History

The Automatic project was originally licensed in 1968 to Central Maine Power. Ownership was transferred to the Kennebec Water District in 1995, and a Maine Water Quality Certification was issued that same year. A new FERC license was issued for the project in 1999. There have been no compliance or other regulatory issues with the facility since the license was issued.

Public Comments

During the public comment period, detailed and substantive comments were received by LIHI from one commenter, the NGO Friends of Kennebec Salmon. Friends of Kennebec Salmon (FKS) and/or its principal, Douglas Watts, have been involved in fish passage issues on the Kennebec River and its tributaries for approximately 10 years, and four years ago unsuccessfully petitioned Maine's Board of Environmental Protection to revise the 1995 water quality certification for the lowermost dam on the river, Union Gas, to require a change in its construction and fish passage.

FKS argues that,

> "the LIHI process [is] a unique opportunity to develop a cooperative plan to restore key components of the natural character of Messalonskee Stream in a decadal context. This opportunity is greatly enhanced by recent water quality improvements in the stream and by the large investment by the local community in creating a walking and biking trail network along the stream ...The plan we envision is not intended to supplant the FERC licensing process, but to build upon it, recognizing that when the FERC licenses were issued in 1997, the stream was in a far poorer condition than it is today...As the 1997 FERC and Maine DEP administrative record shows, scant attention was given to restoring native fish species assemblage of the watershed, particularly native diadromous fish species."

Agency Correspondence

As part of the review process, both State and Federal government resource agency officials were contacted to confirm whether (1) the applicant is currently in compliance with regulatory requirements, and (2) the information conveyed by the respective agencies to LIHI as part of its 2010 review of the other three Messalonskee facilities is (or is not) relevant and valid to the Automatic facility. Following is a list of resource agencies that were contacted as part of the LIHI review process for this project:

- Maine Department of Environmental Protection (Maine DEP)
- Maine Department of Inland Fisheries and Wildlife (Maine IF&W)
- Maine Historic Preservation Commission (MHPC)
- Maine Department of Marine Resources (MDMR)
- United States Fish and Wildlife Service (USFWS)

The summary tables below outline my conclusions as to whether the LIHI criteria have been met. The conclusions are based upon information from the application, earlier LIHI

certifications of the other Messalonskee projects, discussions with resource agencies and Friends of Kennebec Salmon, additional written material provided by Friends of Kennebec Salmon, and review of the regulatory history on file at FERC.

Conclusions & Recommendation

The facility is not different or distinguishable in its impacts from the three other Messalonskee projects situated downstream and upstream of Automatic that LIHI certified as low impact in October 2010. Based upon my review of the Automatic application, and assuming acceptance by the applicant of the condition on certification recommended herein regarding upstream and downstream fish passage for diadromous American eel, the facility's design and operation will be in compliance with LIHI criteria for certification. If implemented, the condition recommended herein for American eel passage, in combination with similar conditions contained in LIHI certifications issued in Fall 2010 for the other three hydropower facilities on Messalonskee Stream, will mean that upstream and downstream eel passage at all dams on Messalonskee Stream will be constructed, including passage at the non-generating outlet dam at the top of the stream. The Messalonskee outlet dam is not the subject of a LIHI certification, but is owned by the owner of the previously-certified Messalonskee facilities, who has agreed to install eel passage there as well as part of the certification condition.

Friends of Kennebec Salmon request that LIHI adopt additional conditions as part of certification beyond the condition recommended above regarding passage for American eel (i.e., also conditions regarding water flows and restocking of certain anadromous species upstream of the project). FKS contends that these additional conditions are required for the Automatic facility and the "various Messalonskee Dams" to be "truly low impact," meaning "operated in a manner which accommodates the restoration of [all] native species to the stream and allows for functioning, natural populations." However, because LIHI's criteria are written so as to focus on whether the applicant's facility is in compliance with FERC and state licensing issuances and outstanding agency recommendations, this reviewer believes that requests made by Friends of Kennebec Salmon for these additional certification conditions are not required as a condition for compliance with LIHI's criteria as written.

Summary Tables

LIHI CRITERION & CONCLUSIONS	SUMMARY & CURRENT STATUS
River Flows ***Facility Passes***	Article 401 of the original FERC license issued July 28, 1999 ordered that the licensee release a minimum instantaneous flow from upstream projects (the projects that control the flow to the Automatic facility) of 100 cfs or inflow, but in no case less than 15 cfs. Maine DEP's water quality certificate states the same. Because the Automatic facility is run-of-river and the impoundment behind it is small (68 acres), the applicant cannot significantly increase or decrease the streamflow to Messalonskee Stream. The amount of flows appropriate at all four Messalonskee projects was a matter of significant dispute in the 1999 relicensing process between the USFWS and certain NGOs on one side, and the owner of the other three Messalonskee projects and state agencies, on the other side. Based upon the USFWS' 10j recommendation, and contrary to both Maine's water quality certification and FERC staff recommendation, in its 1999 license for the other three Messalonskee projects FERC abided by the USFWS recommendation and ordered a significantly higher minimum flow than ordered in the State water quality certification -- 100 cfs -- be released from the upstream projects, and therefore released by Automatic as well, pursuant to the above-noted license condition. Following the 1999 license order for the other three Messalonskee projects containing this 100 cfs minimum flow requirement, the licensee requested a rehearing of FERC's order, arguing that the State-ordered flow rate of 15 cfs is adequate to protect fish resources in the Messalonskee. In 2000, FERC agreed with the licensee's arguments and modified the three licenses to reduce the minimum flow regime to 15 cfs from 100. The USFWS appealed administratively this overruling of its 10j recommendation to the Commission; the appeal was denied in 2001. No further appeal by USFWS was taken. In its written comments to LIHI, Friends of Kennebec Salmon argues that the Automatic facility should not be certified because the flow regime in Messalonskee Stream is not what was recommended by USFWS. However, because this USFWS 10j recommendation was "overturned by a legal proceeding," its recommendation "cease[s] to be valid for purpose of certification" under LIHI's criteria (*see* Section C. 8. Definitions). As such, the facility is in compliance with all existing resource agency recommendations, pursuant to A.1, Flows, of LIHI's criteria.

LIHI CRITERION & CONCLUSIONS	SUMMARY & CURRENT STATUS
Water Quality ***Facility Passes***	The facility received a Water Quality Certificate from the Maine Department of Environmental Protection in 1995. Messalonskee Stream is classified as a Class C water. Water quality upstream and downstream of the project meets the classification requirements according to Maine DEP. Although FKS argues that the Automatic facility is "causing or contributing to a violation of minimum state and federal narrative water quality standards," due to the absence of fish passage for all native species, the Maine DEP staff have stated that the facility is in compliance with all conditions contained in the 1995 water quality certification, especially as understood in 1995 when issued, and with the subsequent decision of the Maine Board of Environmental Protection not to reopen and revisit that understanding. In these circumstances, LIHI's past reviews have relied upon the conclusions of the state issuing the water quality certification. The facility is in compliance with all terms and conditions of its permits.

LIHI CRITERION & CONCLUSIONS	SUMMARY & CURRENT STATUS
Fish Passage & Protection ***Facility Passes with recommended condition on certification***	The review has uncovered no indication from the resource agencies that they believe that installing *anadromous* fish passage on the four Messalonskee dams, including Automatic, is needed at this time, due to a combination of the absence of historic information of significant presence on the Messalonskee of certain species (e.g., alewife and American shad) which have led to the construction of fish passage in nearby rivers, the very limited quantity of meaningful rearing and spawning habitat upstream of the dams for anadromous species that may have historically inhabited the river, and the agencies' belief that there are not substantial populations of anadromous species that would benefit from the habitat that is available. The USFWS reserved authority to prescribe fish passage in the FERC license, and has confirmed that currently it has no interest in exercising that authority regarding anadromous passage. Maine DMR does not believe upstream and downstream passage for two anadromous species that might be present below the first-dam, Union Gas facility -- blueback herring and Atlantic salmon -- is warranted at this time, given the small population size combined with the very limited amount of viable spawning and rearing habitat upstream of the facilities for these species. For these reasons, DMR believe that at this time the facility is appropriately protective of the anadromous

	fishery resource under current passage conditions. USFWS noted that there are far higher anadromous fish passage priorities in the Kennebec River and its tributaries. In contrast, for the *catadromous* American eel, it has been established that the catadromous American eel are present in Messalonskee Stream in significant numbers notwithstanding the absence of structured upstream and downstream passage for eel at the downriver Union Gas project, at Automatic, at the two hydropower facilities upstream and at the non-hydropower outlet dam, and that specifically eel are present below the Automatic facility. The 1999 FERC license contains a reservation of fish passage authority but does not prescribe eel passage. The Maine Department of Marine Resources, which is the state agency that has jurisdiction in this matter, explained that when the 1999 FERC licensing process for this was first initiated in the early 1990s, awareness of the need for eel passage did not exist. DMR further stated that it believes eel passage should be implemented at Automatic, at the other three Messalonskee hydropower facilities, and at the outlet dam, and would have already done so had the resources to undertake such an effort been available. As such, DMR does not believe that the Automatic facility currently is "appropriately protective" of the American eel resource as required by LIHI's criteria, but with the conditions recommended in this report that require eel passage, DMR does believe that the facility will be appropriately protective of eel. The USFWS concurs in this judgment, believing that eel passage is important and not adequate currently. Friends of Kennebec Salmon write, "With restoration of effective passage for juvenile eels at the Messalonskee dams, the Belgrade Lakes have enormous potential for the production of the American eel due to their large surface acreage ideal habitat. Restoring this biological productive capacity would have a dramatic positive effect on the entire Messalonskee watershed, the lower Kennebec River, the Merrymeeting Bay estuarial complex and the status of the species as a whole on the Atlantic seaboard." With the conditions recommended herein made part of the certification, LIHI's fish passage criteria will be satisfied.

LIHI CRITERION & CONCLUSIONS	**SUMMARY & CURRENT STATUS**
Watershed Protection	Although Maine's water quality certification requires the licensee for the other three Messalonskee facilities to implement the

Facility Passes	provisions of the "Messalonskee Lake Waterfowl Management Plan" and begin conducting surveys of wetlands and waterfowl within 2 years of the issuance of the new FERC license, and consult with Maine Department of Inland Fisheries and Wildlife on maintaining or enhancing wetlands and waterfowl nesting, this requirement does not apply to the Automatic facility, as it has no control over the downramping conditions upstream that might affect wetlands and waterfowl. The FERC license contained no provisions on the applicant for additional watershed specific protection measures.

LIHI Criterion & Conclusions	**Summary & Current Status**
Threatened & Endangered Species ***Facility Passes***	There are no state or federal threatened or endangered species present within the vicinity of the project area and/or its downstream reach. This includes Atlantic salmon, listed as endangered in 2009 by federal agencies. There is no recovery plan addressing Messalonskee Stream, and no determination of a "take" occurring.

LIHI CRITERION & CONCLUSIONS	**SUMMARY & CURRENT STATUS**
Cultural Resources Protection ***Facility Passes***	The Facility is in Compliance with all requirements regarding cultural resources protection included in article 409 of its FERC license, according to the Maine Historic Preservation Commission. The FERC website indicates full compliance.

LIHI CRITERION & CONCLUSIONS	**SUMMARY & CURRENT STATUS**
Recreation ***Facility Passes***	The facility is in compliance with the recreational access, accommodation and facilities conditions of its FERC License. The FERC license and water quality certification required the applicant to implement certain recreational enhancements, including off-road parking facilities which are used free of charge by boaters to access the impoundment. Downstream access is limited due to the steep, rocky shoreline. Trails around the impoundment are accessed free of charge for snowmobiling, cross-country skiing, hiking and ATV use.

LIHI Criterion & Conclusions	Summary & Current Status
Facilities Recommended for Removal ***Facility Passes***	There is no Resource Agency Recommendation for removal of the dam associate with the Facility.
RECOMMENDATION: THE FACILITY IS *CONDITIONALLY* LOW IMPACT	

Analysis of the Low Impact Certification Criteria

A. River Flows

Goal: *The Facility (dam and powerhouse) should provide river flows that are healthy for fish, wildlife, and water quality, including seasonal flow fluctuations where appropriate.*

Standard: *For in-stream flows, a certified Facility must comply with recent Resource Agency Recommendations for flows. If there were no qualifying Resource Agency Recommendations, the applicant can meet one of two alternative standards: (1) meet the flow levels required using the Aquatic Base Flow methodology or the "good" habitat flow level under the Montana-Tennant methodology; or (2) present a letter from a Resource Agency prepared for the application confirming the flows at the Facility are adequately protective of fish, wildlife, and water quality.*

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

- ✓ **YES**

Article 401 of the original FERC license issued July 28, 1999 ordered that a minimum instantaneous flow of 100 cfs be sustained through the Union Gas development. This order was based on a U.S. Fish and Wildlife Agency recommendation with the intent to provide adequate flow which would maintain an established brown trout fishery in the tail race of the Union Gas facility. See discussion p. 5, above, as to why the finally-established 15 cfs meets the LIHI river flow criterion.

If YES, go to B.

B. Water Quality

Goal: *Water quality in the river is protected.*

Standard*: The water quality criterion has two parts. First, a Facility must demonstrate that it is in Compliance with state water quality standards, either through producing a recent (after 1986) Clean Water Act Section 401 certification, or demonstrating Compliance with state water quality standards (typically by presenting a letter prepared for the application from the state confirming the Facility is meeting water quality standards). Second, a Facility must demonstrate that it has not contributed to a state finding that the river has impaired water quality under Clean Water Act Section 303(d) (relating to water quality limited streams).*

Criteria:

1) Is the Facility either:

a) in Compliance with all conditions issued pursuant to a Clean Water Act (CWA) Section 401 water quality certification issued for the Facility after December 31, 1986? OR

b) in Compliance with quantitative water quality standards established by the state that support designated uses pursuant to the federal Clean Water Act (CWA) in the Facility area and in the downstream reach?

- ✓ **YES**

See discussion, page 6, above.

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?

- ✓ **NO.**

If NO, go to C.

C. Fish Passage and Protection

Goal: *The Facility provides effective fish passage for Riverine, anadromous and catadromous fish, and also protects fish from entrainment.*

Standard: *For Riverine, anadromous, and catadromous fish, a Facility must be in Compliance with recent (after 1986) mandatory prescriptions regarding fish passage (such as a Fish and Wildlife Service prescription for a fish ladder) as well as any recent Resource Agency Recommendations regarding fish protection (e.g., a tailrace barrier). If anadromous or catadromous fish historically passed through the Facility area but are no longer present, the applicant must show that the fish are not extirpated or extinct in the area because of the Facility and that the Facility has made a legally binding commitment to provide any future fish passage recommended by a Resource Agency.*

When no recent fish passage prescription exists for anadromous or catadromous fish, and the fish are still present in the area, the Facility must demonstrate either that there was a recent decision that fish passage is not necessary for a valid environmental reason, that existing fish passage survival rates at the Facility are greater than 95% over 80% of the run, or provide a letter prepared for the application from the U.S. Fish and Wildlife Service or the National Marine Fisheries Service confirming the existing passage is appropriately protective.

Criteria:

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 IS NO PRESCRIPTION ISSUED FOR THIS FACILITY**

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** to some historical records, with significant limitations; **YES** to "not presently move through the Facility area" ... "because passage is blocked at a downstream dam." For some species (e.g., Atlantic salmon, American shad, alewife) there are not historic records, possibly due to the size of Messalonskee Stream in relationship to the nearby Kennebec River and much larger tributaries, as noted by FKS; if these records exist, they have not been provided to LIHI. For one species, American eel, there is recent historical documentation by Friends of Kennebec Salmon, endorsed by Maine DMR, of limited movement through the facility area following the breach of the downstream Union Gas dam in 2001.

If YES, go to C2a and C2b.

C2a) N/A: Fish are either not extinct or extirpated from the area or downstream reach (American eel) or are not present in the area and downstream reach (e.g., Atlantic salmon, bluebacks) due to the existence of the Union Gas and further downstream previously-existing Edwards Dam.

C2b) N /A: There are no "Resource Agency Recommended" measures, as that term is defined by LIHI.

If N/A, 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 C2 above), and

b) the Resource Agency 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?

- ✓ **N/A.** Resource Agencies had the opportunity to issue Mandatory Fish Passage Prescription as part of the FERC relicensing, and declined. Whether that was appropriate or not is a matter of debate, as seen by the FKS comments. According to Maine DMR, it did not advocate for eel passage simply because this passage need was not being addressed in the 1990s as this licensing was proceeding due to other demands on DMR's time and a lack of focus then on eel passage, not because of technological infeasibility, absence of eel habitat or absence of eel. Regarding anadromous species, the reasons a mandatory prescription were not issued appeared to be a combination of a lack of historical record of significant runs, and a lack of a population of these species downstream (at the time of licensing, a mainstem Kennebec river dam that had been blocking access of anadromous species was just then in the process of being removed).

If N/A, 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

b) If the Facility is unable to meet the fish passage standards in 4a, 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?

WITH CONDITION IMPOSED BELOW, YES. Discussions by this reviewer with the relevant resource agencies has documented that these resource agencies believe that facility as currently operating is appropriately protective, for now, of the anadromous fishery resource (see discussion, pages 6-7, above), but is not appropriately protective of American eel. However, with the condition below, the agencies feel that the facility would be appropriately protective of the fishery resource.

As such, the condition recommended for certification is as follows:

Within 12 months of the date of issuance of the LIHI certification for the Automatic facility, the applicant shall present to LIHI a copy of an agreement with the Maine Department of Marine Resources and the U.S. Fish and Wildlife Service ("agencies") in which the applicant and agencies have reached agreement on the final design, construction, operations and maintenance of safe, timely and effective upstream and downstream passage for American eel at the Automatic facility, along with a similar agreement executed between the owners of (a) the Union Gas facility and (b) the Messalonskee Lake outlet dam (owned by Messalonskee Stream Hydro, LLC, and the agencies for upstream and downstream passage for American eel at these two facilities as well. This 12 month deadline at the Automatic facility may be extended for an additional 6 months if the applicant can demonstrate to the agencies that field work necessary to determine the appropriate location and design of fish passage at the Automatic facility necessitates this extension. This agreement shall include a date to initiate construction of the required upstream and downstream passage at the Automatic facility that is the same date as installation required at the downstream Union Gas facility and the Messalonskee Lake outlet dam, unless the applicant can demonstrate to LIHI that such a

deadline is infeasible, in which the deadline for construction at the Automatic facility shall be no later than 12 months after the date on which the agreement is reached.

If YES, go to C5.

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

- ✓ **N/A**

There has been no prescription for upstream or downstream riverine fish passage prescribed by Resource Agencies for the Automatic facility.

If YES or 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?

- ✓ **N/A**

No recommendations were prescribed by the resource agencies.

If YES or NOT APPLICABLE, go to D.

D. Watershed Protection

Goal*: Sufficient action has been taken to protect, mitigate and enhance environmental conditions in the watershed.*

Standard*: A certified Facility must be in Compliance with Resource Agency Recommendations and FERC license terms regarding watershed protection, mitigation or enhancement. These may cover issues such as shoreline buffer zones, wildlife habitat protection, wetlands protection, erosion control, etc. The Watershed Protection Criterion was substantially revised in 2004. The revised criterion is designed to reward projects with an extra three years of certification that have: a buffer zone extending 200 feet from the high water mark; or, an approved watershed enhancement fund that could achieve within the project's watershed the ecological and recreational equivalent of land protection in D.1 and has the agreement of appropriate stakeholders and state and federal resource agencies. A Facility can pass this criterion, but not receive extra years of certification, if it is in Compliance with both state and federal resource agencies Recommendations in a license approved shoreland management plan regarding protection, mitigation or enhancement of shorelands surrounding the project.*

Criteria:

1) **Is there a buffer zone dedicated for conservation purposes (to protect fish and wildlife habitat, water quality, aesthetics and/or low-impact recreation) extending 200 feet from the high water mark in an average water year round 50-100% o the impoundment, and for all of the undeveloped shoreline?**

   ✓ **NO**

If NO, go to D2.

2) **Has the Facility owner/operator established an approved watershed enhancement fund that: 1) could achieve within the project's watershed the ecological and recreational equivalent of land protection in D1, and 2) has the agreement of appropriate stakeholders and state and federal resource agencies?**

   ✓ **NO**

If NO, go to D3.

3) **Has the Facility owner/operator established through a settlement agreement with appropriate stakeholders and that has the state and federal resource agencies agreement an appropriate shoreland buffer or equivalent watershed land protection plan for conservation purposes (to protect fish and wildlife habitat, water quality, aesthetics and/or low impact recreation)?**

   ✓ **NO**

If NO, go to D4.

4) **Is the Facility in Compliance with both state and federal resource agencies Recommendations in a license approved shoreland management plan regarding protection, mitigation or enhancement of shorelands surrounding the project?**

   ✓ **YES**

See discussion, page 7-8, above.

If YES, go to E.

E. Threatened and Endangered Species Protection

Goal*: The Facility does not negatively impact state or federal threatened or endangered species.*

Standard: *For threatened and endangered species present in the Facility area, the Facility owner/operator must either demonstrate that the Facility does not negatively affect the species, or demonstrate Compliance with the species recovery plan and any requirements for authority to "take" (damage) the species under federal or state laws.*

Criteria:

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

- ✓ **NO.** There are no documented threatened or endangered species in the Facility area and/or downstream reach.

See discussion, page 8, above.

If NO, go to F.

F. Cultural Resource Protection

Goal: *The Facility does not inappropriately impact Cultural Resources.*

Standard: *Cultural Resources must be protected either through Compliance with FERC license provisions, or, if the project is not FERC regulated, through development of a plan approved by the relevant state, federal, or tribal agency.*

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**

See discussion, page 8, above.

If YES, go to G.

G. Recreation

Goal: *The Facility provides free access to the water and accommodates recreational activities on the public's river.*

Standard: *A certified Facility must be in Compliance with terms of its FERC license or exemption related to recreational access, accommodation and facilities. If not FERC-regulated, a Facility must be in Compliance with similar requirements as recommended by resource agencies. A certified Facility must also provide the public access to water without fee or charge.*

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**

See discussion, page 8, above.

If YES, go to G3.

G3. Does the Facility allow access to the reservoir and downstream reaches without fees or charges?

- ✓ **YES**

If YES, go to H.

H. Facilities Recommended for Removal

Goal*: To avoid encouraging the retention of facilities that have been considered for removal due to their environmental impacts.*

Standard: *If a Resource Agency has recommended removal of a dam associated with the Facility, certification is not allowed.*

Criterion:

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

- ✓ **NO**

FACILITY IS *CONDITIONALLY* LOW IMPACT

Appendix A: Agency Contact Information and Correspondence Log

Maine Department of Environmental Protection:

Dana Murch
Bureau of Land and Water Quality: dana.p.murch@maine.gov 207-287-7784

Mr. Murch was contacted via telephone on March 15, 2011. He stated that the Automatic facility was in compliance with all water quality certification requirements, and has had no issues or violations in the past. Mr. Murch also stated that in terms of flows, the project is run-of-river and passes downstream the water that comes to it from upstream-controlled facilities. The facility has no bypass reach that requires water in it, and therefore no flow issue in that regard. Mr. Murch stated that he does not believe that there is meaningful habitat for anadromous Atlantic salmon in the river upstream of Automatic, and that there is no reason to pass alewife upstream as the water falls upstream acted as a natural barrier to spawning habitat.

Maine Historic Preservation Commission:

Dr. Arthur Spiess,
Senior Archaeologist: arthur.spiess@maine.gov 207-287-2132

Dr. Spiess was contacted via telephone on March 15, 2011, and stated that there were no archaeological or historic issues at the site and that the applicant was in compliance with all license requirements.

Maine Department of Inland Fisheries and Wildlife:

Steve Timpano
Environmental Coordinator: steve.timpano@maine.gov 287-5258

Mr. Timpano was contacted via telephone on March 15, 2011, and stated that he was not aware of any compliance issues with fisheries or wildlife conditions at this facility over the years. Mr. Timpano also searched the state database and confirmed that there are no threatened or endangered species present within the vicinity of this facility.

United States Fish and Wildlife Service:

Fred Seavey
Fish and Wildlife Biologist: Fred_Seavey@fws.gov 207-866-3344 (ext. 113)

Mr. Seavey was contacted by telephone on March 21, 2011, and stated that USFWS believed that for the time being the fish passage for anadromous species, or lack thereof, was adequate, that USFWS has no current plans for prescribing anadromous passage at Automatic or any of the Messalonskee projects, and that there are "far higher priorities" in the Kennebec River basin when judging the quantity and quality of anadromous habitat upstream of the Automatic and other Messalonskee facilities vs. other facilities. Conversely, regarding passage for catadromous passage, Mr. Seavey stated passage is inadequate, that

there are signifcant populations of eel in the stream, including below Automatic, and that it is important to achieve passage there, but that the Service has just been too overworked since the license was issued to initiate a prescription process.

Maine Department of Marine Resources

Gail Wippelhauser
Fish and Wildlife Biologist: gail.wippelhauser@maine.gov 207-624-6349

Ms. Wippelhauser was contacted via telephone on March 16, 2011, and repeated the information that she had provided to LIHI in summer, 2010, namely that the FERC relicensing process began well before 1999 and that she did not come on-board with the Maine Department of Marine Resources until 1996 when the process was well under way. She explained that at the time she was the only one concerned with eel passage at hydro facilities and by the time the FERC license was issued, it was too late to address the issue at the Messalonskee Stream facilities. Since issuance of the Messalonskee licenses, subsequently-licensed Maine projects have generally contained eel passage, and nearby projects on the Kennebec and Sebasticook Rivers have recently installed eel passage. Similar to the other Messalonskee facilities, Gail stated that she would recommend both upstream and downstream fish passage for eels at the Automatic facility, and that there is definitive evidence of eel both downstream and upstream of the facility now. She expresses appreciation for the LIHI certification condition issued in October 2010 for the other three Messalonskee facilities, stated that planning for eel passage on those facilities is under way, and requested that the same conditions be placed on the Automatic facility, with dates for installation identical to that imposed by the certification for the Union Gas project.

Regarding anadromous passage, Ms. Wippelhauser reiterated that she did not believe passage for anadromous species was necessary or appropriate at this time, based upon a lack of historical evidence supporting the presence of American Shad, alewives, or Atlantic salmon in Messalonskee Stream, the absence of meaningful habitat upstream of the Automatic facility in terms of quantity and quality, and the absence of a substantial population downstream. She acknowledged that there may be blueback herring downstream of the Union Gas facility and "some" upstream spawning habitat, but not of sufficient quantity or quality to justify the cost of passage.