



United States Department of the Interior



FISH AND WILDLIFE SERVICE
New England Field Office
70 Commercial Street, Suite 300
Concord, New Hampshire 03301-5087
<http://www.fws.gov/northeast/newenglandfieldoffice>

REF: FERC No. 2077

February 3, 2009

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

Dear Mr. Ayer:

This letter is in regards to the pending application by TransCanada Hydro Northeast for the Low Impact Hydropower Institute's (LIHI) Low Impact Hydropower Certification for the Fifteen Mile Falls Project, located on the Connecticut River in Vermont and New Hampshire.

We have reviewed the LIHI's criteria for certification and have assessed whether, in our opinion, the Fifteen Mile Falls Project meets those criteria.

The Fifteen Mile Falls Project underwent relicensing in 2002 and a license was issued that incorporated the provisions of a Settlement Agreement (SA) between the then-licensee New England Power Company, the U.S. Fish and Wildlife Service, and numerous other state and federal agencies, non-government conservation organizations and local interests. The provisions of the SA included some changes to project operations, provided minimum flows and modified reservoir operations. These measures reduced the adverse impacts of the prior project operations on riverine and reservoir resources. However, a major premise of the SA was that, despite some direct project modifications and on-site mitigation, the project's three dams would largely operate as they had in the past: in a store-and-release mode such that daily flow and reservoir level fluctuations would continue, as would a substantial winter drawdown of both Moore and Comerford Reservoirs. In lieu of changes to these operations, other mitigation was agreed to, including land protection and establishment of an environmental enhancement fund which we included in the SA.

Although some of the implemented project operation changes did result in improvements in minimum flows below Comerford and reduced daily fluctuations of the reservoirs, high peak flows and fluctuations of flow and reservoir levels continue to have adverse impacts to aquatic and wetland resources. Absent a SA, we would strongly argue that the ongoing project operations are not consistent with a "low impact" characterization. Although the alternative mitigation was intended, in part, to address project operation impacts, it is unclear whether such

mitigation qualifies the project as "low impact" based on the LIHI certification criteria or the intent of the LIHI certification process.

We have also reviewed the other LIHI criteria and based on our review, we do not believe that the Fifteen Mile Falls Project qualifies for LIHI certification based on the factors specified below.

Fish Passage and Protection

The SA and license require investigation and implementation of downstream fish passage measures at Moore and Comerford Dams to protect outmigrating Atlantic salmon smolts. To date, TransCanada has conducted smolt migration studies and constructed a surface bypass and trapping facility at Moore Dam. However, the size of the Moore Dam, reservoir and intake structure make finding a fish passage solution difficult and expensive. Studies have been undertaken, and have proceeded in a deliberate, stepwise manner, however no final solution for smolt passage has been developed. As currently configured, smolt passage success is lower than we find acceptable, and emigrating smolt experience substantial delays in passing the site.

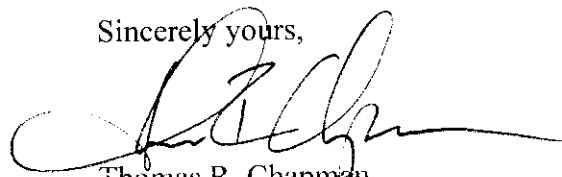
Since studies are ongoing, and passage success using the existing structures has yet to be proven successful, we do not believe that the criteria for providing effective fish passage has been met.

Conclusion

While some aspects of the project adhere to LIHI certification criteria and the current and former licensees made some progress towards effective fish passage, the project does not, in our opinion, adhere to LIHI criteria for fish passage. As noted above, its qualification as low impact relative to river flow issues is also uncertain. For these reasons, we cannot support LIHI certification for the Fifteen Mile Falls Project.

Thank you for this opportunity to comment. If you have any questions, please contact John Warner of this office at 603-223-2541, extension 15.

Sincerely yours,



Thomas R. Chapman
Supervisor
New England Field Office

CC: VDFW/Waterbury – Rod Wentworth
VDFW/Springfield – Jay McMenemy
VANR – Jeff Cueto
NHFGD/Concord - Matt Carpenter
FWS/Ct. River Coord. – Jan Rowan
CRWC – David Deen
FWS/EN – Ben Rizzo
FERC- Div. Of Hydropower Administration and Compliance
Reading file
ES: JWarner:2-3-09:603-223-2541

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Agency Of Natural Resources

February 9, 2009

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

RE: Application by TransCanada Hydro Northeast for Low Impact Hydropower Certification
Fifteen Mile Falls Project; Connecticut River; FERC #2077

Dear Mr. Ayer:

I am writing in response to your request for comments concerning the pending application referenced above. My Department offers the following comments concerning whether the Fifteen Mile Falls Project meets the LIHI criteria. Based on our review, we do not believe that the project qualifies for LIHI certification.

The U.S. Fish & Wildlife Service submitted a letter to you on February 3, 2009 with its assessment. We support their findings, and our conclusions are consistent with them.

The Fifteen Mile Falls Project was relicensed in 2002 and the provisions of a Settlement Agreement were included in the FERC license. The State of New Hampshire issued a Water Quality Certification for the project.

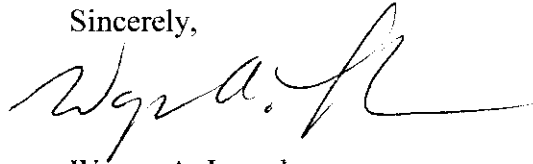
The LIHI criterion for Fish Passage and Protection states: *[F]acility must be in compliance with recent (after 1986) mandatory prescriptions regarding fish passage (such as a Fish and Wildlife Service prescription for a fish ladder) as well as any recent resource agency recommendations regarding fish protection (e.g., a tailrace barrier).*

Reason for non-qualification: There is no permanent downstream passage for outmigrating Atlantic salmon smolts in place at Moore and Comerford dams despite license requirements. Interim operation of a smolt sampler at Moore with trucking around Moore and Comerford has been inefficient and additional modifications are necessary. Nothing further has yet been proposed by the utility despite fishery agency recommendations. The large size of these dams presents special challenges with respect to finding an effective means of downstream passage. While some progress has been made toward implementing effective downstream fish passage, the project does not, in our opinion, meet LIHI criteria for fish passage. The application for LIHI certification at this time is premature but could be submitted again when effective downstream fish passage is in place.



We support the goals of LIHI and its certification program in encouraging environmentally sound operation of hydropower projects and appreciate the opportunity to comment.

Sincerely,

A handwritten signature in black ink, appearing to read "Wayne A. Laroche". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Wayne A. Laroche
Commissioner

CC: Rod Wentworth, VDFW
Jay McMenemy, VDFW
Jeffrey Cueto, VDEC
Matt Carpenter, NHFGD, Concord
John Warner, USFWS
Jan Rowan, USFWS
FERC – Div. of Hydropower Administration and Compliance
David Deen, CRWC



MassWildlife

Commonwealth of Massachusetts

Division of Fisheries & Wildlife

Wayne F. MacCallum, *Director*

February 13, 2009

Mr. Fred Ayer, Executive Director
Low Impact Hydropower Institute
345 providence Street
Portland, ME 04103
RE : 15 Mile Falls Project comments

Dear Mr. Ayer:

The Department of Fish and Game ("DFG") hereby submits the following comments on the Low Impact Hydropower Institute's ("LIHI") Pending Application for the 15 Mile Falls Project on the Connecticut River in New Hampshire and Vermont (FERC No. 2077).

DFG is submitting these comments to LIHI in order to fulfill the requirements of the Massachusetts Department of Energy Resources ("DOER") Renewable Energy Portfolio Standard Regulations (225 CMR 14.00; "RPS I" and 225 CMR 15.00; "RPS II"). The RPS I and RPS II regulations were promulgated by DOER on January 1, 2009 and require that any hydroelectric project wishing to qualify as either a RPS I or RPS II generator first obtain LIHI certification. These regulations also require all relevant regulatory agencies to comment on the pending LIHI application.

DFG understands that TransCanada will be applying to the MA DEOR to have the 15 mile falls project qualify as a RPS I generator. Under the DOER program only incremental increases in power production installed after 1997 are eligible. TransCanada will be applying for the incremental increase in power production realized from the installation of a new waterwheel at the Comerford dam. This new waterwheel was designed to more efficiently release the minimum flows agreed to as part of the Settlement Agreement ("SA") of the 2002 project relicensing process. The SA also addressed some aspects of project operations, reservoir levels, and downstream fish passage for Atlantic salmon smolts. To date TransCanada has installed a surface bypass and smolt collection facility at the Moore dam, but results have been disappointing and studies to determine the final configuration of downstream fish passage at the project continue.

DFG believes that the project changes (physical and operational) made subsequent to the SA should be eligible for DEOR RPS qualification, however the project still stores and releases water resulting in both large daily peaking flows and large seasonal reservoir level changes which are detrimental to fish and wildlife resources. Therefore DFG does not feel that the 15 Mile Falls project should qualify as "Low Impact" hydropower.

Sincerely,

Anadromous Fish Project Leader

www.masswildlife

Division of Fisheries and Wildlife

Field Headquarters, One Rabbit Hill Road, Westborough, MA 01581 (508) 389-6300 Fax (508) 389-6301
An Agency of the Department of Fisheries, Wildlife & Environmental Law



February 26, 2009

Mr. Fred Ayer, Executive Director
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RE: Certification Application for Fifteen Mile Falls Project

Dear Mr. Ayer:

This letter responds to correspondence of February 3 from the US Department of the Interior, Fish and Wildlife Service, New England Field Office; February 9 from the Vermont Department of Fish and Wildlife; and February 13 from the Massachusetts Division of Fisheries and Wildlife commenting on TransCanada's application for certification for its Fifteen Mile Falls Project.

TransCanada worked with the Massachusetts Department of Energy Resources relative to the inclusion of Low Impact Hydropower Institute (LIHI) criteria and certification in the agency's rule-making relative to Renewable Portfolio Standards (RPS) and qualification for Renewable Energy Credits (RECs) for incremental hydropower. We believe that the Fifteen Mile Falls Project meets the LIHI criteria and the three fishery agencies referenced above believe it does not.

We have also worked closely with the agencies and the individual fishery biologists referenced in or signatory to the letters on Connecticut River fishery issues for many years and have respect for them and their views. We feel that agency consultation on the Fifteen Mile Falls project has met the standards expected from LIHI certification criteria and point out that the Fifteen Mile Falls Project has followed closely the consultation requested by the agencies and is in compliance with its federal operating license.

The Fifteen Mile Falls Project was the subject of a multi-party Settlement Agreement, signed in 1997, and both the Fish and Wildlife Service and the Vermont Department of Fish and Wildlife were participants in the settlement negotiation. Ultimately the heads of both agencies were enthusiastic participants and signatories to the agreement as well as speakers at the signing ceremony. Although both agencies now generally object to fishery mitigation and flow management issues in their current letters, the mitigation and enhancement package negotiated in the Fifteen Mile Falls Project relicensing would not have been possible had the project been required to operate in a run-of-river mode. Considerable funding and land protection objectives important to many stakeholders, for instance, were met in the project area and the valley as a result. Currently important climate change objectives are met without the necessity of a fossil fuel alternative to replace the store-and-release mode of the project. Other renewables (such as wind and solar) do meet the definition for RECs but they fail to respond to current critical electrical system needs with respect to a generation source that can be dispatched to respond to demand. Specifically, we note the following with respect to fishery and operational issues raised by the agencies:

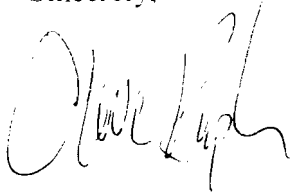
COMMENT	AGENCY	RESPONSE NOTES
FISH PASSAGE		
Downstream passage success at Moore using a constructed bypass and collection facility has been disappointing.	MAFWS	TransCanada has built and operated a surface bypass and collection facility for several years upon notification from agencies that such was necessary. While we concur that results have not met agency (or licensee) expectations we continue to work with agencies to improve results annually. We note that accomplishment of passage effectiveness at most hydroelectric projects is an iterative process of design, implementation, evaluation, re-design, re-evaluation, refinement, etc. That process continues at Fifteen Mile Falls. Although studies continue to improve attractiveness, the system operates well providing passage around all three dams associated with Fifteen Mile Falls. We agree that permanent downstream passage remains to be accomplished and the iterative process continues with plans for 2009 with radiotagging of smolts, acoustic tracking and computational fluid dynamic modeling to examine additional measures to increase the attractiveness of passage for out-migrating fish. It is estimated that between 35% -65% of the migrating smolts utilize the bypass each year. The intricacies of weather, smoltification and readiness, reservoir size and floating debris and a host of other factors have contributed to the complexity of the issue.
Smolt passage is lower than we find acceptable. Studies have been undertaken in a stepwise manner – no final solution has been developed.	USFWS	
No permanent downstream passage has been accomplished. Trucking around Moore and Comerford has been inefficient and additional modifications are necessary. Nothing further has yet been proposed by utility despite fishery recommendations.	CDFW	
OPERATIONS		
The FMF project continues to store and release water which is detrimental to fish and wildlife.	MAFWS	Under the Settlement Agreement, specific operational mitigations included a mix of seasonal minimum flows (some guaranteed from storage at agency request), reservoir operating range reductions and restrictions and spawning protection measures (all with complete understanding and acceptance in the Settlement Agreement that the project as designed needs to continue to peak to remain viable) Major wetland mitigation and reservoir storage issues were incorporated into the Settlement Agreement and license to address concerns although the applicant acknowledges that the project continues to have impact. We would also point out that some of the impacts are positive and storage provides benefits to the river and its ecosystem as well as impacts.
High peak flows and fluctuations of flows continue to have adverse impacts to aquatic and wetland resources	USFWS	

The three agency letters are both surprising and discouraging to TransCanada, but we continue to feel that the Fifteen Mile Falls Project fully meets LIHI certification criteria. The claim of “low impact” is relative to other hydroelectric operations, not a pristine or remote river system without hydroelectric, wastewater assimilation, water supply, recreation, irrigation and other human uses. The LIHI criteria appear to us to require a “balancing” of frequently competing and conflicting hydroelectric project operational demands. The Fifteen Mile Falls Settlement Agreement sought and, we believe, achieved

that balance. Fishery mitigation was an essential and, by far, the most expensive but not the exclusive, test for balance within the Settlement Agreement. The three fishery agency letters' interpretation is understandably narrow and fails to consider the comprehensive approach to relicensing undertaken at Fifteen Mile Falls, which, at the time, was respected and publicly applauded by two of the agencies that now object to certification of the project.

Please contact me with any questions. I appreciate the opportunity to comment.

Sincerely,

A handwritten signature in black ink, appearing to read "Cleve Kapala". The signature is fluid and cursive, with a large initial "C" and a distinct "K".

Cleve Kapala
Director of Government Affairs