



Connecticut River Joint Commissions

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VIA ELECTRONIC FILING

**Kimberly D. Bose, Secretary**

Federal Energy Regulatory Commission

888 First Street, N.E. Room 1-A

Washington, D.C. 20426

**Re:** Comments on Final Report for Studies 2 and 3, Riverbank Transect and Riverbank Erosion; Project Nos. 1892-026, 1855-045 and 1904-073

May 15, 2017

Dear Secretary Bose,

The Connecticut River Joint Commissions (CRJC) was established by the legislatures of Vermont and New Hampshire almost 30 years ago to advise public agencies in their decisions that affect the Connecticut River.

We are again writing to the Federal Energy Regulatory Commission (FERC) in the course of relicensing the three dams on the lower Connecticut River between New Hampshire and Vermont. Our foremost concern, in this and our previous communications, is the deleterious effect of riverbank erosion, which is caused by operations of the hydroelectric projects that you are relicensing. Our concerns have not been addressed.

Today, we draw your attention to:

1. The fact that contrary to FERC's recommendation that "using HEC-RAS modeling in combination with logistic regression statistical analysis may be adequate to identify and describe the likely causes of erosion at the 21 monitoring sites", it is clear the studies did not identify and describe the likely causes of erosion. The final report does not clarify the proportion of erosion that is attributable to project operations. The studies use an unorthodox methodology, the erosion ratio. Princeton Hydro's recent peer-review memo (to Connecticut River Conservancy, dated May 2, 2017) points out that no velocity analysis, using the HEC-RAS model, was included in the revised Study 2 and 3, and relevant discussions do not identify the likely causes of erosion. Nevertheless, John Field's final report concludes, without providing any new evidence, that ". . . notching at the base of the banks that initiates the cycle of erosion can result from a variety of potential factors such as flood flows, wave action, seepage forces generated by natural

groundwater flows, or water level fluctuations.” But no further discussion of these erosive forces is provided, and the regression analysis was of no value in determining the relative importance of each of these forces.

2. Since the studies were unable to identify the effect of project-related water level fluctuations on erosion, Great River Hydro does not have sufficient information to determine the impact of project-related erosion on other public interest factors such as farmland, listed species, natural communities, archaeological sites, roads and other infrastructure.

As a result, we recommend FERC require Great River Hydro, LLC:

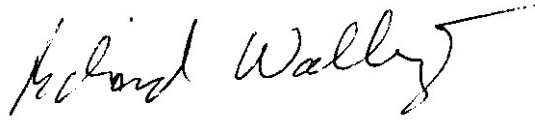
1. Undertake additional studies, as recommended by Princeton Hydro, stakeholders and other resource agencies, to identify and describe the likely causes of erosion.
2. Modify project operations to reduce the magnitude and frequency of water level fluctuations that cause erosion and methylmercury production, and specifically address whether it is practicable to operate the Projects more as run-of-river, where reservoir elevations are relatively stable and flows are within the operating range of the turbines. We agree with the New Hampshire Department of Environmental Services’ comment to FERC on March 1, 2017 that: “it would seem that if the Projects were operated more as run-of-river (e.g., as a steady pond when flows were within the operating range of the turbines)” erosion would decrease.
3. Identify more explicit methods for protecting farmland, listed species, natural communities, archaeological sites, roads and other infrastructure that may be affected by eroding banks and rapid watering and de-watering.
4. Establish a mitigation fund for the life of the permit in an amount adequate for compensating public and private parties for: (i) property losses caused by erosion, (ii) riverbank restoration projects where appropriate, and (iii) costs associated with necessary professional services to prevent further erosion.

As we have previously expressed, the Connecticut River Joint Commissions sincerely appreciates the opportunity to have input in a licensing agreement. In this communication, we are drawing your attention to the fact that the impact of Project operations on riverbank erosion has yet to be quantitatively determined; however, this is essential information that needs to be addressed in a final licensing proposal.

By working in cooperation with FERC and Great River Hydro, we are committed to ensuring local public interests are considered, our shared public trust resource (the Connecticut River) is protected, and the best possible license conditions are crafted.

If you have any questions regarding the contents of this letter, please feel free to contact either of us via e-mail at Jason Rasmussen (jrasmussen@swcrpc.org) or Richard Walling (wsqw@myfairpoint.net).

Sincerely,

A handwritten signature in black ink that reads "Richard Walling". The signature is written in a cursive style with a long horizontal stroke extending to the right.

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Richard Walling  
Chair, New Hampshire Connecticut River Valley Resource Commission

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Jason Rasmussen  
Chair, Vermont Connecticut River Watershed Advisory Commission

Document Content(s)

CRJC Comments Study Reports.PDF.....1-3