Connecticut River Joint Commissions
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VIA ELECTRONIC FILING
September 28, 2016

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E. Room 1-A
Washington, D.C. 20426

Re: Comments on TransCanada Hydro Northeast Inc.'s Updated Study Results for Project Nos. 1892-026, 1855-045 and 1904-073

Dear Secretary Bose,

The Connecticut River Joint Commissions (CRJC) is writing in response to TransCanada's (TC) Updated Study Reports, filed on May 17, 2016 and August 2, 2016, concerning the hydroelectric projects referenced above. The CRJC and three of its subcommittees are actively engaged in the relicensing process and have a number of concerns.

Based on the Study results presented to date, the CRJC herein supports and/or recommends several study modifications; and, provides comments for consideration in drafting the Preliminary License Proposal, which is due on December 1, 2016.

CRJC recommends:

1. Study modifications and new studies that clarify the causes of erosion; related to the erosion studies (Study No. 1, Historical Riverbank Position and Erosion; Study No. 2, Riverbank Transect; and, Study #3, Riverbank Erosion). This is the issue of most concern to riparian owners.

TransCanada did an exemplary inventory of existing bank erosion within the study area, but its conclusions based on too few transects over only a two-year interval are speculative, and its questionable assumptions in an unorthodox methodology to ascertain the causes of erosion make their conclusions equivocal. Nevertheless, the technical studies and analyses conducted by TC do appear to affirm that project operations contribute to bank erosion within the project boundary. However, the crucial question of the proportionate contribution of project operations to that erosion, the impact on specific natural and human resources, and the economic cost of these impacts have not been determined. This information is going to be essential for making a responsible decision about dam operations over the next forty years. Lacking this information, TC is doing little more than looking into a rear-view mirror.

We endorse the erosion peer-review comment letter by Princeton Hydro that critiques the erosion studies. CRJC contributed to this effort, and agrees with Princeton Hydro that the most important goals and objectives of the approved study were not met with the approved study methodology. This is, in part, due to the fact that the approved studies were not conducted as provided for in the approved study plan; but, also due to deficiencies in the proposed methodology itself. CRJC supports study modifications, or additional studies, that are designed to determine the likely causes of erosion, particularly those designed to identify the portion of erosion that is directly attributable to project operations.

2. The operational model (Study No. 5, Operations Model) be optimized to manage ramping rates and frequencies in a manner that minimizes erosion and reduces mercury accumulation.

CRJC's Connecticut River Water Resources Management Plan, published in 2009 after two years of extensive participation by state and federal agencies, local communities, non-profit organizations, and riverfront landowners, concluded hydro dam ramping rates on the main stem of the Connecticut River should be slowed to control erosion and soil piping, and that rapid rates should only be applied when energy blackouts occur.

Moreover, Study No. 5, Operations Model, and Study No. 6, Water Quality Monitoring do not address the accumulation of mercury in the river and their effects on fisheries and public health. We previously provided evidence that indicates fluctuating water levels in reservoirs exacerbate the accumulation of mercury in fish. (e.g., https://www.niehs.nih.gov/research/supported/assets/docs/a_c/bioscience_508.pdf).

Based on the science, CRJC requested that mercury in fish tissues and sediments be tested by TC to identify mercury levels in order to inform possible mitigation measures. We repeat that request here, as more recent research indicates reservoir water level fluctuations do enhance methylmercury production, a process that can result in elevation of methylmercury concentrations in biota, even in older reservoirs (https://www.researchgate.net/publication/279634886_Influence_of_reservoir_water_level).

The Connecticut River Recreation Management Plan prepared and published by the Connecticut River Joint Commissions in 2009 includes top recommendations from each of CRJC's five local river subcommittees. The Upper Valley, Mount Ascutney, and Wantastiquet subcommittees, which cover the river reaches affected by relicensing, each had a strong recommendation to "reduce mercury contamination in the Connecticut River system".

Finally, as CRJC has recommended in previous comments, TC should incorporate into the hydraulic and operations models scenarios of more intense storm events and prolonged periods of drought that are based on recent historical data and predicted by the preponderance of climate models. Not to do so is a glaring weakness in the studies that will undermine their credibility and defensibility. The resulting weaknesses in the models will hamper the projects owner's ability to meet desired stakeholder outcomes in future years.

3. The identification and protection of listed species and exemplary natural communities, and archaeological sites that may be adversely affected by actively eroding banks in the project area.

The CRJC applauds the comprehensive inventory of erosion sites that was compiled by the Studies. However, we are disappointed that the potential impact of this erosion on natural (Study 27, Floodplain, Wetland, Riparian, and Littoral Vegetation Habitats), and historic resources (Study 33, Archaeological Phase II Technical Report Determination of Eligibility), and the portion of the impact attributable to project operations have not been determined. These resources need to be protected, to the extent practicable, from loss by erosion and from rapid watering and de-watering of habitats.

4. A cumulative economic impact analysis of the hydroelectric projects be conducted. TransCanada's has not addressed this issue, and we consider this to be an extremely important impact of project operations. These assessments must include loss of agricultural land due to shoreland erosion, flooding of developed areas, costs associated with maintaining and monitoring recreational use of the impoundments, and most importantly, threats to infrastructure (e.g., NH Route 12A between Charlestown and Walpole, and River Road in Lyme, New Hampshire) caused by shoreland erosion.

The reluctance of TransCanada to compensate municipalities for assessed values of dam properties or expenses related to their operations is highlighted by TransCanada's challenges to local property tax assessments, requiring the municipalities to devote scarce funds and other resources to defend their assessments. The studies do not address the costs borne by local communities and landowners as TransCanada seeks and obtains profits in using our public resource, the Connecticut River.

5. Decisions on which competing resources should be protected (e.g., banks from erosion vs exposure of Sea Lamprey nests, etc.) be based on public policy, and the final decision on a proposed operation model be shaped by all stakeholders. Once TC's preferred hydrologic operations model is identified, the specific and cumulative impacts from impoundment fluctuations and generation-related flow releases need to be determined, and clearly conveyed to all stakeholders (e.g., Study 16, Sea Lamprey Spawning Assessment, Studies No. 14 & 15, Resident Fish Spawning in Impoundments and Riverine Sections).

6. As compensatory mitigation for unavoidable impacts, that TransCanada establish, by December 2016, a mitigation and enhancement fund for the lower Connecticut River as part of the draft license agreement. This fund could be similar to the one established under the 1997 settlement agreement for Connecticut River dams at Fifteen Mile Falls; however, it should be funded at a significantly higher level than the Fifteen Mile Falls fund. As unequivocal scientifically defensible impact studies have yet to be completed, and are not likely to be forthcoming in the near future, we support the creation of this fund as a measure to compensate for unavoidable (and at this point mostly undetermined) impacts to public and private resources.

In summary, the Connecticut River Joint Commissions appreciates the level of effort put forth by the applicant, TransCanada, in collaborating with stakeholders on the Study Plans. In this communication, we are setting forth some crucial omissions which need to be addressed before the current study phase can provide a basis for decisions by responsible public entities, including the Federal Energy Regulatory Commission (FERC). We offer them on behalf of the Joint Commissions, entrusted by the States of New Hampshire and Vermont to oversee and make recommendations to governments and the public, for the health and well-being of the Connecticut River.

By working in cooperation with FERC and TransCanada, we seek to ensure that the best possible license conditions are crafted, local public interests are considered, and our shared public trust resource, the Connecticut River, is protected.

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,

Richard Walling
Chair, New Hampshire Connecticut River Valley Resource Commission

Jason Rasmussen
Chair, Vermont Connecticut River Watershed Advisory Commission

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