## Ekolott Farm/Riverside Emus 179 Scott Road Newbury, VT 05051 802-866-5650

## Kimberly D. Bose, Secretary

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

**Re:** Great River Hydro (GRH)

Wilder, Project No. 1892-026, Bellows Falls, Project No. 1855-045 Vernon, Project No. 1904-073

Comments on November 15, 2017-Supplemental Erosion Report for Studies 2 and 3 (Riverbank Transect and Riverbank Erosion)

April 20, 2018

Dear Secretary Bose,

As a landowner farming 300 acres along the Connecticut River and as a member of the Connecticut River Watershed Farmers Alliance, I submit the following testimony to FERC as it considers re-licensing for Great River Hydro (GRH) Projects 1892-026, 1855-045, and 1904-073.

We have 6,330 feet of Connecticut River frontage on this farm which we have owned since 1980. During that time, we have observed an erratic and unpredictable pattern of flooding after TransCanada assumed ownership of the dams. The extent and the duration of these flooding episodes exceed normal levels. That causes us grave concerns for the resulting riverbank erosion and its impact on water quality.

In 1984, the Soil Conservation Service installed erosion control measures along a section of our riverbank, along with sections owned by abutting landowners. This stabilization worked for a few years, but with the increased fluctuation of the Wilder pond level, the erosion controls are now completely washed away. We have sustained significant land loss along this bank which now remains even more vulnerable to further destabilization and erosion. Tons of sediment that should still be in the field have now damaged water quality of the river. (Attached are two photographs of that section of our riverbank, one in 1984 during the stabilization project, and one in 2016.)

The serious nature of the dams' impact on riverbanks was not unpredicted and has been frequently recognized.

In 1949, as the dam in Wilder was under construction, the Boston & Main Railroad anticipated the danger. Quoting from Cliff Somerville's article "Dam Project Involves Railroad" on page 3 in the Boston and Main Railroad Magazine (July 1949):

"Approximately 184,000 tons of heavy rip rap is being placed along our Connecticut River line in 40 different locations between Wilder and Newbury, Vt., where the river closely borders our tracks... Installation of the rip rap is solely for the purpose of protecting the tracks against erosion by water."

This rip rap installation (4,600 boxcar loads) was accompanied by raising the track level by two feet in some sections and by building seven new concrete box culverts.

Looking at *Water Resources Investigation, Connecticut River Streambank Erosion Study, Plan of Survey* (NE Division Corps of Engineers, Waltham, MA, October 1975), on page 2-12 of Attachment 2, a citizens group "For Land's Sake" made the following observation and recommendations in 1975:

"Limit the rate of drawdown permissible in a 24 hour period. In hearings held in 1945 prior to dam construction, New England Power Company stated that drawdowns would be less than 1 foot per day for 75% of the year. There are Indications that this figure is exceeded."

The importance of being conservative with drawdowns was underscored in a U.S. Army Corps of Engineers study in 1979 (USACE CT River Erosion Study 1979, contract # DACW 33-78-C-0297). On page 159 of that study, the USACE concluded that the operation of hydro-pools increases riverbank erosion in those pools, and they made the following recommendation:

"Complete elimination of hydro-pool fluctuations would increase bank stability In pools on the order of 15-18%."

This supports our belief that flowage rights were sold in 1948 with the understanding that drawdowns would be conservative to minimize impact on the riverbanks. For the first 15 years of operation, the dams generated power according to the natural flow of the river. But, since the late 1960's, the dams' operational flow has focused on peak demand generation with more aggressive drawdowns, and around 1970, farmers began to see serious streambank erosion issues.

We urge FERC to recognize its public trust responsibilities and to take this opportunity to stop the unnecessary destruction of an important natural resource – the Connecticut River – both the quality of its water and its adjacent prime agricultural land. This can be done by re-licensing the dams for "run of the river" only.

Thank you for your consideration,

Larry W. Scott, Owner/Operator Ekolott Farm and Riverside Emus

## **Photo Attachment**



1984 Soil Conservation Service riverbank stabilization project, Ekolott Farm, Newbury, VT



A view of the same section of riverbank, but in order to get the same angle of view in the later photo, one would be standing in the river.

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