



**US Northeast Hydro Region**

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September 24, 2013

**VIA ELECTRONIC FILING**

Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, DC 20426

**Re: TransCanada Hydro Northeast Inc.'s FERC Study Plan  
Determination; Request for Clarification  
Project Nos. 1892-026, 1855-045 and 1904-073**

Dear Secretary Bose:

TransCanada Hydro Northeast Inc. ("TransCanada") is the owner and licensee of the Wilder Hydroelectric Project (FERC No. 1892) (the "Wilder Project"), the Bellows Falls Hydroelectric Project (FERC No. 1855) (the "Bellows Falls Project"), and the Vernon Hydroelectric Project (FERC No. 1904) (the "Vernon Project"). The Wilder Project, the Bellows Falls Project and the Vernon Project are collectively referred to herein as the "TransCanada Projects." The current licenses for these projects each expire on April 30, 2018.

On October 31, 2012, TransCanada filed with the Commission its Notice of Intent ("NOI") to seek new licenses for each project, along with a separate Pre-Application Document ("PAD") for each project.

With this filing, TransCanada submits a request for clarification on several recommendations or aspects found in the September 13, 2013 Letter Order on Study Determination for 13 of 33 proposed studies. Refer to the following requests for clarification listed by Study Plan number.

**2 -- Riverbank Transect Study**

1. **Monitoring Frequency:** TransCanada did not specifically define the flow value that would trigger a high-flow event survey (section 5.9 (b)(6)). Therefore, for the purposes of this study, we recommend that TransCanada define a “high-flow event” as follows: a flow greater than 35,000 cfs at Wilder, 44,000 cfs at Bellows Falls, and 49,000 cfs at Vernon.  
*TransCanada wishes to discuss this recommendation with FERC Staff in so far as these flows typically occur in relation to Spring runoff after which monitoring has been proposed. We may not be able nor is it necessarily prudent to evaluate conditions until after runoff subsides. Our concern is this may not occur until after 15 days. Therefore this should apply outside offspring runoff situation. Secondly, what if similarly high flows [above these triggers] occur more than once in the study year? Are we required to examine shorelines after similar repetitive level events?*
  
2. **Transect Site Selection below Vernon:** we recommend that TransCanada modify the study plan to include one of the transect locations at the large erosion monitoring site that is currently the subject of biennial monitoring below Vernon dam. TransCanada should also use the results of past monitoring to analyze erosion at this site.  
*TransCanada had intended to include this location in its monitoring program. We seek clarification that site would be 1 out of 20 sites. The site is also largely affected, both historically and continually by FL project in terms of normal operation of its two downstream hydroelectric projects. TransCanada would need to understand whether or not FERC has required this location to also be studied by FL and how we will be able to acquire FL operational data to perform the study.*
  
3. **Monitoring Survey Methods:** Regarding NHDES’ request for more information on survey methods to capture bank areas with notching and undercutting, *we note* that a standard survey practice is to perform offsets from a point that can be collected, or to collect a survey shot directly on the ground with the survey prism. Both of these techniques *would be appropriate* for notched or undercut areas.  
*TransCanada seeks clarification as to whether or not we should consider this comment to be formal recommendation that would require using offsets to survey bank areas with notching and undercutting.*

#### **4 -- Hydraulic Modeling Study**

**Velocity Measurements, Calibration, and Verification:** we recommend TransCanada consult with NHDES and FWS to determine the appropriate number and locations of the velocity transects and the appropriate range of calibration flows. TransCanada should file, within 90-days of the date of this letter, and for Commission approval, the proposed transect locations and calibration flows along with any comments on the proposal by NHDES and FWS. If TransCanada does not adopt a recommendation, that filing should include TransCanada’s reasons based on project-specific information.

*TransCanada understand the concerns NHDES and FWS have stated as follows:*

- a. *TransCanada failed to specify the number and location of transects at which TransCanada would actually measure velocity for comparison to predicted velocities.*

*b. FWS requests TransCanada explicitly define the range of proposed calibration flows so FWS can assess the applicability of the HEC-RAS model. Although we can certainly meet and report back to FERC within the requested 90-days, it does not seem practical at that time to identify a final set (number and location) of transects to measure and compute average velocities to compare with the model. Many of those sites would potentially be erosion monitoring sites, which have yet to be finalized. We also contend that, once the model has developed preliminary runs, it may make more sense to review the data to determine where verification locations are most critical. We can discuss a proposed range of calibration flows, however, model calibration will be based upon actual measure flows (from gages and operations data) and actual elevation data from real time elevation data loggers over a range of flows yet to be experienced and recorded.*

## **5 -- Operations Modeling Study**

**Inflow Dataset:** the study plan does not include an analysis that shows why TransCanada's 5-year representative hydrologic subset is appropriate for use in the model and how it is representative of the 30-year hydrologic record (section 5.9(b)(6)). The plan also lacks any analysis to show that annual differences or multi-year wet or dry conditions do not affect the operation of its three projects. Therefore, we recommend that TransCanada revise the study plan to include an analysis of the appropriateness of TransCanada's 5-year representative hydrologic subset (section 5.9(b)(6)). Along with showing how the selected years are representative of the longer hydrologic record, the analysis should document why carry-over storage does not need to be considered in the model.

*TransCanada understands the concern and will endeavor to address it. We request a minimum of 90 days to file a revised Study Plan 5 with the analyses requested.*

We would appreciate an opportunity to discuss these issues with the FERC relicensing staff at their earliest convenience. If there are any questions regarding the information provided in this filing or the process, please contact me at 603-498-2851 or by emailing [john\\_ragonese@transcanada.com](mailto:john_ragonese@transcanada.com).

Sincerely,



John L. Ragonese  
FERC License Manager