

FEDERAL ENERGY REGULATORY COMMISSION

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OFFICE OF ENERGY PROJECTS

Project No. 1892-026 – New Hampshire / Vermont  
Project No. 1855-045 – New Hampshire / Vermont  
Project No. 1904-073 – New Hampshire / Vermont  
TransCanada Hydro Northeast Inc.

John L. Ragonese  
Relicensing Project Manager  
TransCanada Hydro Northeast Inc.  
4 Park Street, Suite 402  
Concord, NH 03301

**Subject: Determination on Requests for Study Modifications and New Studies –  
Wilder, Bellows Falls, and Vernon Hydroelectric Projects**

Dear Mr. Ragonese:

Pursuant to 18 C.F.R. § 5.15 of the Commission's regulations, this letter contains the determination on requests for modifications to the approved study plan for TransCanada Hydro Northeast Inc.'s (TransCanada) Wilder Hydroelectric Project (Wilder Project), Bellows Falls Hydroelectric Project (Bellows Falls Project), and Vernon Hydroelectric Project (Vernon Project). The determination is based on the study criteria set forth in sections 5.9(b), 5.15(d) and (e) of the Commission's regulations, applicable law, Commission policy and practice, and staff's review of the record of information.

Background

The study plan determination on non-aquatic studies proposed by TransCanada in support of its relicensing of the Wilder, Bellows Falls, and Vernon Projects was issued on September 13, 2013. On February 21, 2014, a subsequent study plan determination was issued to address proposed aquatic studies. The study plan determinations required TransCanada to conduct 13 non-aquatic resource studies and 21 aquatic resource studies. TransCanada filed an Initial Study Report (ISR) on the 34 required studies on September 15, 2014. As required in section 5.15(c) of the Commission's regulations, the ISR describes TransCanada's progress in implementing the approved study plan, and an explanation of variances from the study plan and schedule. TransCanada did not file any

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final study reports. TransCanada held its ISR Meeting on September 29, 2014.<sup>1</sup>

### Vernon Hydroacoustic Study

The February 21, 2014, study plan determination required TransCanada to conduct its 20 proposed aquatic resource studies and an additional *Vernon Hydroacoustic Study*. In its study plan determination, Commission staff required TransCanada to develop a study plan for the *Vernon Hydroacoustic Study* in consultation with the resource agencies and file the study plan with its ISR. On March 24, 2014, TransCanada filed a request for rehearing of the February 21, 2014, study plan determination that argues that the *Vernon Hydroacoustic Study* is unnecessary. Because TransCanada's request for rehearing is pending before the Commission, this letter does not address TransCanada's study plan for the *Vernon Hydroacoustic Study*.

### Comments

Comments on the ISR and meeting summaries, including requests for study modifications, were filed by the U.S. Fish and Wildlife Service (Interior) and the Nature Conservancy. TransCanada filed reply comments on December 15, 2014.

A number of the comments received do not specifically request modifications to the approved studies, and are therefore not addressed herein. For example, some of the comments request raw data, address ongoing and future consultation, request status updates, and/or provide additional information. This determination only addresses comments and requests that would require study modifications or additional studies.

### Study Plan Determination

Pursuant to section 5.15(d) of the Commission's regulations, any proposal to modify a required study must be accompanied by a showing of good cause, and must include a demonstration that: (1) the approved study was not conducted as provided for in the approved study plan, or (2) the study was conducted under anomalous environmental conditions or that environmental conditions have changed in a material way. As specified in section 5.15(e), requests for new information gathering or studies must include a statement explaining: (1) any material change in law or regulations applicable to the information request, (2) why the goals and objectives of the approved study could not be met with the approved study methodology, (3) why the request was not made earlier, (4) significant changes in the project proposal or that significant new

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<sup>1</sup> TransCanada filed a meeting summary for the September 29, 2014, meeting on October 14, 2014.

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information material to the study objectives has become available, and (5) why the new study request satisfies the study criteria in section 5.9(b).

As indicated in Appendix A, the requested modification to study 24, *Dwarf Wedgemussel and Co-occurring Mussel Study*, is not required at this time. The basis for not modifying the study plan is explained in Appendix B. Commission staff considered all study plan criteria in section 5.9 of the Commission's regulations.

Please note that nothing in this determination is intended, in any way, to limit any agency's proper exercise of its independent statutory authority to require additional studies.

If you have any questions, please contact Brandon Cherry at (202) 502-8328, or via e-mail at [brandon.cherry@ferc.gov](mailto:brandon.cherry@ferc.gov).

Sincerely,

Jeff C. Wright  
Director  
Office of Energy Projects

Enclosures: Appendix A – Summary of Determinations on Requested Modifications to Approved Studies  
Appendix B – Staff's Recommendations on Requested Modifications to Approved Studies

cc: Mailing List, Public Files

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Appendix A

## APPENDIX A

### SUMMARY OF DETERMINATIONS ON REQUESTED MODIFICATIONS TO APPROVED STUDIES

**Requested Modifications to Approved Studies** (see Appendix B for discussion)

<b>Study</b>	<b>Recommending Entity</b>	<b>Adopted</b>	<b>Adopted in part</b>	<b>Not Adopted</b>
24 – Dwarf Wedgemussel and Co-occurring Mussel Study	Interior, Nature Conservancy			X

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## APPENDIX B

### STAFF'S RECOMMENDATIONS ON REQUESTED STUDY MODIFICATIONS TO APPROVED STUDIES

#### Study 24 - Dwarf Wedgemussel and Co-occurring Mussel Study

##### Background

The goals of this study are to: (1) assess the distribution, population demographics, and habitat use of the federally listed dwarf wedgemussel in the Wilder and Bellows Falls Project areas; and (2) assess the influence of flow regimes on dwarf wedgemussel, co-occurring mussel species, and mussel habitat. The approved study plan requires TransCanada to conduct the study in two phases. Phase 1 requires TransCanada to conduct an initial survey to identify and describe mussel distribution in the project-affected area. Based on the results of phase 1, phase 2 requires TransCanada to collaborate with an aquatics working group<sup>2</sup> to determine where and how to conduct quantitative mussel habitat surveys. Data from the quantitative habitat surveys is to assist in the development of habitat suitability criteria (HSC) for the dwarf wedgemussel. HSC, used in conjunction with hydraulic modeling required by the approved study plan, is to be used to identify suitable habitat for dwarf wedgemussel at different flows.

TransCanada completed phase 1 field surveys in 2013 and distributed the phase 1 report to the aquatics working group. On May 23, 2014, TransCanada distributed a proposed phase 2 study plan to the aquatics working group. After consultation with the aquatics working group, TransCanada completed a revised phase 2 study plan. This plan included the collection of some additional field data and provided greater detail on phase 2 methods and analyses. In August 2014, TransCanada initiated phase 2 field work based upon its revised phase 2 study plan. On September 4, 2014, the U.S. Fish and Wildlife Service (Interior) sent TransCanada a "counter proposal" to the May 23, 2014, proposed phase 2 study plan. This proposal differed from TransCanada's study plan substantially, included additional habitat parameters, and recommended surveys within and outside of the project-affected area to provide data for population trend analyses as well as HSC development. In its Initial Study Report (ISR), TransCanada indicated that Interior's September 4, 2014, proposal is inconsistent with the goals and objectives of the approved study plan; however, TransCanada indicated that there are elements of Interior's proposal

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<sup>2</sup> The aquatics working group consists of multiple stakeholders, including the U.S. Fish and Wildlife Service, the New Hampshire Fish and Game Department, the Vermont Fish and Wildlife Department, the Vermont Department of Environmental Conservation, the New Hampshire Department of Environmental Services, the Nature Conservancy, the Connecticut River Watershed Council, the Connecticut River Joint Commissioners, American Whitewater, New England FLOW, and others.

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that it can accommodate. At the ISR Meeting on September 29, 2014, TransCanada indicated that the completed phase 2 surveys yielded very few observations of dwarf wedgemussel.

On October 9, 2014, TransCanada held a meeting with stakeholders to discuss Interior's September 4, 2014, proposal.

#### Requested Study Modifications

On November 14, 2014, Interior filed a "revised counter proposal" for the phase 2 study plan with its comments on the ISR. In this proposal, Interior expresses concern regarding TransCanada's methods and resulting data, especially the lack of quantitative habitat data for dwarf wedgemussel, and suggests that habitat suitability criteria could not be developed with the existing information. Interior's November 14, 2014, proposal recommends alternative methods such as attempting to collect data across a range of dwarf wedgemussel densities, placing transects perpendicular to the riverbank, increasing the number of transects, and recording additional habitat parameters. The Nature Conservancy expresses similar concerns with TransCanada's phase 2 study methods and supports Interior's November 14, 2014, proposal.

#### Comments on Requested Study Modifications

TransCanada states that it is reviewing Interior's November 14, 2014, proposal and will schedule additional consultation once its review is complete.

#### Discussion and Staff Recommendation

It appears that the primary goal of the Interior November 14, 2014, proposal is to collect additional habitat data from within the project-affected area to inform the development of habitat suitability criteria for dwarf wedgemussel. Due to the low numbers of dwarf wedgemussel observed during TransCanada's phase 2 surveys, little habitat information specific to dwarf wedgemussel was collected. Therefore, according to TransCanada's phase 2 study plan, HSC development for dwarf wedgemussel would largely depend on other sources of information, including previous reports from the Connecticut River, journal publications, unpublished data, and expert opinion. In addition to developing HSC for dwarf wedgemussel, TransCanada would also develop suitability criteria for mussel species that co-occur with dwarf wedgemussel and evaluate project effects on these species as part of this study. TransCanada intends to use co-occurring mussels as surrogates for dwarf wedgemussel to supplement its analysis of project effects on mussels and mussel habitat.

There are multiple accepted practices for developing HSCs based on quantitative field data, existing data, expert opinion, or some combination of these approaches. Any

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of these approaches may be adequate to meet the goals and objectives of this study (section 5.9(b)(6)).

Interior and the Nature Conservancy did not specifically request that Commission staff modify TransCanada's phase 2 study plan to include the November 14, 2014, proposal. Additionally, TransCanada has not indicated that its collaboration with the aquatics working group to develop the phase 2 study methodologies is complete. Because collaboration on phase 2 is ongoing and there are multiple accepted practices for developing HSC that could achieve the goals of this study, we are not making a recommendation on specific methodologies at this time. If agreement cannot be reached on the phase 2 study methods, we recommend that TransCanada seek a determination from the Commission and file the comments received, a response to comments, and any updates to the phase 2 study plan at least 30 days prior to commencing any additional field work.

Document Content(s)

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