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

**Subject: Wilder Hydroelectric Project, FERC Project No. 1892
Bellows Falls Hydroelectric Project, FERC Project No. 1855
Vernon Hydroelectric Project, FERC Project No. 1904
Comments on May 2016 Updated Study Report**

Dear Secretary Bose:

Pursuant to the Federal Energy Regulatory Commission's (Commission or FERC) regulations 18 C.F.R. § 5.15(c), The Nature Conservancy (TNC) is providing comment on TransCanada Hydro Northeast Inc.'s (TransCanada) Updated Study Report (USR) for the relicensing of the Wilder (FERC No. 1982), Bellows Falls (FERC No. 1855), and Vernon (FERC No. 1904) Hydroelectric Projects, filed on May 16, 2016.

These comments focus exclusively on Study 24 Dwarf Wedgemussel and Co-occurring Mussel Study. We also strongly support the comments and recommendations made by the U.S. Fish and Wildlife New England Field Office, the Vermont Agency of Natural Resources, the New Hampshire Department of Fish and Game, and the New Hampshire Department of Environmental Services on Study 24 and the other studies provided in the USR.

Study 24 Dwarf Wedgemussel and Co-Occurring Mussel Study

On May 2, 2016, TNC submitted comments on the March 2016 Updated Study Report and also provided comments on some initial results of the Study 24 dwarf wedgemussel (DWM) Delphi panel process that were presented at the March 17-18 Study Report Meeting. Our comments on the Delphi panel were focused on 2 concerns: 1) the low number of experts consulted for the panel, 2) the lack of explicit criteria documenting how experts were chosen, and 3) the potential bias incurred by including the contractor who selected the expert panel as an expert panelist. As a result of these concerns, we requested that TransCanada provide: 1) justified criteria for expert selection; 2) justification for the low number of Delphi panelists, and 3) documentation from the literature that supports the overlapping role of the contractor in the Delphi process.

On May 31, 2016, TransCanada issued a letter to respond to comments on the March 2016 USR, including the comments that TNC and others provided on the preliminary results of the Study 24 Delphi panel presented at the March Study Report Meeting.

In response to the concerns regarding the limited number of experts and the lack of explicit criteria documenting how experts were chosen, TransCanada states: “The Delphi Panel Report (filed May 16, 2016) describes the panelist criteria which included research (field) experience and the collective works (peer-reviewed publications, books, and reports) of prospective candidates, particularly with dwarf wedgemussels.” However, after reviewing the May 16 USR, we did not find explicit criteria, only a list of qualifications of each expert. Explicit criteria could have potentially justified the limited set of experts, but we can identify several other experts that have “research (field) experience” or “collective works (peer-reviewed publications, books, and reports)” (May 31 letter, page 70). For example, in the Literature Cited section of the USR (pages 13-14), there are several other experts with documented field research and theses or published manuscripts on dwarf wedgemussel (e.g., Michaelson and Neves 1995; Paraziewicz and Rogers 2010; Maloney et al. 2012 (4 authors); Campbell 2014). A quick Google Scholar search identifies even more potential experts (Hanson and Locke 2000; McLain and Ross 2005; Briggs et al. 2013; Smith et al. 2015; Campbell and Prestegard 2016). TransCanada stated in the May 31 letter, “TransCanada felt it necessary to identify and produce a panel of experts with DWM field experience and that field is limited.” However, from the literature TransCanada cited and the Google Scholar search, this field is not as limited as suggested. TransCanada goes on to say: “The five experts that were approached for this project undeniably have the most research and field experience with dwarf wedgemussels,” but does not explain how this conclusion was reached.

Furthermore, the guidance document (Crance 1987) cited by TransCanada states the following regarding the preferred number of experts for a Delphi panel:

“The best number of panelists for a Delphi exercise has not been determined. The number is generally governed by the number of respondents needed to constitute a representative pooling of judgments and by the information-processing capabilities of the design and monitoring team (Delbecq et al. 1975). Hodgetts (1977) indicated that at least eight panelists are needed, but did not provide rationale for this minimum number. A panel consisting of about 10 experts is probably ideal, but more than 10 may be used if desired. The panel should represent a diversity of knowledge about habitat use by the species of interest, but priority should be given to selecting panelists who are knowledgeable about habitat suitability for the species. Overrepresentation by ‘stakeholders’ or individuals from a single agency, interest group, or geographical area should be avoided where possible” (Crance 1987, p. 2).

Although Crance (1987) states that the best number of panelists has not been determined, it is not apparent to us that TransCanada followed this guidance. That is, they have not provided justification that the group constitutes “a representative pooling of judgments,” and they fell far below the suggested number of 8-10 without providing justification.

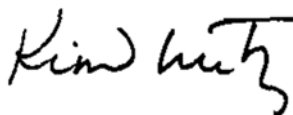
We therefore remain concerned that the limited number of experts on the panel not based on defined criteria and was therefore not justified, and has consequently potentially introduced significant bias to the Delphi panel process. A consequence Furthermore, because it deviates from the suggested guidance in Crance (1987), it should have been identified as a deviation from the study plan, and should therefore have been brought to the Aquatics Working Group for discussion and problem-solving.

In response to the concerns regarding the overlap in roles by the contractor, TransCanada indicated that it was not an issue that the contractor served both as an expert panelist, and developed the list of potential panelists. However, based on the limited justification for the expert panel selection, we remain concerned that there could have been bias incurred in this process. For example, there were only 2 experts who made the final decisions on the HSC for three of the habitat variables, and one of these experts was a TransCanada contractor. Furthermore, TransCanada made the decision on when there was an “acceptable” level of agreement, meaning that not all of the panelists needed to agree. Given the small number of panelists, the lack of agreement is concerning, and together with the weight of influence of TransCanada and its associated contractors, the potential for bias is extremely high.

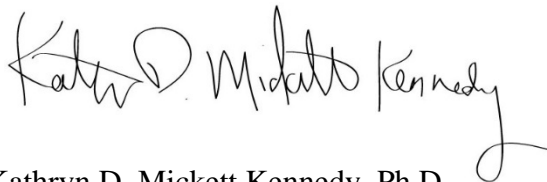
In conclusion, based on the above concerns, we find that the Delphi process was conducted in an inadequate manner, and suggest that FERC require TransCanada to conduct the Delphi process with at least 8-10 panelists. This may be done simply by conducting additional rounds with additional experts.

Thank you for this opportunity to provide comment on TransCanada’s Updated Study Report and Study Report Meeting content. If you have any questions regarding the preceding comments, please contact Katie Kennedy at the Nature Conservancy’s Connecticut River Program office (413-586-2349 or kkennedy@tnc.org).

Sincerely,



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