



January 28, 2021

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

Re: Wilder Dam Project No. 1892  
Bellows Falls Project No. 1855  
Vernon Dam Project No. 1904

**Objection to Deficient Amended Final License Application and Request for Additional Information**

Dear Secretary Bose,

The Connecticut River Watershed Council, Inc. (CRWC), now doing business as the Connecticut River Conservancy (CRC), is a nonprofit citizen group established in 1952 to advocate for the protection, restoration, and sustainable use of the Connecticut River and its four-state watershed. We have been participating in the relicensing of the five hydropower facilities on the Connecticut River since the beginning of the process in late 2012. We have reviewed the Amended Final License Application (hereafter AFLA) dated December 7, 2020. It is deficient and should be rejected. 18 C.F.R. § 5.20. Further information and public input is required. 18 C.F.R. § 5.21 and ILP generally.

CRC previously stated in our comments in both our March 1, 2017 filing (Comments by the Connecticut River Watershed Council on TransCanada's Preliminary License Proposal (PLP) dated December 1, 2016 – Accession #20170301-5153) (attached) and our March 10, 2017 (Connecticut River Watershed Council's Objection to: Revised Process Plan and Schedule - Accession #20170310-5125) (attached) our concern that the PLP was deficient in information and the Integrated Licensing Process (ILP) was being undermined.<sup>1</sup> Great River Hydro (at that time TransCanada) filed an admittedly deficient, incomplete and premature PLP that lacked core components including Protection, Mitigation, and Enhancement Measures (PM&Es), proposed operating conditions, and alternatives. Stakeholders commented on that inadequate PLP, with a lack of substantive information, which precluded any constructive, meaningful comment that the company could respond to and undermined the ILP.

Similarly, with this AFLA, the public is not being provided a comprehensive license application to comment on. In 2017 FERC already allowed a Final Licensing Application to be filed without a reasonable, meaningful 18 C.F.R. § 5.16 process. The ALFA should be rejected, and during the coming months, FERC should ensure that comprehensive details are provided in the license application and the public is provided a formal comment period that the company can respond to before deeming the AFLA complete and ready for review to enable the public's right to meaningful comment on a complete application and PME measures in full accordance with the ILP.

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<sup>1</sup> CRC reasserts these comments and incorporates these comments by reference as part of these comments. They are attached.

Importantly, many of the AFLA's deficiencies, see 18 C.F.R. § 5.18, result from the PLP's deficiencies. As explained in our March 1, 2017 comments, specific measures should have long-ago been provided. The result is that CRC's (and the public's) ability to comment and have meaningful input into the ILP has been undermined. To be clear, the ILP violations identified in CRC's March 1, 2017 comments persist and are now compounded.

### **1. GREAT RIVER'S DEFICIENT AFLA COMPOUNDS THE PLP'S IMPORTANT DEFECTS**

While CRC is pleased with Great River Hydro's willingness to collaborate transparently and effectively on the significant change to operations presented in the AFLA, the public deserves more comprehensive information and commitments regarding enhancements for recreational and cultural considerations in the license, safe and effective fish passage, as well as monitoring to ensure that operational changes will indeed reduce erosion issues in the upper end of the impoundments. The license application provides little detailed information on protection, mitigation and enhancement measures for cultural resources, fish passage, and recreation besides how these might be enhanced by the operational change.

At several points in its AFLA, Great River Hydro indicates that details will be worked out at a future date, undermining the public's right to be informed and opportunity to respond to issues of specific or local concern. These details were to be worked out in response to the PLP. These failures also violate 18 C.F.R. § 5.18 and undermine the ILP process.

For instance, GRH indicates that they will, "develop and sign a Programmatic Agreement for Managing Historic Resources with State Historic Preservation Officers in consultation with Abenaki tribal Leaders,"<sup>2</sup> and that, "Specific measures for the completion of the outstanding consultation and survey and site evaluation and mitigation tasks will be outlined in the HPMPs."<sup>3</sup> These efforts should have been completed and filed as part of PLP, 18 C.F.R. § 5.16. The ILP demands that such measures reflecting public input be detailed by the time that this amended Application was filed. 18 C.F.R. § 5.18.

CRC appreciates GRH's indication that they will increase operation of the three fish ladders from April 1 to May 15 to accommodate White Sucker and Walleye spawning migration, but GRH goes on to state that they, "have initiated discussion of upstream and downstream fish passage" and "will continue those discussions after filing amended FLAs,"<sup>4</sup> which indicates that there is no *comprehensive* protection, mitigation, or enhancement provisions regarding migratory fish passage included in the AFLA for the public or stakeholders to comment on. 18 C.F.R. § 4.51 (f)(3)(v) specifically calls out the requirement for details that include functional design drawings, a description of operation and maintenance, an implementation or construction schedule, and estimate of the costs of construction, operation, and maintenance of proposed fish passage facilities. Again, this compounds the deficiencies in the PLP and undermines the ILP process. 18 C.F.R. § 5.18.

In section 3.3, GRH describes the process by which environmental effects were considered under the

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<sup>2</sup> Amended Final License Application. Exhibit E. Great River Hydro, LLC. Wilder Hydroelectric Project (FERC Project No. 1892-026). Bellows Falls Hydroelectric Project (FERC Project No. 1855-045). Vernon Hydroelectric Project (FERC Project No. 1904-073). December 7, 2020. Page 2-32.

<sup>3</sup> Ibid. Page 3-725.

<sup>4</sup> Ibid. Pages 2-32 and 2-33.

proposed operational scenario. While FERC indicated the following resources be considered for cumulative impact, “water quality and quantity (including power generation), fishery resources (including anadromous and catadromous fish and fish passage), floodplain communities, freshwater mussels, sediment movement, recreational uses, and rare, threatened, and endangered species (FERC, 2013),”<sup>5</sup> it is CRC’s perspective that during discussions, stakeholders and GRH analyzed this operational change from the perspective of aquatic resources only and there was little consideration of cumulative impacts to water quality, recreation, fish passage, floodplain communities or sediment movement. While CRC agrees that this operational change will be positive for the river, GRH should consider these additional resources and provide information as to specifics of how the proposed operational change will affect these resources.

At multiple spots in the application, GRH indicates that they are not proposing an operational change, and they have not considered the impacts (possibly positive...) under this new scenario. This oversight indicates a material lack of comprehensive analysis of cumulative impacts under this new scenario. A specific example is found in section 3.5.3.2 Water Quality, where GRH states, “Moreover, the existing thermal regime is not expected to change from existing conditions because Great River Hydro is not proposing any change in Project operations”<sup>6</sup> and “because Great River Hydro is not proposing any change in Project operations, existing DO levels throughout the entire Project area are not expected to change.”<sup>7</sup> GRH has failed to adequately consider changes to water quality and other resource concerns not specific to aquatic habitat under the new operating scenario.

## **2. PM&ES PROPOSED FOR RECREATION ARE DEFICIENT**

The ILP regulations at 18 CFR §5.18(b)(5)(ii)(C) require that if an applicant does not adopt a preliminary environmental measure proposed by a resource agency, Indian tribe, or member of the public, it must include its reasons, based on project-specific information. On July 30, 2019, CRC filed with FERC a detailed set of recreation recommendations put together by CRC and the Appalachian Mountain Club (AMC). The AFLA does not contain any reasons for not adopting many of these proposed PM&E’s. Additionally, 18 CFR 5.18(b)(5)(ii)(E) states that, “the applicant should estimate the cost of each proposed resource protection, mitigation, or enhancement measure and any specific measure filed with the Commission by agencies, Indian tribes, or members of the public when the application is filed.”<sup>8</sup> The AFLA does not provide a cost estimate of any of the recommendations filed by CRC and AMC after the Final Application was filed in May of 2017.

In section 4.1.2 Costs and Value of PME Measures, GRH lists PM&E costs for their proposed support of three primitive campsites. CRC does not feel that recreation O&M is a “protection, mitigation and enhancement” measure. It is simply an internal cost of doing business and should not be included in this section. FERC issued a deficiency letter on January 14, 2021 requesting, “the capital and annual costs for each proposed measure in 2020 dollars in the years in which they would be incurred.”<sup>9</sup> In addition to this information, CRC would also like to know exactly what this money would be spent on. There is no

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<sup>5</sup> Ibid. Page 3-13.

<sup>6</sup> Ibid. Page 3-262.

<sup>7</sup> Ibid. Page 3-263.

<sup>8</sup> 18 CFR 5.18(b)(5)(ii)(E). Accessed at <https://www.law.cornell.edu/cfr/text/18/5.18>.

<sup>9</sup> FERC Deficiency of License Application and Additional Information Request Issuance. Schedule B – Request for Additional Information. January 14, 2021.

detailed information provided under 4.1.2 to outline what the investments in recreation would consist of or how additional recreational enhancements will be considered over the course of the license. Additionally, GRH did not indicate how they arrived at this cost as their proposed investment in recreation over the course of the license. CRC requests that GRH provide detailed information to explain what percentage of their overall revenue will be spent on recreation over the coming license term for the next 30 to 50 years.

GRH states that it will “will continue to manage its existing Recreation facilities and enhance them as needed to address demands and use.”<sup>10</sup> Yet, they have not included the consideration of developing a Recreation Plan as part of their license. FERC’s own guidance suggests that, “the best way to fully evaluate a project’s recreation resources is to develop a comprehensive plan.”<sup>11</sup> With the absence of the requirement for a Form 80, and the absence of a proposed recreation plan, GRH should articulate how they would anticipate and respond to ongoing recreational needs in the project areas over the next 30 to 50 years and how they will plan to provide additional amenities.

The conclusions to GRH Recreation Study (Study 30) state, that:

“however, these users continued to make recommendations such as a need for **more boat ramps and launches** river access for shoreline fishing, parks (picnic tables and benches), and walking trails... **more bank angling opportunities** within existing sites, adding walking and hiking trails along the riverbank wherever possible, and adding more motorboat launch facilities. **New motor boat launch facilities were specifically recommended below Wilder dam and Bellows Falls dam** due to the combination of limited number of access sites in these reaches and the demand for fishing. **Additional primitive camping locations for users along the Connecticut River Paddlers’ Trail downstream of Wilder dam were also recommended.**”<sup>12</sup> [emphases added].

There is clear indication from the studies that the public is asking for **more** recreational amenities, yet GRH has not proposed developing any additional recreational amenities in its AFLA. GRH should clarify why they are not providing specific needed PM&E measures in this AFLA that were identified in their own study.

The Connecticut River Paddlers trail has a goal of establishing campsites approximately every 3 or 5 miles. Under section 2.1 of the AFLA, GRH provides the acreage available for outdoor use as well as additional acreage of fee ownership lands. This clearly shows that the company owns significant land. For instance, in the Vernon project area, they indicate ownership of 287 acres of land, 34 of which are for recreational use, and 223 acres of which are forested.<sup>13</sup> Stakeholders have clearly stated a desire for additional recreational infrastructure and GRH should be presenting a plan for how additional

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<sup>10</sup> Amended Final License Application. Exhibit D. Great River Hydro, LLC. Wilder Hydroelectric Project (FERC Project No. 1892-026). December 7, 2020. Page D-2.

<sup>11</sup> Recreation Development at Licensed Hydropower Projects: Division of Project Compliance and Administration, Office of Hydropower Licensing, Federal Energy Regulatory Commission, Washington DC. March 1996. Page 12.

<sup>12</sup> TransCanada Hydro Northeast Inc. ILP Study 30 Recreation Facility Inventory. Use and Needs Assessment Study Report. Prepared by Louis Berger and Normandeau Associates, Inc. March 1, 2016. Page 240.

<sup>13</sup> Amended Final License Application. Exhibit E. Great River Hydro, LLC. Wilder Hydroelectric Project (FERC Project No. 1892-026). Bellows Falls Hydroelectric Project (FERC Project No. 1855-045). Vernon Hydroelectric Project (FERC Project No. 1904-073). December 7, 2020. Page 2-19.

recreational assets throughout their landholdings and within the project area can be developed.

Because of the extent of the project area, GRH has many options to provide for mitigation of the hydro-facilities' impacts to recreation. But, CRC asserts that mitigation of project impacts is not limited by the project boundary. The project boundary is set in order to identify where the impacts of the operation are. If needed, the project boundary can be adjusted to accommodate mitigation requirements.<sup>14</sup>

GRH is not proposing any PM&Es for the portage trails. All three portage trails need improvements to make them usable. While GRH's Recreation Study focused on infrastructure issues at the portage trail put-in and take-out locations, it did not ask specific questions to ascertain users perception of portage trails usefulness when considering a through paddle. CRC and AMC surveyed river users<sup>15</sup> and heard responses that indicated that the portages are so bad that most people would not bother attempting a through paddle. Simply put, GRH is refusing to mitigate the very clear impacts of the dams. Most notably, the Bellows Falls portage is 1.5 miles long along a state highway. GRH needs to propose some comprehensive improvements to the portages to allow for through paddles. The alternatives they examine in Exhibit E are inadequate and they have not provided any PM&Es to mitigate for this. Under their previous license, FirstLight in MA provided a shuttle service to pick up through paddlers in order to mitigate for the obstacle to navigation. GRH should consider an alternative such as this in their AFLA.

GRH indicates in Table 3.9-8. Bellows Falls Project recreation sites and facilities<sup>16</sup> that the portage put-in is located below Bellows Falls dam on land owned by the Town of Walpole, NH, outside the Project boundary. GRH should apply to change the project boundary to include this recreation access site. Our understanding from Division of Hydropower Administration & Compliance Handbook states that:

“Occasionally, lands outside a project boundary must be used to serve a particular project need or to satisfy a particular license requirement. In most of these cases, the licensee must apply for a change to the project boundary to add those lands to the project and bring the lands into the project boundary.”<sup>17</sup>

Additionally, GRH proposes no enhancements to increase accessibility to persons with disabilities. CRC and AMC recommended that GRH establish ADA compliant access for people with disabilities at as many licensee recreation locations as possible. GRH has not addressed this need in their AFLA.

Given the proposed changes to operation, GRH should provide some detailed analysis in the AFLA to illustrate when and how peaking flows from McIndoes will impact flows for whitewater boaters below Wilder dam.

Had they proposed any real PM&Es in the PLP there would have been public input and reasonable

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<sup>14</sup> See City of Seattle, Washington, 26 FERC ¶ 61406, 61906 (1984) where FERC required off project site recreation facilities.

<sup>15</sup> Those survey results were submitted to the FERC docket on May 5, 2016. Accession #20160505-5135.

<sup>16</sup> Amended Final License Application. Exhibit E. Great River Hydro, LLC. Wilder Hydroelectric Project (FERC Project No. 1892-026). Bellows Falls Hydroelectric Project (FERC Project No. 1855-045). Vernon Hydroelectric Project (FERC Project No. 1904-073). December 7, 2020. Page 3-544.

<sup>17</sup> FERC. Division of Hydropower Administration & Compliance. Compliance Handbook. Office of Energy Projects. 2015. Page 19.

recommendations and PM&Es for recreation in this AFLA. As evidenced by the lack of PM&Es proposed in this AFLA, GRH is still refusing to provide adequate mitigation measures that should have been included in 2017 when they submitted their PLP. This violates, compounds prior violations of, and undermines the ILP. In this regard, the application is deficient because GRH is in fact providing the status quo of what they currently provide for recreation. There are in fact no PM&E measures for recreation to be found in the AFLA.

### **3. INFORMATION PROVIDED FOR FISH PASSAGE IS DEFICIENT**

GRH indicates in their application that they will operate the Wilder fish ladder from approximately April 1 to July 15 to accommodate passage of Walleye, White Sucker and Sea Lamprey.<sup>18</sup> The ladder previously was required to operate only when an adult Atlantic Salmon passed Bellow Falls. Given that the ladder was designed for Atlantic Salmon and has not been used in the last two years, the current application is deficient in not accounting for potential needed changes to attraction flows or other modifications to the fish ladder to accommodate Walleye, White Sucker and Sea Lamprey.

American Eel have been observed using all three ladders to pass upstream, but this may not be the most efficient passage pathway. GRH indicates that they continue to work on more efficient American Eel passage at Vernon but does not indicate a similar intention or effort at the other facilities. Again, they indicate that these details will be worked out through discussions with agencies, but GRH does not address specific PM&E's that will be put into place to accommodate the upstream passage of American Eel in this AFLA.

Given the proposed operational change and higher expected base flows, GRH needs to analyze potential changes in attraction flow for the three fish ladders to be more appropriate for target species. There are no PM&E's included in the application addressing this consideration.

Given that GRH's studies showed turbine mortality in downstream migration, and the fact that GRH will be generating all of the time under the new operational scenario, GRH should provide an analysis of potential downstream turbine mortality rates under the new operational scenario and provide specific measure to improve turbine survival rates.

As stated above, PMEs should have been provided as part of Great River's PLP. These PMEs are still missing, public input avoided, and the ILP undermined and violated.

### **4. INFORMATION PROVIDED FOR CULTURAL AND HISTORIC CONSIDERATIONS IS DEFICIENT**

In table 4.1-8<sup>19</sup>, GRH indicates that they will be spending \$740,000 on cultural resource surveys and historic resource management plan measures. GRH should explain how they arrived at this estimate.

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<sup>18</sup> Amended Final License Application. Exhibit E. Great River Hydro, LLC. Wilder Hydroelectric Project (FERC Project No. 1892-026). Bellows Falls Hydroelectric Project (FERC Project No. 1855-045). Vernon Hydroelectric Project (FERC Project No. 1904-073). December 7, 2020. Page 3-393.

<sup>19</sup> Amended Final License Application. Exhibit E. Great River Hydro, LLC. Wilder Hydroelectric Project (FERC Project No. 1892-026). Bellows Falls Hydroelectric Project (FERC Project No. 1855-045). Vernon Hydroelectric Project (FERC Project No. 1904-073). December 7, 2020. Page 4-7.

Their AFLA<sup>20</sup> indicates that they will Develop new HPMPs for the Wilder and Bellows Falls Project and update the current HPMP for Vernon; including the following: “continue attempts to secure landowner permission to conduct Phase IB on remaining identified locations and if permission allows, conduct Phase II surveys as appropriate; expand and support educational and cultural programs, activities and outreach for Abenaki tribal groups and interests.”<sup>21</sup> GRH should explain their proposed timeline for these actions and how they will they engage the Abenaki community. The details of this work should have been worked out and details included in this AFLA.

GRH states in their Study 33 – Traditional and Cultural Properties (TCP),

“The following recommendations are provided for consideration:

- ...
- **Tribal consultation and participation is also important to determine if additional information through oral histories or other research should be gathered to supplement the research in this study.** Research through oral histories from Tribal members may provide more information on ancestral, traditional, and current use of the study area. The memory of these places may live on through oral histories, which we can only know as a result of ethnographic interviews or site visits conducted with Tribal members and traditional practitioners.
- If Tribal consultation provides information on ancestral, traditional, and current use of places within the APE that indicates cultural importance and there is a direct impact on such due to project operations then the following actions are recommended:
  - If places are within the APE but privately owned by others, the Licensee should attempt to foster communication between the Tribe and the landowner in order to develop a mutual understanding of the cultural significance of the place and examine opportunities to preserve its heritage.
  - If places are within the APE and on Project land held in fee by the Licensee, the Licensee should, through communication and cooperation by the Tribe, develop an understanding of the cultural significance of the place, examine opportunities to protect its heritage and to the extent possible, implement measure to do so.”<sup>22</sup>

GRH indicates in Exhibit E that “No Project effects on traditional cultural properties have been identified at this time...”<sup>23</sup>

A complete TCP requires consultation with the tribes. GRH needs to ask what is important to the Abenaki and it is our understanding that they have not comprehensively done that. GRH created a TCP – compendium of texts and a literature survey. It is our understanding, based on personal communication that there was one meeting in 2016 with GRH to address tribal cultural concerns, but GRH has not followed through with additional outreach to complete the recommendations that were

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<sup>20</sup> Ibid. page 2-32.

<sup>21</sup> Ibid. Page 2-32.

<sup>22</sup> ILP Study 33 Traditional Cultural Properties Study Report. Wilder Hydroelectric Project (FERC Project No. 1892-026) Bellows Falls Hydroelectric Project (FERC Project No. 1855-045) Vernon Hydroelectric Project (FERC Project No. 1904-073). TransCanada Hydro Northeast Inc. Prepared by Willamette Cultural Resources Associates, LTD and Normandeau Associates, Inc. May 16, 2016. Page 31.

<sup>23</sup> Ibid. Page 2-25.

outlined in their own study. As a result of the lack of communication over the past 5 years, no traditional cultural properties have been identified by GRH, therefore GRH conveniently concludes that there is no need to consider PM&Es for cultural concerns. This is a self-fulfilling prophecy. Obviously, if you don't do the real work to collect the information needed, you will find nothing.

GRH should have consulted the tribes to ascertain cultural importance, but instead they are considering this an after-thought in case something comes up when they happen to finally get to the work of developing an Historic Properties Management Plan. This consultation work with the tribes and development of the HPMP should have begun, and comprehensive information should have been provided as part of the Amended Final License Application. Again, the AFLA is deficient in this regard and compounds prior ILP violations.

## **5. REVENUE AND COST INFORMATION IS DEFICIENT**

CRC has the following questions for the Estimated costs for proposed PM&Es for the Wilder, Bellows Falls and Vernon Projects as noted in Table 4.1-8.<sup>24</sup>

- CRC contends that “Expanded Fish Ladder O&M,” “Recreation O&M,” and “Impoundment WSE monitoring/Inflow forecasting enhancements and O&M” are a cost of doing business and should not be considered as protection, mitigation, and enhancement effort costs.
- CRC requests that GRH clarify the difference between what is needed for “Impoundment WSE monitoring/ Inflow forecasting enhancements and O&M” (estimated to cost \$720,000 across all three facilities) and “WSE monitoring Inflow forecasting equipment and installation” (estimated to cost \$1,050,000 across all three facilities).
- GRH has indicated separate costs for “Eel Surveys and Studies,” “Fish Ladder Modifications,” “Downstream Fish Passage,” and “Expanded Fish Ladder O&M.” CRC requests that GRH provide exactly what this cost covers and a detailed timeline for when costs would be incurred. Given that GRH has indicated that they are still in discussion with the Fisheries Agencies on passage issues, GRH should clarify how they have come up with these estimates. For instance, what changes are assumed and what is the ensuing cost based on?
- GRH indicates a total of \$645,000 for recreation area improvements across all three facilities' project areas. The only recreation PM&E they have indicated in the application is formally adding three primitive campsites that they already maintain to their project portfolio. This currently would have an annual maintenance cost, which CRC assumes is addressed by the other line item, “Recreation O&M.” Clarification is needed on what the \$645,000 indicated would pay for.
- Based on information provided in Exhibit D for each facility, it seems that the Wilder facility by itself had earned profits in 2019 of something on the order of \$3,674,000; Bellows Falls \$3,498,143; and Vernon \$1,248,984 for a total of \$8,421,127. Yet, the Exhibit E indicates an intended investment for recreation of only \$1,050,000 for all three projects that is supposed to serve as a PM&E for the next 30 to 50 years. CRC would like a detailed understanding of the percentage of profit that will be invested in recreation at each facility over the course of the license.

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<sup>24</sup> Amended Final License Application. Exhibit E. Great River Hydro, LLC. Wilder Hydroelectric Project (FERC Project No. 1892-026). Bellows Falls Hydroelectric Project (FERC Project No. 1855-045). Vernon Hydroelectric Project (FERC Project No. 1904-073). December 7, 2020. Page 4-7 and 4-8.



## **6. ADDITIONAL INFORMATION NEEDED FOR CONSIDERATION OF EROSION AND ONGOING MONITORING**

GRH states, “While the impoundment upstream of Wilder dam extends upstream to Haverhill, New Hampshire, and Newbury, Vermont, WSE fluctuations in the upper impoundment are more significantly impacted by inflows from upstream” and that “an analysis of georeferenced historical aerial photographs indicates that the rate of erosion has increased slightly at some locations in upper Wilder impoundment...”<sup>25</sup> While GRH contends, and CRC agrees, that the operational change should have a significant impact on reducing erosion issues in the impoundments, given the specific influence of peaking flows from the 15 Miles Falls projects that impact the upper end of Wilder impoundment, it is incumbent upon the company to evaluate ongoing potential impacts of the operational change on the banks of the upper area of the Wilder impoundment. GRH should provide specific information showing expected WSE changes at the upper end of the Wilder impoundment under the new operational scenario. Additionally, CRC would encourage GRH monitor to make sure that reductions in erosive forces due to the new operational change are in fact true, especially in the upper Wilder impoundment where the pool level is influenced by peaking releases from the McIndoes facility (P-2077).

## **7. ILP DEFICIENCIES SHOULD BE REMEDIED AND OPPORTUNITY FOR MEANINGFUL COMMENT ALLOWED**

Great River Hydro’s cover letter to its FLA submitted on May 1, 2017 stated the following:

“In its March 1, 2017 comment letter on the Preliminary Licensing Proposal (PLP), the Connecticut River Watershed Council (CRWC) stated a number of concerns about the ability of the ILP process to address stakeholder interests and provide for meaningful PLP content for comment. As described above, for various reasons outside of TransCanada’s and Great River Hydro’s control, the status of the relicensing studies and subsequent consultation and alternatives evaluation remain on-going. The delay in producing what CRWC and others consider to be a “complete” PLP or FLA will not diminish Great River Hydro’s intent to evaluate project effects on resources, and to engage and consult with resource agencies and other stakeholders. This consultation will include Great River Hydro, LLC discussion of study results, consideration of and responses to study report comments, consideration of additional studies, and evaluation of PM&E recommendations that may lead to a more thoughtful, evidence-based licensing proposal. This iterative study process is a hallmark of the ILP, which requires studies to be satisfactorily completed prior to developing meaningful recommendations or licensing proposals. As a part of this process, Great River Hydro recognizes the need for continued stakeholder participation, consultation, and adequate opportunity to comment on additional study results and/or licensing proposals. Nothing in the ILP process or these FLAs diminishes the opportunity for stakeholder engagement.”

CRC reflects back on this statement and reiterates that the public has not had the opportunity to comment on a complete PLP and have those comments considered by GRH. These important

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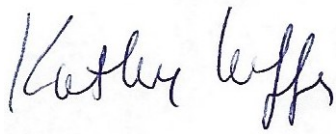
<sup>25</sup> Amended Final License Application. Exhibit E. Great River Hydro, LLC. Wilder Hydroelectric Project (FERC Project No. 1892-026). Bellows Falls Hydroelectric Project (FERC Project No. 1855-045). Vernon Hydroelectric Project (FERC Project No. 1904-073). December 7, 2020. Page 3-68.

Connecticut River Conservancy comments and request for additional information on Great River Hydro Amended Final License Application dated December 7, 2020  
January 28, 2021

deficiencies compound prior deficiencies and short-circuit the public input required by the ILP. FERC should act to fully preserve public rights to participate in the ILP process. An applicant's deficient filing should not be allowed at the expense of meaningful, substantive stakeholder input. The AFLA should be rejected as deficient. After the significant deficiencies in this AFLA are resolved, stakeholders should be allowed a formal public comment period on an actual complete application to allow for the continued development of comprehensive PM&Es before the application is deemed complete. FERC should schedule this on an expedited timeline to reduce any additional delays in an already long-delayed resolution to this relicensing process.

We appreciate the opportunity to comment. I can be reached at [kurffer@ctriver.org](mailto:kurffer@ctriver.org) or (802) 258-0413.

Sincerely,



Kathy Urffer  
River Steward

ATTACHMENTS:

- 1) Comments by the Connecticut River Watershed Council on TransCanada's Preliminary License Proposal (PLP) dated December 1, 2016 – Accession #20170301-5153
- 2) Connecticut River Watershed Council's Objection to: Revised Process Plan and Schedule dated March 10, 2017 - Accession #20170310-5125

CC:

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## CONNECTICUT RIVER WATERSHED COUNCIL

*The River Connects Us*

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March 1, 2017

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

Re: Wilder Dam Project No. 1892  
Bellows Falls Project No. 1855  
Vernon Dam Project No. 1904  
**Comments by the Connecticut River Watershed Council on TransCanada's Preliminary License Proposal (PLP) dated December 1, 2016**

Dear Secretary Bose,

The Connecticut River Watershed Council, Inc. (CRWC) in this letter provides comments in response to TransCanada's December 1, 2016 filing of the "Preliminary License Proposals" (PLPs) for Wilder (No. 1892), Bellows Falls (No. 1855), and Vernon (No. 1904) Dams, filed as a consolidated document. The PLPs are incomplete and preclude full comment. To the extent that it can, CRWC submits the following comments pursuant to 18 C.F.R. § 5.16(e) and Revised Process Plan and Schedule – Wilder, Bellows Falls, and Vernon Mountain Projects (May 5, 2016 and February 22, 2017).

### **I. DESCRIPTION OF THE CONNECTICUT RIVER WATERSHED COUNCIL**

The Connecticut River Watershed Council, Inc. (CRWC) is a nonprofit citizen group that was established in 1952 to advocate for the protection, restoration, and sustainable use of the Connecticut River and its four-state watershed. We are proud that the Connecticut River was designated one of 13 American Heritage Rivers during the Clinton Administration and became the country's first National Blueway in 2012. The interests and goals represented by CRWC include, but are not limited to, improving water quality; enhancing habitat for fish and other aquatic biota; safeguarding and improving wildlife habitat; protecting threatened and endangered species; protecting wetlands; preserving undeveloped shore lands; enhancing public recreation and promoting recreational safety; protecting aesthetic values; protecting archeological, cultural, and historical resources; fostering sustainable economic development, energy production, and preserving the local tax base along the Connecticut River and its tributaries.

The Council's members regularly and frequently use and are concerned about the area of the Connecticut River affected by the presence and operation of the Wilder, Bellows Falls, and Vernon Projects, currently owned and operated by TransCanada.

MASSACHUSETTS  
413-772-2020

LOWER VALLEY  
860-704-0057

UPPER VALLEY  
802-869-2792

NORTH COUNTRY  
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CRWC has been participating in the relicensing of the five hydropower facilities on the Connecticut River since the beginning of the process in late 2012. CRWC is committed to working with the FERC, the applicant, resource agencies, Tribes, and other stakeholders to support a new set of licenses that will positively affect the Connecticut River and its resources for present and future generations. CRWC has intervened in relicensing proceedings and license amendments at the Holyoke Dam (FERC No. 2004), Canaan Dam (No. 7528), Fifteen Mile Falls (No. 2077), Turners Falls (No. 1889) and Northfield Mountain Pumped Storage (No. 2485) projects on the Connecticut River. We are also participating in the ongoing relicensing of Bear Swamp Pumped Storage/Fife Brook on the Deerfield River (P-2669).

## **II. THE DEFECTIVE PLP AND REVISED PROCESS PLAN AND SCHEDULE VIOLATE STAKEHOLDER RIGHTS**

Public rights to participate in this process are on their way to being lost. A hallmark of the ILP is assuring that needed information is gathered and analyzed, and issues identified, *prior* to filing a formal application. However, this purpose cannot be met without meaningful stakeholder participation. Indeed, the importance of meaningful stakeholder participation is reflected in Commission rules providing stakeholder and public rights under the ILP. *See e.g.* 18 C.F.R. § 5.16(e) (providing stakeholders 90 days to comment on PLP and make recommendations on whether an EIS should be prepared).

Here, the ILP appears to be operating for the sake of process rather than its substantive purpose – deadlines are being met, but the ILP’s substantive purpose is not. TransCanada filed an admittedly incomplete and premature PLP that lacks core components including PM&Es, proposed operating conditions, and alternatives. Stakeholders now have to comment on this PLP, but the lack of substantive information prevents constructive, meaningful comment. CRWC fears that its right to meaningful, substantive participation in this critically important ILP step will be lost unless provided the opportunity to comment on a complete PLP. An applicant’s deficient filing should not be allowed at the expense of meaningful, substantive stakeholder input. Such a result would severely undermine the ILP’s purpose, transparency, and stakeholder rights – an applicant’s failure to provide required information should not result in stakeholders being cut out from substantively critical ILP steps.

Compounding this already very troubling procedural development is the fact that the public also stands to lose this right in the relicensing of the related and downstream Northfield Mountain Pumped Storage Project, No. 2485-063 and Turners Falls Project, No. 1889-081. CRWC raised these same issues in its March 1, 2016 Comments on the Draft Licensing Application filed by FirstLight. FERC is coordinating the relicensing of those projects with these TransCanada Projects because they have interconnected operations and impacts. For the same issue to occur here threatens the loss of meaningful public input on an enormous public resource stretching from well north of Wilder, VT/Hanover, NH to well south of Montague, MA. The five projects collectively impact a 175-mile stretch of the Connecticut River, and are of critical importance to three states, numerous organizations and municipalities, and dozens of northern and central New England citizens. The public stake in these five projects cannot be understated. CRWC incorporates and reasserts its March 1, 2016 Comments on FirstLight’s DLA into these comments. CRWC respectfully requests the FERC consider both sets of comments to assure effective coordination and management of this important public resource.

Put another way, FERC's rules require it to consider the information in a complete PLP *and* comments and recommendations responding to a complete PLP. Decisions made without considering such information are contrary to the law, arbitrary, and capricious. FERC must endeavor to assure the public right to comment on and make recommendations on a complete PLP.

#### **A. Comment Must Be Allowed on a Complete PLP**

Core stakeholder rights include the opportunity to comment on, and frame the NEPA process in response to, a complete PLP – one that contains a substantively complete draft EA and proposes well-informed PM&E measures and operating plans. 18 C.F.R. § 5.16. In this final step of the pre-filing process, stakeholders, agencies, tribes and the public can, for the first time, react to: (1) the complete package of needed information, and (2) the applicant's proposal for operating a facility for the next license term. *Id.* These comments identify issues and frame the post-application and NEPA processes. *Id.*

Meaningful comments must, of course, be based on complete information. As such, the PLP must:

- (1) Clearly describe, as applicable, the existing and proposed project facilities, including project lands and waters;
- (2) Clearly describe, as applicable, the existing and proposed project operation and maintenance plan, to include measures for protection, mitigation, and enhancement measures with respect to each resource affected by the project proposal; and
- (3) Include the potential applicant's draft environmental analysis by resource area of the continuing and incremental impacts, if any, of its preliminary licensing proposal, including the results of its studies conducted under the approved study plan.

18 C.F.R. § 5.16(b). FERC Guidance further provides:

#### **PM&Es in the Preliminary Licensing Proposal or Draft Application:**

To promote *constructive* feedback, preliminary proposals for measures and plans to protect, mitigate, or enhance environmental resources should be described and evaluated *to the extent possible* in an applicant's DLA/PLP documents (18 C.F.R. §§ 5.16(b)(1) and (2)). *At a minimum*, the draft license application/PLP should include preliminary proposed measures, operations and maintenance plans, and a draft environmental analysis associated with them.

<https://www.ferc.gov/industries/hydropower/gen-info/licensing/guidance.pdf> (emphasis added).

The Commission was clear in its description of how the ILP is supposed to work:

The PLP should also include a description of proposed measures and plans to protect, mitigate, or enhance environmental resources (e.g. a Draft Biological Assessment, Essential Fish Habitat Assessment, Historic Properties Management Plan, Recreation Management Plan, etc.). *Filing drafts of the plans and measures with the PLP will*

*facilitate the filing of final plans and measures with the license application, which is strongly encouraged by the Commission.*

It is during this period that applicants and stakeholders often enter into settlement discussions to resolve issues related to licensing the project. The Commission looks with great favor on settlements in licensing cases.

FERC ILP Tutorial, ***Protection, Mitigation and Enhancement Measures, Settlements and Draft License Application***, <https://www.ferc.gov/industries/hydropower/gen-info/licensing/ilp/ilp-tutorial/prepare/draft-license/protect-app.asp> (citations omitted, emphasis added).

It is also important to note that the draft EA required by Rule 5.16(a)(3) is not different from that required by Rule 5.18(b) (Exhibit E) required as part of a draft license application. 18 C.F.R. § 5.18(b)(5). A draft EA must be based upon the “results” of studies conducted. 18 C.F.R. § 5.18(b)(5)(ii)(B). Most importantly, the draft EA must address alternatives. 18 C.F.R. § 5.18(b)(5) (Proposed action and action alternatives); 18 C.F.R. § 5.8(c)(2). Assessment of alternatives is the “heart” of the NEPA process. *See* 40 C.F.R. § 1502.14

## **B. The PLP Fails to Meets Core Requirements**

TransCanada quite candidly concedes that the PLP does not provide a meaningful proposal for licensing the Projects -- comments and recommendations on this PLP would be largely meaningless:

Since many of TransCanada’s studies are not yet final, it would be premature at this time for TransCanada to develop a complete licensing proposal, reflecting other alternatives for operating the Projects in the new license term. Once TransCanada’s studies and FirstLight’s studies are complete and TransCanada has had an opportunity to discuss the study results with resource agencies and other stakeholders, TransCanada will be in a better position to develop comprehensive proposals for relicensing the Projects.

\* \* \*

Pursuant to § 5.16(e), comments must be filed with the Commission on no later than February 28, 2017 or 90 days from the filing of the PLP. Given that TransCanada’s proposal for relicensing the project is incomplete; TransCanada expects that stakeholders may reserve their right to provide substantive comments until after more comprehensive for relicensing the Projects are presented.

TransCanada Cover Letter for PLP from John Ragonese to Secretary Bose (Dec. 1, 2016) (Ragonese Letter) at 1-2. Indeed, 17 of the 33 required studies were incomplete when TransCanada filed the PLP.<sup>1</sup>

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<sup>1</sup> TransCanada has since completed some of these 17 studies, but none of these now-completed studies have been incorporated into the PLP and translated to alternatives, PM&Es, proposed license conditions, or analyzed in the draft EA. One of the studies still incomplete is the important Instream Flow Study, Study 9.

This is stunning: the PLP proposes no change whatsoever. With the experience gained since the 1979 issuance of its license and the research required by this proceeding, TransCanada has yet to develop a single measure addressing any of its three dams' significant impacts on any facet of the environment. Rather, TransCanada provides a "placeholder" *status quo* until the information needed for a complete PLP has been gathered. *Core* substantive aspects of the PLP have yet to be developed.

FERC should not limit public rights to participate in the ultimate step of the pre-filing process to comment on an artificial placeholder. Giving TransCanada the benefit of the doubt, it is premature to propose such measures because studies are not yet complete. Likewise, requiring comments on this PLP is premature. As TransCanada suggests, "stakeholders may reserve their right to provide substantive comments until after more comprehensive proposals for relicensing the Projects are presented." Ragonese Letter at 2.

### C. Accepting the PLP Violates the ILP

The Commission cannot hide substantive ILP failures behind a procedural deadline. Nor should an applicant filing an incomplete PLP be rewarded with a free pass to the post-filing process. Certainly, such procedural failures should not be allowed at the expense of public rights to meaningful participation in the ILP.

In addition to the above, failure to allow meaningful comment on a complete PLP undermines the ILP because substantive comment shapes the final application, proposed environmental measures, and narrows or resolves issues for the post-application process. PLP comment is also the final opportunity for stakeholders to comment directly to the applicant, and where the applicant must respond to stakeholder comment. Such comment sets the stage for any settlement discussions. *See* ILP Tutorial, quoted above. The PLP here does not allow any of these purposes to be met.

Further, an applicant bears the burden of first proposing alternatives, operating conditions, PM&Es and other PLP requirements. A process failure cannot shift that burden. TransCanada suggests that:

In the event that FERC, federal or state agencies, or the public provide proposals for alternatives to the Projects' facilities, operations, maintenance and/or environmental measures, TransCanada will evaluate those proposals or develop a modified proposal of its own in the Final License Applications (FLAs) or during the course of FERC's post-filing environmental analysis, as appropriate.

Ragonese Letter at 2. TransCanada's proposal would render Rule 5.16 entirely meaningless, shift the burden from the applicant, and preclude public comment. TransCanada's suggested approach also limits information going into the application process and clouds transparency.

The FLA will be tainted without the opportunity for meaningful comment on the PLP. The inability to substantively comment on a complete PLP will taint any subsequent final licensing application, and sets the stage for disputes over post-application decisions and the Commission's compliance with its own procedural and substantive requirements.

#### **D. The PLP Should Be Rejected, a Complete PLP Required, and Comment allowed on the Complete PLP**

TransCanada effectively concedes that its PLP lacks core requirements and does not meet Rule 5.16. It also concedes that this failure precludes, “substantive comments until after more comprehensive proposals for relicensing the Projects are presented.” Ragonese Letter. The “make-work” of meeting unmovable deadlines while utterly failing to meet the underlying substantive purpose imposes unnecessary burdens on all relicensing participants. Such burdens distract and detract from substantive issues, and are particularly hard on citizens, not-for-profit organizations, tribes, and municipalities.

However, these burdens pale in comparison to losing the right to comment and meaningful participation in the ILP. FERC should act to fully preserve public rights to participate in the ILP. As TransCanada suggests, stakeholders should be allowed comment on a complete PLP. Ragonese Letter at 2. FERC should assure that such comment is allowed prior to the filing of a Final Licensing Application.

CRWC respectfully requests:

1. The PLP be rejected;
2. An order requiring TransCanada to file a complete PLP; and
3. Stakeholders be given all rights allowed by Rule 15.6(e) to respond to the complete PLP.

### **III. CRWC GENERAL COMMENTS**

#### **A. Obligation to Mitigate**

A new license will involve a balance between power generation and environmental quality.

In deciding whether to issue any license under this subchapter for any project, the Commission, in addition to the power and development purposes for which licenses are issued, shall give equal consideration to the purposes of energy conservation, the protection, mitigation of damage to, and enhancement of, fish and wildlife (including related spawning grounds and habitat), the protection of recreational opportunities, and the preservation of other aspects of environmental quality.

16 U.S.C. §797(e)

Under 18 CFR §§ 5.16(b) and 5.18(b)(5)(ii)(C) the license applicant must provide any proposed new environmental measures to address identified environmental effects.

Without considering any alternatives, the PLP proposes what would be identical to a “no action alternative” on the premise that a number of studies are incomplete and it would be premature for TransCanada to submit a complete licensing proposal, reflecting alternatives for operating the Projects under the new license. As such, the PLP contained no new mitigation proposals. We request that the FLA (or better yet, a revised PLP) propose specific protection, mitigation and enhancement (PM&E) measures, or include placeholders for them, that address the environmental effects of each Project and the cumulative effects. We further request that the FLA propose objectives, or leave placeholders for them, for the purpose of effectiveness monitoring of PM&E measures which may require adaptation in design or operation.



## **B. An EIS is Required**

Rule 5.16(e) provides that comments on a PLP may include recommendations on whether the Commission should prepare an Environmental Assessment or an Environmental Impact Statement. The decision to prepare an EIS has already been made. FERC, in its December 2012 Scoping Document 1 stated in Section 1, “At this time, we intend to prepare an environmental impact statement (EIS) for the projects...” The need for an EIS continues, and the decision to prepare an EIS should not be revisited.

## **IV. SPECIFIC COMMENTS**

### **A. Geology and Soils**

TransCanada carried out three studies to gauge Project operational affects upon geology and soils within the designated project affected reach (ILP Study 1: Historic Riverbank Position and Erosion Study, ILP Study 2 and Study 3: Riverbank Transect and Riverbank Erosion Studies). Goals for ILP Study 1 were to compile information and materials relevant to historic erosion and riverbank movement, process collected information in a format useful for analysis as part of other related studies, and compare historical information with recent conditions. Goals for ILP Studies 2 and 3 were to monitor riverbank erosion at selected sites in the impoundments and project-affected Riverine reaches for all three Projects, determine the location of erosion in project-affected areas and compare these locations with previously compiled erosion maps, characterize the processes of erosion, ascertain the likely causes of erosion, and identify the effects of shoreline erosion on other resources.

TransCanada distributed the ILP Study 1 report on March 1, 2016, and the combined Study 2 and 3 Report was posted on August 1, 2016. CRWC hired Princeton Hydro, a private consulting firm, to peer review the Study 2/3 Report. TransCanada, in its response to stakeholder comments dated October 31, 2016, volunteered to revise the Study 2/3 Report and incorporate comments received. The revised report was released on February 4, 2017; two months after the PLP had been distributed. CRWC has not reviewed the revised Study 2/3 Report in the midst of preparing comments on the PLP.

The Study 2/3 Report dated August 1, 2016, stated on page 111 that, “Fluctuations in WSE related to normal project operations under no-spill conditions are consistent with notching and overhangs observed at the base of 8 of the 21 monitored banks at some point during the two-year monitoring period (Appendix A). Erosion can result from seepage forces generated by WSE fluctuations (Budhu and Gobin, 1995) with overhangs developing when seepage is focused along a single layer (Fox and Wilson, 2010).” Table 5.6.5-2 of the Study 2/3 Report indicated that in 2014, 28.5 miles (or 11.3%) of riverbank in the study area were eroding. The Wilder impoundment had 12.4 miles (13.7%) of eroding shoreline; Bellows Falls impoundment had 6.9 miles (13.9%) of eroding shoreline, and Vernon impoundment had 4.6 miles (7.9%) of eroding shoreline.

The PLP concludes that while Project operation does contribute to notching and overhangs which characterize the initial stages of the cycle of erosion, it states that this is unavoidable, and only contributes to a very small percentage of the total amount of sediment transported and deposited by the CT River within the impoundments. The PLP contends that natural high flow events outside the control of project operations contribute far more heavily to streambank erosion within the project-affected reach.

The maximum operating range at the Wilder Project is 5 feet between el. 380 – el. 385. The facility is typically operated within a 2.5-foot range at el. 382 – el. 384.5 under non-spill conditions. The maximum

operating range at the Bellows Falls Project is 3 feet, between el. 288.63- el. 291.63, however the facility typically operates within a 1.8-foot range between el. 289.6 – el. 291.4 under non-spill conditions. The Vernon Project operates at a maximum 8-foot range between el. 212.13 – el. 220.13, but typically operates within a 1.8-foot range between el. 218.3 – el. 220.1 outside of high water events that require tripping of the stanchion bays, in accordance with license Article 32. CRWC notes that Figure 3.4-15 in the PLP shows that elevations in the Wilder impoundment have a much larger operating range than in the Bellows Falls (Figure 3.4-17) and Vernon (Figure 3.4-19) impoundments.

CRWC expects the FLA to include PM&E measures, including operational mitigation strategies, to reduce riverbank erosion. These operational mitigation strategies could include license provisions that would require TransCanada to operate within the current voluntary ranges, for example, reducing the mandated operational range at the Wilder Project to 2.5 feet, and ranges at the Bellows Falls and Vernon Projects to 1.8 feet.

PLP Section 2 states that the three Projects are subject to 28 boiler-plate license articles under Form L-3: Terms and Conditions of License for Constructed Major Project Affecting Navigable Waters of the United States (October, 1975).

Article 19 from this document, which is a license article at all three TransCanada facilities, states that:

In the construction, maintenance, or operation of the project, the Licensee shall be responsible for, and take reasonable measures to prevent, soil erosion on lands adjacent to streams or other waters, stream sedimentation, and any form of air or water pollution. The Commission, upon request or upon its own motion, may order the Licensee to take such measures as the Commission finds to be necessary for these purposes, after notice and opportunity for hearing.”

CRWC expects this License Article to remain intact within any new licenses issued for the operation of these facilities. Under any new licenses, we expect operational mitigation strategies as mentioned above, as well as the development of a plan in coordination with stakeholders for objectively monitoring and pro-actively remediating erosion prior to severe degradation. Protection of historic, archaeological, and cultural resources should also be enhanced within the framework of this effort.

## **B. Water Resources**

The PLP states that Project operations will continue to alter flows in the Connecticut River, leading to unavoidable adverse effects upon fish and aquatic resources, terrestrial resources, and potential cultural and historic resource degradation. The PLP lists several factors that constrain TransCanada’s ability to deviate significantly from the current operational regime in a way that will mitigate degradation of these resources, citing the following factors:

- The amount and timing of water available as a function of upstream inflow and intermediate drainage flow. A portion of this inflow is subject to regulation and can be limited or currently augmented above natural flows during low flow periods, from upstream storage reservoirs.
- Limited generation flow capacity above which spill must occur;
- Safety and flood control operations, which are required during periods of high flows;
- Normal operations, which use only a portion of the overall impoundment storage capacity; and
- Limited impoundment storage, which necessitates spilling rather than storage of available inflows that exceed Project generating capacities.

It should be noted that the fourth bullet point above, pertaining to limited overall impoundment storage capacity usage is a voluntarily imposed measure, not a current license provision.

The PLP further states that the amount of warming as water flows from the upstream areas to the Project dams will be primarily dependent upon natural prevailing weather conditions and longitudinal variation, and at times will exceed Vermont's temperature standard ( $>1^{\circ}\text{F}$ ), especially when over long longitudinal distance from the upstream Riverine areas to each Project dam and due to larger diurnal temperature changes at upstream Riverine reaches. It is further stated that this effect will reflect existing conditions, i.e., short term, with limited or negligible impacts. CRWC recommends that TransCanada model and evaluate the cumulative effect of the operation of its dams and existence of multiple impoundments on the water quality parameters analyzed in Study 6 in the Connecticut River.

The PLP states that impoundment stratification will occur if weather conditions are conducive, which can lead to decreased DO levels in the hypolimnion in the forebay areas. This can spark conditions that fall below surface water quality standards, which will stress aquatic life. However, the PLP asserts that waters will become oxygenated above surface water quality standards as it passes through the Project powerhouses, thus the cumulative effects will be confined to the forebay areas and will be brief, rendering Project effects related to diminished DO limited to negligible.

The lack of a finalized instream flow study precludes CRWC from providing complete comments on water resources. CRWC requests that FERC provide framework for commenting on TransCanada's instream flow study, and that stakeholders and resource agencies be provided adequate time to review the study and provide comments.

CRWC notes that there are current voluntary measures related to limited operational WSE ranges and weekend elevated impoundment levels. These measures help to reduce ecological and biological degradation as well as infrastructure damage, and enhance recreational opportunities. The new licenses should include provisions that may include, for example, the voluntary measures become mandatory under certain flow or seasonal conditions.

### **C. Fish and Aquatic Resources**

The PLP states that Project operations will continue and will have some minor adverse effects upon resident and migratory fish species, including dewatering of fish eggs or nests during spawning season. It is further stated that the levels of these adverse effects will vary based upon the water year but states that overall, these effects are small for most fish species. It is also stated that some injury and mortality to downstream migrating American eels and American shad will continue to occur, but that the effects are generally small. Given the American eel turbine mortality rates listed, particularly at the Wilder Project, CRWC feels that this statement is misleading and unsubstantiated. A 62% turbine mortality rate is in no way small.

A number of studies conducted in an effort to gauge Project operational effects upon aquatic resources were incomplete when the PLP was posted. These include: ILP Study 19: American Eel Downstream

Passage Assessment, ILP Study 21: American Shad Telemetry Study, ILP Study 22: Downstream Migration of Juvenile American Shad, and ILP Study 23: Fish Impingement, Entrainment, and Survival Study. Because these studies were incomplete, CRWC is precluded from providing complete comments on fish and aquatic resources at this time.

In the fish and aquatic resource section of the PLP, in subsection fisheries management plans, it is stated that the Atlantic States Marine Fisheries Commission (ASMFC) developed a fisheries management plans for American eels which researched American eel mortality. It states that a 2008 Addendum to the Fishery Management Plan (FMP) was published due to evidence that eel stocks had declined and are at or near low levels. ASMFC strongly recommended that member states and FWS request special consideration for American eel in the FERC relicensing process, including improving upstream and downstream passage and collecting data on both (ASMFC, 2008). A Benchmark Stock Assessment (ASMFC, 2012) concluded that the American eel population in U.S. waters is depleted and is at or near historically low levels because of a combination of historical overfishing, habitat loss and alteration, productivity and food web alterations, predation, turbine mortality, changing climatic and oceanic conditions, toxins and contaminants, and disease. As a result, ASMFC approved Addendum 3 (ASMFC, 2013) with the goal of reducing mortality and increasing conservation of American eel stocks across all lifestages. The addendum focused on the establishment of new management measures for commercial and recreational eel fisheries and the implementation of fishery independent and fishery dependent monitoring. Addendum 4 (ASMFC, 2014) followed and modified management of commercial fisheries. CRWC requests that in the FLA, TransCanada provide additional information as to what impact Addendums 3 and 4 have on project operations with respect to reduction of American eel mortality related to project operations. Additionally, CRWC would like to highlight ASMFC's concerns about American eel stocks and turbine mortality as further exhibiting the need for safe and effective upstream and downstream passage of American eel at these projects, particularly at the Wilder Project.

With respect to American eel turbine survival rates, CRWC is very concerned by these numbers, particularly at the Wilder Project. The 48-hour survival rate at the Wilder Project was 62%, 42.6% were visibly injured, and 36.2% sustained major injury. CRWC feels this is unacceptable, and requests that measures requiring improved turbine survival rates be mandatory in the issuance of a new license for this Project.

The PLP states that alternative operational regimes may be analyzed, and that a dual flow analysis will be conducted in order to identify persistent habitat, however no time-frame for these analyses has been provided. CRWC requests that FERC impose a time-frame for these analyses to be conducted.

#### Upstream and downstream fish passage

In ILP Study 10, only three American eels were recorded through spring, summer and fall sampling. CRWC would like to offer that perhaps this isn't due to a lack of naturally occurring eel populations in the Project reach, but rather suggests inadequate passage at the three facilities. Further, ILP Studies 17 and 18 suggest that a significant number of eels are present within the Project affected reach. CRWC requests that provisions requiring enhanced fish passage infrastructure be included in the issuance of any new licenses for each of the three facilities.

With respect to upstream passage of Sea Lamprey, CRWC has concerns that the hard cut-off of the survey area at the edge of the Project affected reach led to data which downplays the number of Sea Lamprey migrating into the Project area. CRWC requests that additional surveys be done which extend further into tributaries, such as the West River and the Williams River in order to acquire more accurate quantitative data with respect to Sea Lamprey migration into the Project area.

#### Fish entrainment

The lack of a finalized Fish Impingement, Entrainment, and Survival Study precludes CRWC from providing comment on fish entrainment. CRWC reserves the right to provide comment and recommendations on this study once it is released.

#### Tributary/backwater access

The Tributary and Backwater Fish Access and Habitat Study concludes that 27 of the 37 study sites, including all backwater sites, are not adversely impacted by Project operations. This is based on each site have a confluence water depth of <0.5 ft at least 25% of the time. The study states at only 2 sites (CT-B-3.10 & CT-BR-4.04) appear to have Project effects of any significance that could limit fish access. CRWC has concerns regarding the standard of adequate fish passage of water depth >0.5 ft at least 25% of the time, and would recommend that the license provision require more protective standards, such as >0.5 ft of water a minimum of 50% of the time.

### **D. Terrestrial Resources**

The PLP asserts that normal Project operations have very few adverse effects on terrestrial resources. However, it does offer a number of potential adverse effects that are essentially dismissed as minor or inconclusive. These include loss of odonate habitat when the entire bank height becomes inundated as well as direct odonate mortality as a result of rising water levels. Additionally, cobblestone tiger beetles may suffer energetic costs from temporary loss of forage habitat due to multi-day inundation, and Fowler's toad breeding may be affected as they are not adapted to frequent changes in water surface elevation. Further, persistent pools are required for Fowler's toad eggs; which require stable water levels during the breeding season at elevations low enough for pools to persist.

CRWC recommends the FLA include measures to ensure impacts to terrestrial resources are minimized as much as reasonably possible, particularly those related to species listed as Federally Endangered.

### **E. Threatened and Endangered Species**

The PLP asserts that normal Project operations have no identified adverse effects on current federally threatened or endangered terrestrial species that are located in the Project area. It is further stated that dwarf wedgemussel is the only federally listed aquatic endangered species known to be present within the Project areas.

Given that a full analysis of the Project effects on dwarf wedgemussels has yet to be complete, CRWC is precluded from providing full comment at this time. CRWC recommends that if adverse effects on Dwarf

Wedgemussels related to Project operations are identified, measures should be included in the FLA to minimize or, if reasonably possible, negate those effects.

It is further recommended that monitoring efforts be included in the FLA to track the presence of northeastern bulrush, and that operational strategies to minimize adverse impacts on this species be included, regardless of whether or not northeastern bulrush is identified in field surveys before or after licenses are issued.

## **F. Recreation and Land Use**

Hydropower dams are barriers to travel on rivers and the manipulation of flows also impact recreational use of the river. On the other hand, the impoundments create more opportunities for motor boating in rivers that may not have provided that type of recreation without a lake-like impoundment.

TransCanada's existing license includes recreational provisions. The PLP describes in detail all of the current recreational offerings in the project areas, including locations owned and maintained by TransCanada. Relicensing Study 30 in general rated these amenities favorably. However, Table 6.2-2 through 6.2-4 in Study 30 Report indicated a predominance of dissatisfaction with the number and type of facilities in the project areas. Those surveyed suggested improvements at each project and Table 6.2-1 in Study 30 indicated reasons why those surveyed don't use the project areas. TransCanada and stakeholders can glean information from the Study 30 Report to suggest new types of facilities that may attract those who would like to enjoy the CT River without being in a boat, for example.

### Cartop, fishing, and motor boat access locations

Regional planning agencies will be compiling recreation plans, and we will look to those plans for future discussions on enhancing the recreational offerings in the project-affected areas. Study 30 Tables 6.2-5 through 6.2-7 indicate comments for additional boat access locations desired at each project.

CRWC shares a concern identified by the Friends of the Connecticut River Paddlers' Trail that several launch sites have overnight parking restrictions, which hinder paddlers embarking on multi-day trips. CRWC recommends that TransCanada modify its parking policy to allow paddlers to leave their vehicles at these sites when on overnight outings.

### Paddlers Trail Camping Sites

The Friends of the Connecticut River Paddlers' Trail, of which CRWC is a member, has conducted a Campsite Expansion Assessment. One of the primary objectives of the trail effort is to ensure there are adequate campsites along the river to facilitate multi-day trips. The near term goal (0-5 years) for the trail is to establish campsites every 5 miles, and the long term goal (5-15 years) is campsites every 3 miles, to ensure that groups can safely reach a downstream campsite within an hour should they arrive at one already occupied. The Assessment indicates that 18 of 52 campsites along the Connecticut River fall between the Wilder impoundment and the Massachusetts border. The average distance between sites is 7.3 miles, which falls well short of the trail's goals. Three of the biggest gaps have been identified: 1) Roaring Brook Campsite to Patchen's Point (11 miles), 2) SCA Campsite to Lower Meadow Campground (12 miles) and 3) Windyhurst Campsite to Wantastiquet Campsite (17.5 miles). CRWC recommends that the new licenses support the development of new Paddler's Trail campsites,

### Water levels

The PLP in Section 2 mentions voluntary river levels maintained for recreational boating. These provisions are only voluntary and should perhaps be formalized. In addition, river fluctuations do impact use of the river. Survey respondents in Study 30 noted impacts to recreation from fluctuating water levels. These should be minimized and mitigated.

### Portages

The portage routes around Wilder, Bellows Falls, and Vernon could be improved, and in the case of Bellows Falls, the current route is long and dangerous. At Wilder Dam, the portage into the river is steep and slick in wet weather and considered dangerous. At Bellows Falls Dam, the portage route is a bit longer than 1.5 miles, with 0.6 mile of that along a state highway with no sidewalk or pedestrian space. At Vernon Dam, the portage route includes walking on Route 142 and the path down to the river below the dam is steep, without stairs, and the packed earth can become slippery when wet. TransCanada has concluded that alternate portage routes identified in the recreation study are impractical, unsafe, and infeasible. CRWC disagrees that the options presented in the Study 30 Report are the only ones available and/or are infeasible.

### Whitewater flows

CRWC will wait for the instream flow study to come out and a better understanding of fisheries agency recommendations at Bellows Falls before we advocate for a particular position on whitewater releases or timing of whitewater flows at Sumner Falls and the Bellows Falls bypass reach.

### Trails along the river

Study 30 in Section 6.1 indicates that wildlife viewing and walking/hiking are very popular activities in Vermont and New Hampshire. Currently, there is little in the way of trails along the river, which would allow for hiking and wildlife viewing while enjoying views of the river. While it is understood that TransCanada does not own all lands along river, the Study 30 report mentions acres of TransCanada-owned land that are leased for agriculture. The Pre-Application Documents (PADs) contain maps showing lands owned by TransCanada. These maps indicate that there are opportunities for TransCanada and project stakeholders to discuss trail development on project-owned lands and in cooperation with willing landowners.

## **G. Aesthetics**

FERC's Scoping Document 2 identified aesthetic issues as, "Effects of the projects' features, operation, and maintenance on the surrounding landscape, including flows in the bypassed reach of the Bellows Falls Project." TransCanada's Study 30 involved survey questions for respondents to rate aesthetics at each project. Features, operation, and maintenance were all wrapped into the response, with respondents being asked to identify what makes each location appealing. Locations in each project area generally rated extremely appealing to appealing.

In addition, TransCanada conducted Study 32 to assess aesthetic flows at the Bellows Falls bypass reach. Although all respondents rated water flowing in the bypass reach as high, TransCanada dismissed the need to include aesthetic flows in the new license on the grounds that few people have access to a view of the bypass channel. One of the reasons few people have access to views of the bypass channel is that the Vilas Bridge has been closed since 2009. However, at some point in the 30-50 year term of the new

hydropower license, this may change. In fact, a recent article in the Rutland Herald indicated that New Hampshire may put repairs on its 10-year priority list (see <http://www.rutlandherald.com/articles/vilas-bridge-progress-expected/>). If and when Vilas Bridge is once again accessible, the license should include a re-opener clause for aesthetic flows in the bypass reach, unless habitat flows have made the issue obsolete.

## **H. Cultural and Historic Resources**

CRWC did not have access to the Phase IA, IB, and Phase II Archaeology studies, but some of the results have been summarized in Tables 3.10-2 through 3.10-13 in the PLP. Sites that are impacted or threatened by erosion are identified in the PLP. The Traditional Cultural Properties Study 33 has been completed, but tribal consultation continues, and the sites may not be complete.

CRWC recommends that the FLA include operational changes to minimize impacts to archaeological sites, and mitigation projects to protect sensitive historic and cultural locations along the river banks that may be eroded away.

## **I. Socioeconomics**

Sections 3.11, 4 and 5.2.9 of the PLP discuss socioeconomic impacts. Tables 4-2 through 4-4 include annual operating and maintenance costs per year in 2016 dollars. However, the PLP does not include the cost of each proposed (in this case, existing) resource protection, mitigation, or enhancement measure. In addition, according to 18 CFR §5.18(b)(5)(ii)(E), for an existing license, the applicant's economic analysis must estimate the value of developmental resources associated with the project under the current license and under the applicant's proposal, which in this case is the same thing. CRWC could not find where this information was included in the PLP. It is important to understand the costs and values of recreational resources and other resources offered under the current license.

Table 4-1 indicates that the period of economic analysis is 30 years. Hydropower licenses are issued for a term between 30 and 50 years; we could not find elsewhere in the PLP that TransCanada was seeking a 30-year license.

Table 4-1 shows the market values of the forward capacity, real-time reserves, volt-ampere-reactive (VAR) support, and renewable energy credits (RECs) for Vernon Dam. CRWC believes that with new licenses, it seems entirely possible that the owner of Wilder and Bellows Falls dams would apply for RECs for those Projects as well, which would certainly add to the value/revenue of the projects. TransCanada should include information on what RECs at Wilder and Bellows Falls would earn them.

## **J. Consistency with Comprehensive Plans.**

As required by 18 CFR §5.18(b)(5)(ii)(F), TransCanada's PLP in Section 5.3 identifies state and federal comprehensive plans applicable to project operations. Section §5.18(b)(5)(ii)(F) requires that the applicant, "Identify relevant comprehensive plans and explain how and why the proposed project would,



would not, or should not comply with such plans...” The PLP simply states that TransCanada reviewed 34 identified plans and “no inconsistencies were found.” There was no explanation how and why the projects comply with the 34 plans. In addition, there is no mention of regional or town plans that might include recreation goals for river access or trails along the river.

## V. CONCLUSION

CRWC reiterates that the PLP’s deficiencies preclude significant comment. Comment should be allowed on a revised PLP. CRWC reserves the right to submit further comment and amend these comments once complete information is provided.

We appreciate the opportunity to submit our comments on the Preliminary Licensing Proposal (PLP) for the proposed projects P-1904 (Vernon), P-1855 (Bellows Falls), P-1892 (Wilder). We hope you will take our requests to heart and by doing so give all of the stakeholders the information we need to consider when developing appropriate recommendations for license conditions.

Sincerely,



Andrea Donlon  
River Steward



Christopher Yurek  
ECO AmeriCorps VT (CRWC)



## CONNECTICUT RIVER WATERSHED COUNCIL

*The River Connects Us*

15 Bank Row, Greenfield, MA 01301 crwc@ctriver.org www.ctriver.org

March 10, 2017

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

Re: TransCanada Hydro Northeast Inc.  
Wilder Dam Project No. 1892-026  
Bellows Falls Project No. 1855-045  
Vernon Dam Project No. 1904-073

**CONNECTICUT RIVER WATERSHED COUNCIL'S OBJECTION TO:  
REVISED PROCESS PLAN AND SCHEDULE (Feb. 22, 2017) AND TO STAFF COMMENTS ON  
PLP (Mar. 3, 2017)**

Dear Secretary Bose,

CRWC objects to the above-referenced documents to the extent that they decide or implement any decision to forego a reasonably complete Preliminary License Proposal or Draft Licensing Application and the public comment allowed under 18 C.F.R. § 5.16(e). CRWC further objects to these documents to the extent that they decide or implement any decision to allow a Final Licensing Application to be filed without a reasonable, meaningful 18 C.F.R. § 5.16 process. The bases for this objection are stated in CRWC's Comments on TransCanada's PLP filed in this matter on March 1, 2017, and CRWC Comments on the Draft Licensing Application filed by FirstLight on Northfield Mountain Pumped Storage Project, No. 2485-063 and Turners Falls Project, No. 1889-081 (Mar. 1, 2016). CRWC incorporates by reference and reasserts those comments as part of this objection.

While there is authority to revise study plans and schedules, there is no authority allowing an applicant or the Commission to avoid Rule 5.16's substantive requirements. CRWC requests that the Commission require a reasonably complete PLP and that public comment be allowed pursuant to Rule 15.6(e).

Sincerely,

Andrea Donlon  
River Steward