



Connecticut River Joint Commissions

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***VIA ELECTRONIC FILING***

**Debbie-Anne Reese, Acting Secretary**

Federal Energy Regulatory Commission

888 First Street, N.E. Room 1-A

Washington, D.C. 20426

**Re:** Great River Hydro, LLC; FERC Project Nos. 1892, 1855 and 1904  
Applications Accepted for Filing; February 22, 2024  
Response to Notice for Solicitation of Comments and Preliminary Conditions

May 14, 2024

Dear Secretary Reese,

As you may know, the Connecticut River Joint Commissions (CRJC) has a statutory duty, as a public entity, to comment on licenses that affect the Connecticut River and advise public agencies in their decisions regarding the river. While river waters are significantly cleaner than 50 years ago, and fish habitats are improved, much more is needed. Use of the Connecticut River has evolved over the past 50 years and more change is expected in the next 50. The Connecticut River has become a valued asset for attracting businesses and tourism to adjacent communities. Recreation on the river and adjacent lands has significantly expanded. CRJC acknowledges the value of renewable energy production and the benefits to mitigating climate change impacts. Clean energy production from the three dams will be the dominant use of this reach of the Connecticut River for the next 30 to 50 years. However, all river users have important rights and objectives that should be supported, not precluded, by the dominant use of hydropower generation.

CRJC and our bistate local river subcommittees, designated by the States of New Hampshire and Vermont to advise on this State Designated River, have been involved in this relicensing effort since its onset in 2012 and are sensitive to the fact that one hundred and twenty miles of our lower Connecticut River between New Hampshire and Vermont will be affected by the proposed licenses. Of this 120-mile reach, 100 miles have been converted to impoundments, essentially lakes, to facilitate power generation by the three hydroelectric dams requesting new licenses.

CRJC herein provides comments and preliminary licensing conditions on the “applications accepted for filing” for the above-mentioned projects, including a request to create a Mitigation and Enhancement Fund in order to protect and preserve designated uses of the river and enhance public recreational opportunities.

**1. Public Participation in Developing License Conditions.** The process should be transparent and collaborative, consistent with Integrated Licensing Process objectives. We are pleased to see proposed modifications to project operations to minimize water level fluctuations. This has been a priority for CRJC. However, we request that CRJC, the only public body specifically representing the interests of New Hampshire and Vermont regarding the Connecticut River, be included in any future negotiations with stakeholders regarding mitigation and enhancement, and that CRJC, as the representative for the communities along the river, be involved in the administration of Mitigation and Enhancement Fund as outlined in **Section 5**.

*Comments.* Precedent dictates that CRJC is an essential stakeholder, and was a key participant in forging the Settlement Agreement of August 11, 1997 which was reached between thirteen partners setting forth proposed changes to operational modes and minimum flow releases for the Fifteen Mile Falls hydroelectric facilities on the northern reach of the Connecticut River, including the Moore, Comerford, and McIndoes Falls dams.

**2. Document Environmental Impacts.** The proposed operational changes will likely benefit the river’s biological community as these changes will provide a hydrological regime that more closely resembles natural pre-impoundment conditions. However, no scientific evidence has been presented on water quality, sediment transport, and riverbank erosion. Since intense storms and river flows are projected to increase due to climate change (see **Section 3**), and flow velocities will increase due to water surface elevations (WSE) being held constant at the dams<sup>1</sup> we anticipate erosion and bank failures will be an ongoing problem and likely increase. Moreover, the Projects will still have other adverse effects such as accumulating toxic substances in both impoundment and riverine reaches (e.g., see Final License Application (FLA) dated December 2020, p. 955, 1144; revised in June 2023). Therefore, monitoring of water quality, sediment transport and erosion must be conducted throughout the life of the licenses.

We respectfully request that this work be a required condition in each of the licenses and funding for the work be provided by Great River Hydro (GRH). This should include, at a minimum, fully funding the USGS water quality monitoring gauge at Northfield, Massachusetts and adding monitoring to the gauge on the northerly portion of the river near Dalton, New Hampshire.

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<sup>1</sup> “Flow velocities within the impoundments are controlled both by discharge and WSE at the dams as well as upstream inflow. ... **When the WSE at the dams is held constant, flow velocity will generally increase with increased discharge or upstream inflow** [emphasis added]” (Revised “Amended Final License Application, Exhibit E, January 2024, Section 3.4.2.1, p. 78).

*Comments.* GRH’s preferred alternative proposes operational changes that “will maintain water surface elevations at the dams at higher elevations within a narrower bandwidth more often than current operations” (Revised Amended FLA, Exhibit E, January 2024, Section 3.3.1.1, p. 21)<sup>2</sup>.

GRH provides little evidence in the FLA on how the proposed operational changes will affect erosion, water temperatures, dissolved oxygen, pH, nutrients, bacteria and invasives (plant and animal), of impoundment and riverine reaches. We request that impacts by this preferred alternative on these factors be closely monitored, accurately determined and annually published by an independent entity during the life of the licenses.

As data are collected and adverse impacts revealed, GRH/Hydro-Quebec should be required to plan (in consultation with all stakeholders), execute and pay for mitigation measures so as not to place undue responsibility for mitigation on riverfront landowners, towns along the river, and state resources. GRH is using this public resource for private profit and needs to contribute to the cost of mitigation. Costs that need to be addressed include loss of agricultural soils, flooding of developed areas, costs associated with maintaining and monitoring recreational use of the impoundments and associated access facilities, and threats to infrastructure (e.g., NH Route 12A between Charlestown and Walpole, and River Road in Lyme, New Hampshire, which have cost tax-payers tens of millions of dollars) caused by shoreland erosion.

**3. Address Potential Climate Change Impacts.** The FLA does not incorporate scenarios and potential responses to more intense storm events and prolonged periods of drought that are based on recent data<sup>3</sup> and predicted by the preponderance of climate models. These might include, for example, specific provisions for reopening the permit if there are significant persistent changes in river flows, or if significant adverse impacts are discovered by environmental monitoring required under **Section 2. Document Environmental Impacts.** FERC has a long-standing practice of retaining the ability to reopen licenses to modify dam operations if justified by reliable data on climate change factors.<sup>4</sup>

The Federal Power Act (FPA) and the National Environmental Policy Act (NEPA) require that federal agencies must meaningfully “evaluate the impact of climate change on a project...” This has been upheld by the federal courts.<sup>5</sup> The FPA requires FERC to describe any “known or potential adverse impacts...associated with the...operation”<sup>6</sup> of the dam.

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<sup>2</sup> “Changes include increased stability of WSEs (decreases in frequency, duration, and range of impoundment WSE fluctuation), and changes in flow and velocity through the impoundments.” (Revised Amended Final License Application, Exhibit E, January 2024, Section 3.3.1, p. 20).

<sup>3</sup> USGCRP, 2023: Fifth National Climate Assessment. Crimmins, A.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, B.C. Stewart, and T.K. Maycock, Eds. U.S. Global Change Research Program, Washington, DC, USA. <https://doi.org/10.7930/NCA5.2023>. November 2023. Figure 2.8.

<sup>4</sup> Eagle Crest Energy Co., 153 FERC ¶ 61,058 (2015)

<sup>5</sup> See *Aqualliance v. U.S. Bureau Reclamation*, 287 F. Supp. 3d 969, 1031 (E.D. Cal. 2018); *Wild Fish Conservancy v. Irving*, 221 F. Supp. 3d 1224, 1233-34 (E.D. Wash. 2016).

<sup>6</sup> 18 C.F.R. § 5.6(d)(3)(i)(C)

We request that FERC use the NEPA process to obtain information about the relationship between climate change and the proposed dam operations as part of relicensing. This request aligns with previous instances when FERC has included terms in dam relicenses that require the dam operators to annually consult with listed stakeholders regarding climate change impacts on dam operations.<sup>7</sup>

Climate scenarios must be based on current state-of-the-art climate models, such as those used by the United Nations' Intergovernmental Panel on Climate Change. GRH must annually report on:

1. How predicted increased flows will be handled.
2. River levels that might be reached during intense storm events predicted by climate models.
3. How release of water from all the hydroelectric as well as flood control dams will be coordinated to minimize flooding and other adverse impacts.
4. What riparian communities can expect in terms of flooding and drought.

This report will be used to inform landowners, municipalities and other stakeholders along the river where flowage rights exist of what to expect, based on the most up-to-date climate modeling, so they can plan and prepare.

Therefore, we respectfully request that each of the license permit applications include a condition that they remain open in order to address climate impacts.

**4. Establish a Revenue-Sharing Commitment.** Under the public trust doctrine, the State holds title to submerged land under navigable waters in trust for the benefit of the public. The public should benefit by sharing in the profits generated for use of our public trust resource by GRH. We expect that the anticipated Mitigation and Enhancement Fund (MEF) outlined in **Section 5** will be funded by revenues generated by this Commitment.

The FLA does not address many of the real costs borne by local communities and landowners in unwilling service to a private enterprise whose profits derive from its use of our public resource. Investors in GRH benefit from recent sweeping changes to the tax code which increases their profits, while citizens of New Hampshire and Vermont riverfront communities struggle to pay some of the highest electrical rates in the country, which likely will increase even further. These high electrical rates are a major impediment to local economic development. The public is the largest stakeholder in this project, but currently stands to receive the least economic benefit. In fact, the FLA as proposed does not even cover the public costs of these facilities.

We respectfully request that the license permit applications include a condition that establishes a Revenue-Sharing Commitment and designates a group of stakeholders to negotiate the details. As a preliminary recommendation, we suggest GRH make an annual contribution of at least one million dollars and 2% to 5% of its annual profits to support the MEF.

*Comments.* This concern and request are exemplified by the reluctance of TransCanada, GRH's predecessor-in-title, to compensate municipalities for the assessed values of dam properties or expenses related to their operations. TransCanada's challenges of local property tax assessments, required expenditures by the municipalities to defend. No private business should reasonably expect to

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<sup>7</sup> See J. Curtis Idaho Aviation Found., 175 FERC ¶ 62,001 (2021); Pac. Gas & Elec. Co. Nev. Irrigation Dist., 177 FERC ¶ 61,111 (2021)

operate rent-free on a publicly-owned property. These licenses grant GRH monopolistic revenue-generating use of the river, a public trust resource, over the next 30 to 50 years. In the proposed FLA riverfront communities do not adequately benefit from the generation of electricity on their river.

The lease of the State-owned Sunapee Ski Area to a private enterprise is a precedent for revenue-sharing agreements between the State and a private company for the use of a publicly-owned resource. The Fifteen Mile Falls Settlement Agreement in 1997 is also an appropriate and specifically relevant precedent where a portion of the revenue generated from hydroelectric generation on the river is designated for public use.

**5. Establish a Mitigation and Enhancement Fund (MEF).** As “use” of the river for power generation continues along with adverse impacts, we respectfully request that a Mitigation and Enhancement Fund be established that, at a minimum, compensates for foreseeable and unforeseen future impacts that are not mitigated by other license conditions. GRH is profiting from use of a public resource and offers operational changes as “the major enhancement and mitigation element” (FLA, p. 2; Revised Amended FLA, Exhibit E, January 2024, Section 2, p. 24). This change offers avoidance and minimization of impacts, not enhancement nor compensatory mitigation.

To compensate for unavoidable adverse effects, GRH needs to establish a MEF that will be used to mitigate adverse impacts and enhance river-related activities that would likely flourish in the absence of hydroelectric production. MEF awards will go to communities and organizations undertaking protection and restoration efforts.

*Comments.* Previously, the CRJC was involved with relicensing the Fifteen Mile Falls hydroelectric facilities on the northern reach of the Connecticut River, resulting in the establishment of a \$18 million Connecticut River Mitigation and Enhancement Fund (with those funds provided by the licensee). This fund has been a major asset for the northern reach of the Connecticut River and adjacent New Hampshire and Vermont communities and should serve as a precedent for this Project.

In the FLA, filed in December 2020, GRH proposed a few specific recreational enhancements but did not propose a mitigation fund. Afterwards, ArcLight-backed GRH conveyed their operating portfolio to Hydro-Quebec in 2022, after owning them for only six years.<sup>8</sup> Consequently, Hydro-Quebec had no input into the applications. So, at this time, we now call upon Hydro-Quebec to concur with the establishment of a MEF to compensate for their use of the river which will cause unavoidable adverse impacts on public interests.

It is anticipated the MEF will be used for projects that are not addressed and funded by other permit conditions. Potential project types include:

- a) update or establish watershed management plans for the river corridor, water quality, and recreation;
- b) protect and improve habitats for fish and wildlife in the contributing watershed;
- c) monitor fish populations;

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<sup>8</sup> <https://enerdatix.com/blog/renewable-energy-m-and-a-arclight-backed-great-river-hydro-sells-589-mw-operating-portfolio-in-new-england-to-hydro-quebec-for-2-billion/>

- d) protect, re-connect and restore floodplains
- e) remove dams on tributaries;
- f) monitor and document invasive species, conduct public education, and eradicate the invasive species where feasible;
- g) establish and plant riparian buffers on suitable sections of riverbanks;
- h) conduct a comprehensive economic assessment of the impacts due to dam operations;
- i) establish accessible recreation facilities such as docks, picnic sites, boat launches, trails for marine patrol, hikers, bikers, and walkers that improve access and enjoyment of the river;
- j) protect and interpret early American and Native American assets in the vicinity of the river;
- k) provide public education about natural resources and wise use of the river and nearby lands;
- l) cleaning up debris; and,
- m) augment emergency patrol services.

We respectfully request that the license permit applications include a condition that establishes an MEF. The establishment of this fund is supported by New Hampshire Fish and Game, and other stakeholders.

**6. Support Recreational Enhancements.** Required project mitigation should fund additional initiatives to increase public engagement with the river through the creation and improvement of accessible walking trails, boat launches, and river access opportunities. The 2013 Connecticut River Recreation Management Plan documents these needs and opportunities.

Both FERC and the Army Corps of Engineers adopted these plans to establish the long-term recreational goals and propose implementation strategies to adopt them. Those recommendations are not acknowledged in the 2020-FLA. The years of work and investment by stakeholders on this mutually agreed upon management plan should be the guidance document of recreational enhancement.

*Comments.* Use of the Connecticut River has substantially evolved over the last 50 years, and more change can be expected over the next 50. Recreation will continue to be a primary objective of many river stakeholders and the renewed licenses need to accommodate that expectation.

**7. Prepare a Toxic Substances Management Plan.** Because the towns of Charlestown, Norwich, Lyme and other riverfront towns withdraw municipal drinking water from an aquifer under the river, toxic substance management is of vital concern. Additionally, subsistence fishing by lower income residents, among others, along the river needs to be protected. We respectfully request that FERC require each of the licenses include a *Toxic Substances Management Plan*, acceptable to stakeholders, which provides for the funding of studies, plans, and mitigation measures for mercury and other toxic substances. As an example, measures need to be drafted to address bio-accumulation of mercury in fish in the project area.

*Comments.* CRJC recommends the monitoring for toxic substances in the water, fish, and sediments, within the impoundments and free-flowing reaches of the project areas and inform the public about the results.

**8. Establish a Capital Reserves and Investment Fund.** GRH acknowledges that “[t]here would be significant costs involved with decommissioning the projects and/or removing project facilities” (FLA, p. 691). CRJC believes it is imperative that GRH establish a long-term escrow fund to ensure the facilities have adequate capital on-hand to reinvest into the facility to address the known and future improvement needs of these man-made facilities which have real, known anticipated lifespans. This Capital Reserve Fund would serve towards the renovation and/or replacement of these facilities as expected over the course of this license and allow for the dams to be decommissioned and dismantled if they become obsolete.

As many dams built in the early/mid-20th century come up for their 2nd or 3rd FERC relicensing, it is imperative that the financial and operational structure of these new licenses be informed by regional and national case studies that address the true long-term costs of these facilities. If these costs are allowed to be externalized by the facility owner and operator, the impacts will continue to be unduly borne by the general public. The inevitable reality of significant future costs was ignored by the original project licensing. It would be irresponsible for FERC to grant another 30- to 50-year license that does not adequately allocate funds and protective measures for the now-known and likely future costs.

We respectfully request that each of the license permit applications include a condition that requires the establishment of a capital reserve and investment fund for normal wear-and-tear and decommissioning, and proof of adequate insurance coverage for catastrophic property damage (e.g., by earthquakes or terrorist acts).

*Comments.* Neither the States of New Hampshire and Vermont, nor riverfront towns should be liable for the cost of impoundment mitigation/removal and river restoration efforts should the dams fail or outlive their usefulness.

GRH needs to provide a financial assurance plan, including a draft of the financial assurance mechanism (e.g., bond, standby trust), to ensure funds are available for maintenance and eventual decommissioning of the dams.

## **9. Summary**

We understand operational changes of the hydroelectric facilities in conjunction with climate change and many other known and unknown factors will affect communities along the Connecticut River for many decades. Therefore, the Connecticut River Joint Commissions recommends that the forthcoming renewal licenses for the dams at Wilder, Bellows Falls, and Vernon include conditions that require Great River Hydro/Hydro-Quebec (or its successors) to: 1) document environmental impacts, 2) address potential climate change impacts, 3) establish a revenue-sharing commitment, 4) establish a revenue-sharing commitment, 5) establish a Mitigation and Enhancement Fund, 6) support recreational enhancements, 7) prepare a toxic substances management plan, and 8) establish a capital reserves and investment fund.

We appreciate your consideration of these comments and strongly encourage you to contact either of us. Finally, we understand that CRJC will have a further opportunity to review and comment on the draft environmental impact statement and we will do so at that time.

Sincerely,



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