



June 6, 2019

Low Impact Hydro Institute
329 Massachusetts Ave
Suite 6
Lexington, MA 02420

Re: Proposal to Expand Eligibility for New Construction

To Whom it May Concern:

The Connecticut River Watershed Council, Inc., doing business as the Connecticut River Conservancy (CRC), is a nonprofit watershed organization that was established in 1952 as a citizen group to advocate for the protection, restoration, and sustainable use of the Connecticut River and its four-state watershed. CRC has an interest in protecting environmental values that directly and indirectly support the state, regional, and local economies and quality of life of the Connecticut River. In that capacity, we routinely participate in the relicensing of the multiple hydro-electric facilities that exist in the Connecticut River watershed.

We will address the questions presented in the proposal individually below:

1. Should LIHI change the cutoff date for new dams or diversions?

The Low Impact Hydro Institute's (LIHI) website indicates that "LIHI's mission is to reduce the impacts of hydropower dams through incentives." The proposal to expand eligibility for new construction flies in the face of that mission and CRC is opposed to this change.

LIHI's Proposal to Expand Eligibility for New Construction states:

"LIHI's current facility age restrictions limit eligibility to (1) incremental efficiency improvements made at existing facilities constructed prior to September 1998 and (2) new facilities built on existing nonpowered dams. *This limitation was adopted to avoid LIHI's Certification program becoming an incentive or support for the construction of new dams.*"
[emphasis added]

It seems that the existing eligibility criteria have been successful in creating a disincentive for the construction of new dams. Expanding the eligibility for new dams or diversion construction contradicts this effort, undermines the reason for LIHI's creation, and provides an incentive for the development of new impoundments.

LIHI standards indicate that Low Impact is defined by all of the following:

- Water quality supportive of fish & wildlife resources and human uses
- Safe, timely & effective upstream and downstream fish passage
- Protection, mitigation & enhancement of the soils, vegetation, & ecosystem functions in the watershed

- Ecological flow regimes that support healthy habitats
- Protection of threatened and endangered species.
- Avoidance of impacts on cultural and historic resources
- Recreation access is provided without fee or charge

Any new impoundment would therefore not fall under the definition of Low Impact because any new impoundment would cause degradation to water quality, fish passage, ecosystem function, ecological flows, recreation access, and species. To that end, it is unconscionable that LIHI certification be expanded to include the construction of new dams or diversions.

LIHI states that "The proposal is based on the understanding that unless we reconsider the vintage date criteria for eligibility, LIHI Certified® hydro will become a rapidly decreasing resource..." The organization's need to create additional projects to sustain its existence is not justified. CRC is challenged to understand how "LIHI Certified® hydro will become a rapidly decreasing resource" when the eligibility allows for "incremental efficiency improvements made at existing facilities constructed prior to September 1998 and new facilities built on existing non-powered dams." It is imperative to continue to incentive additional incremental efficiency improvements on all existing dams as well as incentivize any new hydro facilities to be developed on already existing impoundments. There are plenty of opportunities for both. Additionally, current LIHI certified facilities will continue to require a re-certification process to maintain that status. The LIHI Handbook already indicates that, "Facilities that do not involve a dam or diversion are not subject to the August 1998 construction date limitation" so any innovations in hydro power production that do not involve impounding a waterway with a dam or diverting flow should be eligible for LIHI certification, thereby supporting the existence of the organization. LIHI certification standards should continue to be improved to move all existing facilities to be more responsive to ecological concerns and to continue to iterate technological and operational processes to increase that responsiveness. If we reach the point where no process improvements can be made, then it is a good thing that LIHI has put itself out of business!

2. Is five years an appropriate timeframe to understand a new dam or diversion's impacts?

CRC contends that five years is not enough time to understand a new dam or diversion's impacts. Given the FERC licensing process, studies that might be done in the consideration of a new impoundment would not assess ecosystem issues that result from the new dam until 30 to 50 years after the license is issued when studies are conducted for the subsequent relicensing. While studies done in the licensing process for a new dam or diversion might provide a baseline understanding or data collection before the new facility is built, a five year period after that issuance would not be enough time to consider impacts. Even if the design and plan of the new dam or diversion included considerations for LIHI certification, the execution of those considerations would need to be tested over a longer period of time to justify the issuance of the LIHI certification.

The FERC process can be fraught with delays. Even during the course of a relicensing process, when multiple studies are conducted to attempt to understand impacts of dams, often a five year period is not enough time to conduct appropriate and comprehensive studies given the variability of storms and unexpected circumstances. Additionally, given variability in species life cycles, it seems absolutely untenable that one could understand the effect of a new dam in a five year period.

3. Should the new date be a specific date or rolling as suggested in the proposal?

As indicated, CRC objects to the change of the cut-off date. Given LIHI's consideration of this change CRC would prefer to see a specific date set as opposed to a rolling date. We understand that allowing

for an incremental change of 5 years in the cut-off date may increase the ability to incentivize upgrades at facilities constructed between 1998 and 2003, but would suggest that any new dam or diversion developed after 2003 would not provide a period long enough to assess project affects.

4. Should other eligibility requirements be adjusted?

CRC would encourage the removal of the following statement from the LIHI Eligibility Requirements: "Hydropower facilities at dams or diversions that have been reconstructed at the site of a previously existing dam may be considered for Certification on a case-by-case basis." With the increase in dam removals there will be more and more "previously existing dam" sites. CRC is concerned that this statement would encourage the re-development of previous dam sites. Additionally, there are no standards developed to define what exactly is being considered on a "case-by-case" basis to determine eligibility. This statement provides an opportunity for arbitrary and capricious decision making.

5. How should an applicant demonstrate net benefit to resource values?

Without profoundly defining the standards for what a net benefit would mean, one cannot imagine how any additional new impoundment or dam could provide a net benefit to a resource. Even given the example of basin scale planning, the ensuing benefits of a multi-stakeholder restoration effort should not be credited to the development or removal of one facility.

6. Does the definition of Net Benefit (page 42 of 2nd Edition Handbook) need to be adjusted?

Our objection to this proposal notwithstanding, yes, the definition of "Net Benefit" should be adjusted *even if this proposal is not adopted*. The current definition is not quantifiable and does not adequately define cause and effect in any scientific manner. Any attempt to demonstrate net benefits to resource values should only be done in the context of a required adaptive management program over an extended period of time to prove that there *actually has been* a benefit to the resource based on technological improvements or mitigation measures. CRC proposes that the definition of net benefit be changed to provide comprehensive quantifiable standards for what a "net benefit" would actually be.

CRC is grateful for the opportunity to comment on the governing board's proposal. We object to the proposal to expand eligibility to new construction and would encourage LIHI to continue to pursue and strengthen its mission to reduce the impacts of hydropower dams.

Sincerely,

A handwritten signature in black ink that reads "Kathy Urffer". The signature is written in a cursive, flowing style.

Kathy Urffer
River Steward