



March 25, 2019

Proposal to Expand Eligibility for New Construction

Introduction:

At the December 2018 meeting, LIHI's governing board approved a proposal to consider changing the eligibility for newer dams and diversions. 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 in both the voluntary market and in some state compliance (RPS) markets.

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 non-powered dams. This limitation was adopted to avoid LIHI's Certification program becoming an incentive or support for the construction of new dams.

The Green-e and EPA GPP programs, which require LIHI Certification for hydro to qualify in their programs, allow new hydro generation built on existing impoundments on a rolling 15-year date (e.g., projects 15 years old or newer). Several state RPS programs also limit eligibility to newer projects only.

Advancements are being made in the design of new dams and diversions, designs that push the traditional understanding of a hydro dam and its impacts. Through support of the US Department of Energy and entrepreneurs, technology is being developed that could restore ailing river systems or otherwise improve river environments while providing additional hydropower supply.

LIHI's research on new hydro construction found that very few new dams or diversions have been constructed since 1998, about a dozen in total, suggesting that LIHI is not driving interest in new construction.

Regardless of the limited number of facilities that have been built since 1998, and because of advancements being made in hydropower technologies, LIHI believes it is important to consider updating eligibility in order to remain relevant to voluntary programs and some state programs. States that include a cutoff date for dams in their RPS programs would not be affected. The proposal would move the LIHI eligibility cutoff date forward while allowing for a reasonable time period to identify post-construction and operational project impacts, while keeping with LIHI's commitment to safeguard riverine systems. Since LIHI's current criteria do not directly address new construction activities, it is important that a project have a track record of operations before being considered for Certification.

Proposal:

Summary: New dams and diversions that provide a net benefit to resource values will be eligible if the dam or diversion has been constructed and in service for 5 years or more (on a rolling basis).

Proposed Handbook Edits:

(Highlighted text is new.)

2. ELIGIBILITY REQUIREMENTS

2.1.1 Existing and New Facilities

“Existing” hydropower facilities, meaning those that have powerhouses located at existing dams or diversions and that were generating electricity as of August 1998 **five (5) years prior to the date of the initial application**, are eligible to apply for LIHI Certification. “New” hydropower facilities, meaning those that added a new powerhouse at a previously non-powered dam or one that increased power generation capacity **after August 1998**, are also eligible for LIHI Certification, if the dam or diversion structure associated with the facility was in existence **in August 1998 at least five (5) years before the application date**. **For dams or diversions built after August 1998, the dam or diversion must provide a net benefit to resource values.**

New hydropower facilities that are eligible at existing dams include those that have added generating equipment, made efficiency upgrades to existing equipment, or otherwise increased generation, provided that the added or increased generating capacity meets the following requirements:

- New capacity was created by modifications or additions to the existing facility (e.g., modifications or additions to the existing dam, intake structure, or powerhouse) and did not include any new dam or other diversion structure;
- New capacity did not result in a change in water flow through the facility that worsened conditions for resources assessed by LIHI criteria (for example, operations did not change from run-of-river to peaking); and
- New capacity did not occur at an existing dam that had been recommended for removal or decommissioning by a resource agency. Exceptions may be considered but only when it is shown that the changes in the facility resulted in improvements to resources assessed by LIHI criteria, especially those issues raised in removal recommendations.

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.

2.2 Facilities Not Eligible for LIHI Certification

The following types of hydropower facilities are not currently eligible for LIHI Certification:

- Facilities associated with dams that have been recommended for removal by a resource agency. If a natural resource agency has concluded that a dam should be removed and has documented their recommendation in an official, publicly available report or proceeding, the hydroelectric facilities associated with that dam are not eligible for LIHI Certification and owners of those facilities should not apply;
- Hydropower facilities that are located at a dam or diversion that was constructed **after August 1998 within five (5) years of the application date**, or that would require construction of a new dam or diversion that does not currently exist.
- Pumped-storage hydropower facilities;
- Hydropower facilities located outside of the United States; and
- Facilities located in marine environments or using hydrokinetic hydropower technologies.

Request for Comments:

Specifically, LIHI would like feedback on the following questions:

1. Should LIHI change the cutoff date for new dams or diversions?
2. Is five years an appropriate timeframe to understand a new dam or diversion's impacts?
3. Should the new date be a specific date or rolling as suggested in the proposal?
4. Should other eligibility requirements be adjusted?
5. How should an applicant demonstrate net benefit to resource values?
6. Does the definition of Net Benefit (page 42 of 2nd Edition Handbook) need to be adjusted?

Comments should be submitted in writing via email to comments@lowimpacthydro.org by May 31, 2019. Please put "Comments on New Construction Eligibility" in the subject line. Written comments can also be submitted to the LIHI office at 329 Massachusetts Ave, Suite 6, Lexington, MA 02420.