LOW IMPACT HYDROPOWER INSTITUTE

THE CLEANIE AWARDS WINNER 2018

July 25, 2019

VIA EMAIL – DOER.RPS@mass.gov

John Wassam
Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02214

RE: RPS Class I and Class II Regulations

Dear Mr. Wassam,

Thank you for the opportunity to comment on the proposed changes to the Massachusetts Renewable Portfolio Standard (RPS) Class I and Class II regulations (225 CMR, the "Regulations"). **These comments are focused on the proposed change to hydropower's RPS qualification**, but we recognize the extensive work that the Department has put into a thorough update of the regulations overall. For the reasons set out below we oppose the change in regulations regarding hydropower but acknowledge and understand the desire to ensure the Commonwealth's regulations are as efficient and effective as possible.

Hydropower plays a key role in the Commonwealth's clean and carbon free energy goals. Hydropower is a reliable, carbon-free generator and can provide storage capabilities that help to integrate intermittent renewables into the New England grid. At the same time, hydropower affects the public waterways on which they are built by impacting fish habitat, ecosystems, water quality, flows and the ability for the public to recreate. Some of these impacts are positive, such as creating and supporting recreation economies in rural Massachusetts. Yet some are negative, such as severely limiting fish migration opportunities. For these reasons, in 2008 the Commonwealth took an innovative and effective step by granting renewable energy credits and the accompanying revenue, only to hydropower owners that meet key environmental requirements as evidenced by Low Impact Certification. The forethought demonstrated by the Commonwealth ensures hydropower projects remained economically viable while protecting and investing in our dynamic, fragile ecosystems. This approach earned the broad support of Massachusetts' environmental community and has been a model used by other states.

When the Department adopted Low Impact Certification by the Low Impact Hydropower Institute (LIHI) as demonstration of meeting the environmental requirements laid out in the Green Communities Act of

2008 (GCA), it turned to a professional, independent, cost-effective organization whose own criteria were paraphrased in that statute. In doing so, the Department entered into a public-private partnership that ensured it could thoroughly achieve the legislation's requirement that hydropower meet "appropriate and site-specific standards that address adequate and healthy river flows, water quality standards, fish passage and protection measures and mitigation and enhancement opportunities in the impacted watershed,"[1] without having to hire staff with hydropower expertise, dedicate time and resources to developing criteria, and conducting comprehensive reviews for hydropower facilities, not only in Massachusetts, but throughout New England, New York and the mid-Atlantic area.

The Low Impact Certification program was originally developed over a period of three years with public comment periods, multiple in-person workshops and significant volunteer time from environmental and industry experts. The result was the establishment of the Low Impact Hydropower Institute as a non-profit organization to oversee and manage the national certification program. We began with one certificate in 2000. Over the next 19 years we have grown to 143 active certificates in 23 states, representing over 230 powerhouses and 15 million megawatt hours of annual generation. So far, we have issued 29 certifications in Massachusetts representing 65% of Massachusetts' eligible hydropower. To date, we have certified 40% of New England's eligible hydropower. At any given moment, we have an average of 25 applications in process. We employ 2.6 staff members and 7 independent consultants to review the applications, provide yearly reviews, and consult with prospective and active certificate holders. Precious staff time is often dedicated to educating hydropower owners about their regulatory obligations and the importance of staying in compliance, not only with LIHI criteria but also with their own federal licenses or exemptions. An application can take 50 hours of dedicated staff time from first consultation to final decision. As a nonprofit organization, we are able to keep costs low by being dedicated exclusively to evaluating the environmental stewardship of applicants and keeping fees aligned with actual costs, not profit. Critical to the integrity of the program are reviews conducted annually during each certificate's five to ten-year term. These are conducted by LIHI staff who have extensive experience with hydropower operations, Federal Energy Regulatory Commission (FERC) processes and resources, and connections with stakeholders, state and federal agencies across the country.

The RPS was originally conceived to promote the development of new renewable energy sources. When, in 2008, there was industry desire to recognize pre-existing hydropower as an important part of a carbon-free future in Massachusetts, there was opposition by environmental organizations to providing a reward for hydropower facilities regardless of their impact on the environment. This is why the environmental community negotiated with the hydropower industry to craft a program that would both provide important revenue to hydropower, while also encouraging active investment in Massachusetts' (and New England's) precious rivers. For over a decade, the inclusion of LIHI certification, including annual reviews and periodic renewals, has formed the basis of hydropower in the RPS. The environmental community strongly supports the continued inclusion of current and valid Low Impact

[1] Massachusetts General Laws, Chapter 25A, sections 11F(c) and 11F(d).

Certified hydropower in the RPS, as evidenced by their collective sign-on letter, which at last count included 26 organizations.

The Department was forward thinking in its adoption of the third-party Low Impact Certification as a way to streamline state processes, provide assurance of environmental requirements, and significantly reduce costs to Commonwealth taxpayers. As the manager of the Low Impact Certification Program, LIHI remains ready to assist the Department in making sure that the process is as efficient, effective, and low-cost as possible. In fact, part of our management structure includes a team of hydropower owners and operators who have achieved Low Impact Certification. This voluntary team provides valuable feedback on improvements, enhancements, and services provided by LIHI that will support the hydropower industry. For instance, in response to industry feedback that the application process was taking too long, LIHI reduced typical application processing from an average 135 days in 2017 to an average of 111 days (16% reduction) during 2018 and 2019[2], and reduced the maximum processing time by 32%. We also improved our website and outreach to include more transparency on the status of pending applications. In a further demonstration of our commitment to incorporating stakeholder feedback, the governing board at its quarterly meeting on July 18th, unanimously adopted a motion to create an ad hoc committee comprising New England hydropower owners, NGOs, board members and others. The committee's charge will be to solicit stakeholder input from around the country on ideas to improve the program, including ideas like extending the certificate term, and to make a proposal for changes at our annual meeting this fall. That work will begin this summer.

LIHI is active within the hydropower industry and the environmental community – providing a unique bridge between these two often disparate communities. The Low Impact Certificate program is now recognized globally as well as nationally for its clear, independent information regarding hydropower. In fact, the Low Impact Certificate program information has been a critical element in multiple Department of Energy research efforts[3] whose goal is to increase the amount of installed low impact hydropower in the US – understanding the critical role hydropower plays in our carbon-free future.

In the course of our research and discussions with industry, environmental groups and the Department, we have encountered some common misunderstandings:

Misunderstanding number one is that a valid license from FERC is tantamount to meeting the standards of Low Impact Certified hydropower. FERC has licensed ten of the 29 projects that are Certified in Massachusetts. Eighteen projects are FERC exempt and one is FERC non-jurisdictional. That means that less than half of the projects qualified in the RPS today will ever receive an additional regulatory review of their facilities or operations. When FERC does have jurisdiction, hydropower facilities only undergo relicensing every 30 to 50 years, typically. Furthermore, FERC's role in relicensing is to balance the needs

[2] From Intake phase through full review and preliminary decision, including the 60-day public comment period, but not including the 30-day appeal period which follows preliminary decision.

[3] Esther S. Parish, et al., 2019. Review of environmental metrics used across multiple sectors and geographies to evaluate the effects of hydropower development. Applied Energy Vol. 238:101-118. LIHI also participates in multiple DOE supported Mission Advisory Boards at Oak Ridge National Labs regarding hydropower development.

of resource agencies, such as US Fish and Wildlife, with energy needs and operator costs. While Low Impact Certification states clear objectives for achieving environmental protections, FERC merely balances environmental improvements with costs and energy needs. In the case of the Coosa Hydroelectric project, whose FERC-issued license was overturned by the 2nd Circuit Court of Appeals for having disregarded environmental science, even this balance was not achieved.[4]

Misunderstanding number two is that, "capital investments to achieve low environmental impact will likely be completed during the first LIHI certification process and recertification generally ensures operational compliance."[5] Whether hydropower meets the definition of Low Impact is dependent upon both the physical attributes of the facility **and the ongoing operations of that facility**. The majority of our Certificates are issued with conditions. Sixty-five percent of our recertifications are issued with new conditions as compared to the original certification. Some of these conditions pertain to capital improvements, others to operational expectations. These conditions allow hydro owners to achieve Certification while making continuous strides to improve their operations. Stated differently, if a hydropower owner is taking active and meaningful steps to achieve 100% compliance with our Criteria, LIHI will consider those present and future actions enough to grant Certification, conditionally. Without the expectation of ongoing reviews and recertifications, Low Impact Certification cannot be granted or maintained.

The final misunderstanding is that self-certification is sufficient to ensure continuous adherence to Low Impact standards. Although LIHI originally contemplated annual self-certification, the original task force (made up of environmentalists as well as hydropower industry representatives) agreed that third-party verification was critical. As stated earlier, 65% of our recertifications contain new conditions that are monitored on at least an annual basis. This demonstrates that circumstances, owners, operations, and ecosystems change over time and must be assessed by personnel with the time and expertise to do so.

Maintaining active Low Impact Certification is cost-effective, reliable assurance that hydropower is meeting the requirements of the Green Communities Act. We are concerned that the proposal to eliminate the requirement to maintain an active LIHI Certification undermines the program's integrity and will unleash distrust between industry and environmental groups that undermines the goals of the Green Communities Act at a time when we all need to work together to achieve the goals of the Act, the Global Warming Solutions Act, the Clean Peak Standard, developing storage solutions, and reaching a carbon-free grid. We ask that the regulations regarding hydropower's qualification do not change.

All of us at LIHI are available and eager to assist the Department in reaching its goals. In fact, we appreciate the opportunity this process has created to reengage our stakeholders in a dialogue that we are confident will improve our program overall. It is our sincere hope that we can work together to ensure cost-effective and continual assurance of environmental standards without undermining and undervaluing the full scope of Low Impact Certification. We are proud to be partners with the

[4] https://www.cadc.uscourts.gov/internet/opinions.nsf/8CE28752AC62F25A852582C200528B2B/$file/16-1195.pdf
[5] Report, page 26

Department on hydropower and look forward to continuing our work together to support hydropower in the Commonwealth and throughout the region.

Sincerely,

Shannon Ames
Executive Director
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