



June 7, 2019

Grand Riverkeeper Labrador, Inc.
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AOP1E0

To: Low Impact Hydropower Institute
Comments on Low Impact Hydropower Institute's proposal to Expand Eligibility for New
Construction

To Whom it May Concern:

Grand Riverkeeper Labrador, Inc. (GRK) notes with interest your March 26th, 2019 proposal to Expand Eligibility for New Construction. We also note that a few years ago, there was a movement underway to possibly include Canadian hydro projects in your certification scheme and in fact, it is our understanding from reviewing comments written by Phil Raphals of the Helios Centre in Montreal, that the Low Impact Hydropower Institute (LIHI) has been and still is considering this possibility. For this reason, we feel we absolutely must warn of possible issues with your proposal that we feel will adversely affect us here in Labrador and in fact, the whole group of Canadian Hydro Provinces and Canadian Hydro Projects.

GRK has for many years been actively involved in trying to stop the construction of two large dams on the Grand (a.k.a. Churchill) River in Labrador. One of those dams is now nearly complete, the Muskrat Falls dam. The other (Gull Island) has already undergone an environmental assessment and is being seriously considered as soon as Muskrat Falls is complete. Most of the power from these two dams is for export to the United States. (Muskrat Falls is 824MW and Gull Island is 2300 MW)

We at GRK understand that as of now, it would not be possible for environmentally damaging projects like these mega-hydro types to receive certification as green energy from most sources including LIHI. However, we are concerned that should LIHI change their eligibility criteria to allow certification of NEW PROJECTS after only 5 years of operation, move into certification of Canadian dams, and then possibly change some of it's current criteria, it is conceivable that LIHI could certify these very damaging projects, and, as stated in Revision 2 of your Handbook, the

damage caused by building them is not accounted for in the LIHI criteria at the moment. See quote below:

Similarly, the current LIHI criteria are not yet considered sufficient to evaluate facilities involving construction of new dams or diversions, pumped-storage facilities, or new facilities using marine and hydrokinetic technologies; therefore, those types of facilities are ineligible for certification at this time.

However, we are concerned that the next section of that same paragraph could indeed make it possible that mega hydro projects in Canada might be considered for certification. See quote below:

At a future date, the Governing Board may revise the current eligibility provisions to allow these types of hydropower facilities to apply and the Handbook would be revised to reflect such programmatic changes, with public input.

We believe this would be a huge mistake, as many dams currently under construction and proposed here in Canada may fall into this category. More green incentives for hydropower projects of the size and type that are proposed and being built in Canada currently seems to us to be in direct opposition to the stated purpose of the Institute which is “to reduce the impacts of hydropower dams through incentives,” and historically, to offer those incentives only to projects already built at the time the Institute was formed.

We believe that unless LIHI changes its criteria to take into account the detrimental environmental, cultural and social effects of the construction of any new or 5 year old projects, and considering the numerous new scientific documents currently available on the many and various negative impacts to these areas, that people in the US and Canada would likely lose confidence in the certification process of LIHI.

One of the most significant impacts of the Muskrat Falls project is mercury contamination downstream of the dam, due to flooding of biomass. To the best of our knowledge, there is nothing in the LIHI criteria that would address this type of impact. Another major issue for us here in Labrador is the fact that the current proponents Nalcor and the Newfoundland and Labrador Government are using a natural spit of land that is fraught with layers of leda clay (quick clay) that is prone to liquify under pressure or when saturated with water. Again, to the best of our knowledge, there is nothing in the LIHI criteria that would address this type of impact either.

As you may or may not know, as many as 6 transmission lines are currently proposed by Hydro Quebec to bring power from the Canadian Border into various northeastern States. In many cases the power projects were built expressly for export to the US and more projects will likely be proposed.

As you likely know, massive numbers of new hydro projects are being proposed and/or are currently under construction in Canada. Here is an example article from a site called Hydro Vision International:

<https://www.hydroworld.com/articles/hr/print/volume-36/issue-10/cover-story/hydropower-across-canada.html>

Hydropower Across Canada

12/01/2017

By [Elizabeth Ingram](#)

Managing Editor



Canadian Spotlight

Canada still has significant untapped hydro potential, and this article provides insight into eight projects that are being built or are planned for future construction across the country. An impressive number: The work in this article represents more than US\$33 billion of investment.

By Elizabeth Ingram

The article goes on to list each Province where new projects are proposed or under construction.

Another article from Hydro Vision International has this to say:

Building for the future

Canadian industry observers and regulators forecast continued expansion of hydropower. Population and economic growth will drive the demand for new capacity. At the same time, aging electricity generation facilities will need to be refurbished or replaced. Canada is not constrained for opportunities to expand the industry. In fact, the needed investment will underpin economic activity in the years to come.

The Canadian Hydropower Association estimates that Canada has an additional 163,000 MW of technical potential, more than double the current installed capacity of 74,000 MW. Developers across the country have about 25,000 MW of projects that are planned or under construction. <https://www.hydroworld.com/articles/hr/print/volume-31/issue-1/article/hydros-strong-future-in-canada.html>

[There are various other articles that are worrying in that many are claiming hydroelectricity is the answer CO2 emissions from other forms of energy when we all know that even hydro projects emit CO2 as well as Methane which is far more damaging to climate than even CO2.](#)

Canada, and its Crown Corporations, have their eyes set on being the Climate Change savour for the entire North American Continent at the peril of our last remaining wild rivers. We here in Canada, cannot let that happen without a strong resistance and our neighbours to the south have committed to this resistance alongside us.

“Net Benefit to Resource Values”???

We find the statement that “the dam or diversion must provide a net benefit to resource values,” both vague and confusing and wonder whether it wouldn’t be more appropriate to state that since ecosystems, and especially riverine watershed ecosystems, are fundamental to life on earth and provide goods and services that are essential to human well-being, including their role in helping human populations mitigate and adapt to climate change, that the dam or diversion, in order to qualify, must ensure ecosystem service values are taken into account as part of a thorough cost and benefits analysis before it is built? This of course, would be pertinent only if LIHI decided at some point to actually change the criteria for qualification of newly built dams which we have already stated we disagree with. Since we are confused about the meaning “net benefit to resource values” this suggestion may not replace this section, however, we believe it should be an essential part and in fact, the “gold standard” for any certification of a hydro project as green energy should your decision be to move forward on certification of new hydro projects which again, we have outlined our reasons why we believe this would not be the right decision.

For all of the environmental, social and cultural reasons mentioned above and in the following articles, we believe that any changes to eligibility that allow projects to be built and then certified with some small changes that may create a “net benefit to resource values” whatever that means, after only five years of operation, without considering the original construction and impoundment or diversion of the project, would do nothing to bolster the mission and original purpose of the Institute and that LIHI would be subject to criticism from affected communities and environmental groups if projects with so many detrimental local effects were to be offered incentives for minor improvements and ultimately be awarded green certification.

Following are links to several recent statements pointing out the unsustainable nature of hydropower imports from Canada. If LIHI begins certifying new hydropower plants in Canada (even with a 5-year delay), it will become an enabler, an inappropriate role for it in our opinion.

<https://www.sierraclub.org/massachusetts/canadian-hydropower>

<https://vtdigger.org/2018/08/13/environmentalists-power-massive-canadian-dams-isnt-renewable/>

<https://commonwealthmagazine.org/opinion/sierra-club-fires-back-on-quebec-hydro/>

<https://www.theglobeandmail.com/report-on-business/rob-commentary/quebec-is-facing-its-own-dirty-energy-problem/article27502571/>

https://sierraclub.bc.ca/wp-content/uploads/Hydro_Bill_Madness_SCBC_Report.pdf

<https://nsadvocate.org/2019/05/15/people-from-labrador-florida-and-nova-scotia-rally-at-embra-shareholders-meeting-in-halifax/?fbclid=IwAR3IghSqUFEvEQ17TPyuyv71ksfReC2f58S5pziQs5QjTvD2MyuqEsVOM>

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<https://thetyee.ca/News/2018/01/24/Megadams-Not-Clean-Green/>

No doubt we could fill up dozens of pages with links to groups/scientists/experts etc. opposed to mega hydro. However, that is not our intention.

As it stands now, your original idea of certifying projects that were already built before 1998 as they change their operations for the better is a commendable mandate and we applaud your efforts.

Our intention here is to inform you that should you consider expanding eligibility for new construction and then moving into the Canadian market to certify new hydro projects after they have been operating for only 5 years, without completely changing the qualifying criteria to consider the effects on marine and freshwater ecosystems, the social impacts and the economic impacts on the most vulnerable people, mostly Aboriginal people, along with the global effects of over 60,000 huge hydro projects, it is our opinion that you will meet with much opposition. We therefore recommend that you proceed with care and stay true to your original mission to reduce detrimental effects of “existing hydro” projects without offering incentives to newly constructed dams which likely will not be built in the United States, but, is extremely likely, under the current political situation, to be built in Canada, and in fact, several are currently under construction (Quebec, Manitoba, British Columbia, Newfoundland and Labrador), with massive efforts to export that power to the United States, leaving us to question the real reason why LIHI may be considering these changes at this time.

We appreciate the opportunity to comment on your proposal to expand eligibility for new construction in the hydro field and hope our comments have answered most of the 6 questions you proposed and that they will be of help in making your decision.

Sincerely,

Roberta Benefiel, Riverkeeper and Director