January 5, 2019

Low Impact Hydropower Institute 329 Massachusetts Avenue, Suite 2 Lexington, MA 02420 Via email: comments@lowimpacthydro.org Attention: Shannon Ames, Executive Director

Re: Request to Appeal LIHI Recertification Decision of the "Beaver River Hydroelectric Project"

Dear Ms. Ames,

This letter is my request to appeal LIHI's preliminary determination that the Beaver River Hydroelectric Project qualifies for recertification. The reasons I am requesting an appeal are stated below.

## LIHI's Certification Criteria do not take into account Beaver Lake resident's concerns.

LIHI's certification criteria do not address Erie's impacts on watersheds and shorelines not "associated" with Erie's facilities. The term "associated" in Criterion "E" "Shoreline and Watershed Protection" means "lands under the 'ownership and control' of the applicant." (Erie) The residents of the lake own the shoreline and submerged lands of Beaver Lake so their concerns about effects of Erie's operations on Beaver Lake are not reviewable under LIHI's Criterion "E".

LIHI's preliminary determination reviewed the residents' comments under LIHI criterion "A" "Ecological Flow Regimes". LIHI's goals and standards under Criterion "A" only require that Erie's releases from the Moshier power plant support healthy fish and wildlife resources and habitat. The LIHI decision incorporates Beaver Lake in Zone of Effect, Zone 3 (the tailrace below Moshier) and applies Standard A-2 "Agency Recommendation" to the lake. Standard A-2 can be met by "site specific science based agency recommendations" on fish and wildlife resources. This means the residents' concerns about lake levels and shoreline protection will only be addressed under Criterion "A" if federal and state agencies conclude that Erie's releases from Moshier adversely affect fish and wildlife resources of the lake.

## **Beaver Lake residents are not represented on the Beaver River Advisory Council (BRAC).**

BRAC was established through the offer of settlement for the Beaver River project now operated by Erie under FERC No. 2645. BRAC is required to keep abreast of changing conditions that may affect river flows and Erie's management objectives. BRAC administers a fund disbursed by majority vote of its members for the purposes, among others, of ecosystem restoration and protection.

The current membership of BRAC does not include any Beaver Lake residents.

The Town of Watson, a current member of BRAC, does not represent the residents of Beaver Lake. Though the residents pay real estate taxes to the Town, the Town has no municipal power under the New York Town Law to represent the private property interests of its taxpayers on BRAC.

Nor do the residents have a voice on BRAC through a "Beaver Lake Association" or "Property Owners Association". No such Association, incorporated or unincorporated, has ever existed as a representative of Beaver Lake residents. The BRAC letter of April 27, 2001 to Mr. Henry Schaab of Lowville "c/o Beaver Lake Property Owners" is not evidence that an Association existed.

Consequently, the recommendation in the LIHI decision that Erie consult with BRAC and government agencies to discuss resident concerns about the causes of fluctuations of water levels in Beaver Lake will leave the residents out of the discussion unless BRAC wishes to include them.

## LIHI's preliminary decision does not resolve the problem of high water levels in Beaver Lake.

The LIHI preliminary decision states that the causes of fluctuation in Beaver Lake levels are unknown. It then suggests that releases from Stillwater might provide valuable information concerning lake levels. Continuing in this vein, the decision compares Stillwater levels and Beaver River flows at Croghan and suggests increased flows after the FERC license was issued are due to wetter weather.

The USGS study referenced in LIHI's decision contained a staged discharge analysis of Moshier Reservoir releases on Beaver Lake. The analysis concluded that Moshier Reservoir's releases were not a likely cause of the flooding of Beaver Lake "during significant run off events or rainy seasons" and that historically there appeared to be a trend of increased annual discharges in the Beaver River between 1960 and 1999 which indicated more rain in the basin and hence more flooding.

However, the USGS study also measured the effect of discharges from Moshier by comparing the discharges with Beaver River flows below the confluence of Beaver Lake and Alder Creek. These measurements are shown in the following table:

<u>Moshier Release (CFS)</u>		<u>USGS Measurement (CFS)</u>
Bypass	45	171
1 Turbine	360	552
2 Turbine	660	630

At the time these measurements were taken, the USGS measured lake elevations at its outlet. According to the USGS, a Moshier release of roughly 350 cfs translated into a rise in lake levels of approximately 8 inches and when both generating units at Moshier were operating at full capacity, the lake rose 15 inches. This indicates that discharges from Moshier significantly influence Beaver Lake levels during normal weather.

Whether high lake levels have risen due to climate change and/or Erie's operations at Moshier was not resolved in the LIHI decision. Climate

data and Erie's operations at Moshier should have been examined to avoid speculations about lake level changes.

## LIHI should have requested more data from Erie before certifying the Beaver River Project.

After receiving the comments from 14 Beaver Lake residents and Erie's response to those comments, LIHI referred Erie's application to an outside evaluator for review. The reviewer was confronted with questions about high water levels he could not answer because he did not ask Erie for the relevant data. Instead, the reviewer's decision referred these questions to BRAC. The result is that Erie's project flows at Moshier have been prematurely certified by LIHI as an environmentally compliant operation.

The evaluator should have postponed his decision until Erie had supplied him with the data needed to understand the causes of abnormally high water levels in Beaver Lake.

**The Remedy Requested.** Since LIHI's mission is to reduce the environmental impacts of hydropower generation, it should request all of the information relevant to LIHI's evaluation of Erie's project. Erie has data stored in its SCADA logs of Moshier operations and can readily access PRISM Climate data to determine the impacts of project flows in Zone 3.

At this point, LIHI's preliminary decision should be stayed until Erie provides this information.

Sincerely,

s/ Edward D. Earl

Edward D. Earl