

August 27, 2025

Ms. Debbie-Anne Reese, Esq.
Secretary Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426



Via online submission to: <http://www.ferc.gov>

Subject: Further Comments on Additional Information Requests (AIRs) Regarding Relicensing of the Ripogenus Project (P-2572) and the Penobscot Mills Project (P-2458)

Dear Secretary Reese,

Maine Council of Trout Unlimited ("TU") submits these comments regarding the July 28, 2025 response submitted by Brookfield Renewable U.S. (Brookfield) for Great Lakes Hydro America, LLC to your Issuance of February 28, 2025. As previously stated, TU continues to have the serious concerns that we stated in the Non-government Organization's letter of March 21, 2025 that additional AIRs and further additional studies will be required for the project to meet FERC information requirements and be Ready for Environmental Analysis (REA).

Draft Operations and Compliance Monitoring Plan. Is inadequate and needs to include additional features.

Page 5. Brookfield "proposes to provide a minimum flow of 100 cfs downstream of Ripogenus Dam into the bypassed reach (Upper Gorge) from July 1 through September 30 annually, released through the manually operated sluice gate at the north end of the dam." This leaves Ripogenus Gorge dewatered except for leakage flows for nine months out of the year. The summer "fishing" flows use the warmest water from Ripogenus-Chesuncook-Caribou Lake, waters measured by TU observers at 77 degrees in August of 2025. This temperature is unsuitable for the salmonids that are the object of fishing in that reach. The 100 cfs does not offer a paddling opportunity and does little to nothing to restore the aesthetics of the gorge that higher flows would provide. It does not provide a buffer for the lethal low flows caused by the generator trip events that Brookfield continues to be unable to prevent with resultant mortality to fish and macro-invertebrates, primarily to young-of-the-year landlocked salmon, the species that is Maine's state fish. The most recent of these events occurred on June 19, 2025, and these events continue to occur on an average of once a year. Provision of the flow on a seasonal basis fails to provide additional macroinvertebrate habitat that would improve the greater fishery. Higher flows from a colder water source are needed to provide a more consistent fishery, provide paddling opportunities, and improve the aesthetics so marginalized by the current provision of leakage flows nine months out of the year and only 100 cfs in July, August and September. Request minimum flows of 300 cfs in Ripogenus Gorge and the installation of continuous water temperature monitors (data loggers set at a maximum of one hour recording intervals) be installed below McKay Station and in Ripogenus Gorge below Ripogenus Dam, maintained and data shared at the end of the water year each year (October) to insure the Ripogenus Gorge outlet flows are of comparable thermal quality to the McKay Station releases.

Page 5 (continued). Brookfield “proposes to provide a minimum flow of 1,700 cfs (not including the seasonal minimum flow into the Upper Gorge) year-round downstream of McKay Station (see Table 3-1.1) released through the turbines at McKay Station, unless the station is unavailable during which time the flows will be provided by manually opening gates at Ripogenus Dam.” This proposal in itself is without merit as it will only serve to deplete the Ripogenus-Chesuncook-Caribou Lake of its water by late summer in many years forcing reductions in flows when stress to the fisheries habitat downstream is at its highest point unless Brookfield is limited from going to above 3000 cfs (three generator operation) by other operational restrictions. The NGOs offer 1500 cfs as a more realistic minimum flow. In the event that flows through McKay Station during maintenance cannot provide the required minimum flow, the difference in flows will be released from Ripogenus Dam and have comparable water temperatures as water being released from McKay station.

Page 6. “Consistent with current operations, during sustained adverse or low water years/conditions, operation of the Ripogenus Project may require modifications to the proposed minimum flows (i.e., 100 cfs seasonal bypass flow or 1,700 cfs minimum flow). As further described in the LIP provided in Attachment 1, in response to sustained adverse or low water years/conditions, GLHA proposes to coordinate with the applicable resource agencies (i.e., MDEP, USFWS, and MDIFW) to modify the downstream flow requirements in order to balance resource interests.” Brookfield should consult with the agencies listed and Maine Council of Trout Unlimited, American Whitewater, and the Caribou and Chesuncook Lake Camp Associations under the circumstances described. NGOs are included in many other projects, and their participation is especially important for the Ripogenus Project.

Page 9. TU acknowledges and appreciates Brookfield’s offer to include Ripogenus-Chesuncook-Caribou Lake levels in the Safe Waters online system.

The draft is less specific than provisions of the Final License Application (FLA) and fails to include features that are required to guide the conduct of future operations.

Ramping Rates. No mention has been made of incorporation of ramping rate changes despite Ramping Study data that shows that abrupt changes in flows strand fish. It would be in the best interest of the resource if flows where are not increased or decreased any more than 25% of prior flow level in any one hour.

Flow gage. TU asks that a flow (and water temperature) gage be installed at a location to be determined between McKay Station and Telos Bridge. Given the wide gaps that continue to exist between Brookfield and the stakeholders, and Brookfield’s continued refusal to consider any but their predetermined scheme for future project operations that this be ordered to be accomplished as soon as practicable. Issues like the June 19, 2025 trip event are problematic for FERC to investigate properly due to lack of a flow gage and Brookfield’s inability to provide actual flow data. This also limits the accuracy and credibility of Brookfield’s Ops Model.

Adaptive management. Given that climactic conditions have changed over the last five years, and some change to project operations will be required to be implemented, such as fill by lake elevations and dates, maintain until levels and dates, and minimum drawdown, TU proposes that a mechanism be

established including the operator, agencies and other stakeholders to evaluate the effectiveness of whatever the terms and conditions are for the new license five years after issuance of the new license and every five years thereafter.

Rule Curve. The FLA states that Brookfield proposes to: “operate and maintain the Ripogenus impoundment pursuant to the system-wide rule curve.”¹ TU points out that that this rule curve is identical to the curves generated by the Ops Model runs, and should be an enforceable part of future license terms and conditions. The FLA also includes: “Continue to operate the Ripogenus Project for generation and seasonal storage and maintain Ripogenus impoundment elevations pursuant to the existing systemwide rule curve for the West Branch system.”² If this is how the lake levels are controlled, then this should be an enforceable provision of the new license. Changes to North Twin flow requirements will decrease water demands from the Ripogenus Project reducing the need to release higher flows from the Ripogenus Project.

Additional concerns remain. Until the requests for actions requested below, especially, Ops Model runs incorporation this pending request:

“modify Scenario 26 as follows:

- Eliminate 3,000 cfs flow from North Twin
- Remove the dry years including 2021, 2001, 2002, 2016, 2004, 2020 and 2015 from the simulation calculations. “

information needs will continue to exist regarding how best to conduct project operations.

New license terms and conditions will need to include more specific lake levels and dates that additional Ops Model runs may serve to inform.

Draft Low Inflow Protocol. Is inadequate as well and requires modification.

TU assumes that the new license will include provisions for lake levels and the dates associated with them. Currently, TU continues to support:

- 940.1’ or above by May 10th, 940.1’ or above by June 1 with monthly withdrawals not to exceed 1 foot throughout the recreational season
- Maintain to 935.6’ until October 15th
- No lower than 925.1’.

TU assumes that there will be some form of correction to the dewatering of Ripogenus Gorge for nine months out of the year and watering it in July, August and September with a minimal flow of 100 cfs from the sluiceway with the warmest water in the Ripogenus Lake. Whitewater recreational releases into Ripogenus Gorge are also likely to be included. In dry years like the current one that occur 3 out of every ten years, it will not be possible for the operator to meet all the relicensing lake level and flow conditions and Brookfield acknowledges this on page 4 and in Figure 3 of the draft plan.

¹ Final License Application dated September 30, 2024, Volume 1, Exhibit E, page E-154.

² Id., Exhibit D, Table 4.2-1, page D-3.

Page 5 of the draft plan 5.0 Modifications of Required Flow does not provide for a mechanism that involves the stakeholders:

“Based on the drought status, inflow forecasting, and available system storage using the methods described above, minimum flows and/or recreational boating flows may be modified if required by hydrologic conditions beyond the control of the licensee and upon mutual agreement between the licensee, USFWS, MDEP, and MDIFW. If the flow is so modified, the licensee shall notify FERC as soon as possible, but no later than 10 days after each such incident, together with the record of agency consultation.”

This is unacceptable as Brookfield can change the flow regime without consulting the stakeholders.

TU proposes that:

All scheduled, non-emergency flow deviations must be of mutual agreement between the Licensee, MDEP, MDIFW, and USFWS with advance notification and consultation with TU, American Whitewater, Caribou and Chesuncook Lake Camp Associations and AMC.

This type of provision has been acceptable to Brookfield for other projects.

Draft Recreational Management Plan. TU will be a signatory to a joint NGO filing.

Draft Eel Management Plan. The plan does not go far enough in addressing eel passage. The new license will be for a term of 40 years. The historical range of American eels was state-wide, and an American eel was observed stranded below McKay station during the Ramping Study conducted in 2024. Video documenting this is provided as Attachments A and B which are provided as separate files.³

Page 7, Penobscot Mills Project. The draft plan states:

“Implement upstream passage measures at the East Millinocket and Dolby Developments within 2 years of new license issuance and at the Millinocket Lake Storage Development within 5 years of new license issuance.” And goes on to say:

“Study upstream American eel passage at the East Millinocket, Dolby, and Millinocket Lake Storage Developments for up to 2 years following upstream American eel passage implementation.

More specific objectives for the Plan will be developed after the issuance of the new license.”

This provision will only result in endless delays such as those that have occurred with the Medway Project. Eel passage at North Twin Dam is not addressed and should be included. TU proposes implementation of Eel passage at North Twin within 3 years of the issuance of the new license.

Page 8, Penobscot Mills Project. The plan also proposes to “provide downstream passage for adult silver eels at the East Millinocket and Dolby developments within 20 years following new license

³ Todd Mercer videos taken below McKay Station, July 17, 2025.

issuance.” This should also be as soon as possible after license issuance (i.e. within 3 years) and the plan to require Brookfield get approval from the resource agencies on all passage measures. The relicensing studies demonstrated again that some portion of juvenile eels are able to migrate upstream of all of the projects, except Ripogenus which was not assessed.

Ripogenus Project eel passage is not addressed. TU proposes implementation of upstream eel passage within 5 years of the issuance of the new license. American eels have been documented in the West Branch Penobscot River by: the video documentation that TU obtained,⁴ fish assemblage studies during the previous relicensing of the projects,⁵ and surveys by the Midwest Biodiversity Institute.⁶ The sluiceway may provide an easy way to implement this.

Historic Properties Management Plan, Loon Management Plan, Wildlife Management Plan or Shoreline Management Plan. TU has no comments on these drafts at this time.

Summary of Requests.

Draft Operations and Compliance Monitoring Plan - Ripogenus Project

- Amend the plan to include 300 cfs minimum flows for a colder water source into Ripogenus Gorge.
- Install water temperature loggers below McKay Station and in Ripogenus Gorge to insure the Ripogenus Gorge outlet flows are of comparable thermal quality to the McKay Station releases. A permanent flow/water temperature gage may replace the logger below Ripogenus Gorge when implemented.
- Install a permanent flow/water temperature gage at a location between McKay Station and Telos Bridge as soon as practicable.
- Implement ramping rates for McKay Station flows requiring that flows are not increased or decreased at any more than 25% of prior flow level in any one hour.
- Require that in the event that flows through McKay Station during maintenance cannot provide the required minimum flow, the difference in flows will be released through from Ripogenus Dam and have comparable water temperatures as water being released from McKay station.
- Include provisions for adaptive management: periodic review of the effectiveness of the flow and lake level provisions of the new license.

⁴ Ibid.

⁵ Federal Energy Regulatory Commission (FERC). 1996. Final Environmental Impact Statement Upper Penobscot River Basin Maine, Ripogenus Hydroelectric Project (FERC No. 2572) and Penobscot Mills Hydroelectric Project (FERC No. 2458). Federal Energy Regulatory Commission, Public Reference and Files Maintenance Branch, Washington, DC.

⁶ Federal Energy Regulatory Commission (FERC). 1996. Final Environmental Impact Statement Upper Penobscot River Basin Maine, Ripogenus Hydroelectric Project (FERC No. 2572) and Penobscot Mills Hydroelectric Project (FERC No. 2458). Federal Energy Regulatory Commission, Public Reference and Files Maintenance Branch, Washington, DC.

Draft Low Inflow Protocol - Ripogenus Project

- All scheduled, non-emergency flow deviations must be of mutual agreement between the Licensee, MDEP, MDIFW, and USFWS with advance notification and consultation with TU, American Whitewater, Caribou and Chesuncook Lake Camp Associations and AMC.

Draft Eel Management Plan – Penobscot Mills Project

- Implement Eel passage at North Twin Dam as soon as possible after license issuance (i.e. within 3 years).
- Provide downstream passage for adult silver eels at the East Millinocket and Dolby developments as soon as possible after license issuance (i.e. within 3 years).

Draft Eel Management Plan – Ripogenus Project

- Implement Eel passage at Ripogenus Dam within 5 years of the issuance of the new license.

Summary of Prior Requests.

Based on the information presented above, the NGOs request that FERC:

- We support the Camp Owners' request to modify Scenario 26 as follows:
 - Eliminate 3,000 cfs flow from North Twin
 - Remove the dry years including 2021, 2001, 2002, 2016, 2004, 2020 and 2015 from the simulation calculations.
- Conduct an independent analysis of the Ops Model runs including an Operations Model error analysis. TU and the other NGOs are unable to do this using the proprietary CHEOPS and we are not resourced to conduct one ourselves.
- Request Brookfield to provide a Low Water Plan that uses lake levels to adjust flows. 1700 cfs minimum flows will result in the inability of the operator to provide required flows in low-water years.
- Request Brookfield to redo the Wadability/Fishability study to include flows of up to 1000 cfs.
- Request Brookfield to redo the Fish Stranding Mitigation Study Report that includes measures to reduce the severity of the well-documented fish kills that occur upon generator trip events, including restoring a dam keeper at McKay station, providing 400 cfs buffering flows into the gorge from a cool water source, automate some of the gates at Ripogenus dam and install redundant power lines from McKay Station to Millinocket or other grid access point.

- Request Brookfield to redo the Fish Stranding Mitigation Study and at least comment on TU's proposals to install a dam keeper and run 400 cfs cold water buffering flows in the gorge.

- Request Brookfield to provide the data basis and calculations used to derive the 350 cfs estimate of the July 17, 2025 trip event flows.

Additionally, TU requests that Brookfield make an earnest effort to include analysis that informs the full range of operating parameters for the projects in its remaining reports.

TU reiterates the requests the NGO's jointly stated in their last joint filing that Brookfield:

1. Find a technical solution that avoids low flows occurring with generator trip events and provides the water from a coldwater source
2. Establish an appropriate flow regime below Stone Dam
3. Establish lake levels that support recreation, wildlife and fisheries both on the lakes and downstream , using lake levels successfully modelled in the Operations Model run labeled "RipNTwinElevLev3MinInst" (pg. 302) in the May 29, 2025 AIR response.
4. Respond to changes to recreational use of West Branch resources
5. Determine the feasibility of preferred flow and lake level scenarios through Ops Model runs that respond to stated parameters.
6. Determine economic tradeoffs for the full range of flow options for both Ripogenus/McKay Station and Stone Dam.

Very respectfully submitted,



Stephen G. Heinz
Maine TU Council FERC Coordinator

Attachments:

- A. Movie file Eel Movie.mpg
- B. Movie file Fullpoolpan.mpg

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File [B - Fullpoolpan.mpg] cannot be converted. (File extension 'MPG' is not supported)

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