

EDERAL ENERGY REGULATORY COMMISSION
Washington, D. C. 20426

OFFICE OF ENERGY PROJECTS

Project No. 2572-148 – Maine
Ripogenus Hydroelectric Project
Great Lakes Hydro America, LLC

August 27, 2026

VIA FERC Service

Randall Dorman
Senior Compliance Manager
Brookfield Renewable, N.A.
460 Civic Center Drive
Augusta, ME 04330

Subject: Additional Information Request-Whitewater and Minimum Flow Deviation on
July 27, 2026 – Article 402

Dear Mr. Dorman:

On July 31, 2026, you notified the Commission of a whitewater and minimum flow deviation from the requirements of Article 402 which occurred at 3:02 p.m. on July 27, 2026, at the Ripogenus Hydroelectric Project No. 2572.¹ The project is located on the West Branch of the Penobscot River in Piscataquis County, Maine.

Background

Article 402 of the license requires you to, in part, provide whitewater recreation flows from May 1 through September 15 between the hours of 8:30 a.m. and 5:00 p.m. In a normal hydrologic year (such as 2026), the required minimum flows are 2,300 cubic feet per second (cfs) on Saturdays and Sundays, 2,200 cfs on Mondays and Fridays, and 2,000 cfs on Tuesdays through Thursdays. Additionally, Article 402 requires minimum flows of 1,000 cfs between the hours of 5:00 p.m. and 8:30 a.m. from June 8 through October 14, plus short-term outage flows of at least 400 cfs during generating unit failures at McKay Station. These minimum flows must be the flows for each hourly

¹ Order Issuing New License (77 FERC ¶ 61,066), issued October 22, 1996.

period (measured based on an hourly average), and any modifications from these flow requirements must be reported to the Commission within 10 days of the incident.

Deviation Event

The July 31, 2026, filing states that on July 27, 2026, the McKay Station tripped offline and flows from the project dropped below the required minimum flow of 2,200 cfs for whitewater recreation for one hourly period, and below the 1,000 cfs minimum flow that immediately followed that day's whitewater recreation flow for one additional hourly period. You reported average hourly flows of 648 and 610 cfs respectively during these two hourly periods. You state that although normal outflows were disrupted by this event, the automated minimum flow release system at McKay Station functioned normally and prevented deviation from the Article 402 outage flow requirements. The filing included a graph showing the change in flows over time.

You identified the cause of the outage as a fault on the project transmission line² due to a broken cross-arm on the structure. You state the cross-arm failed due to age-related internal deterioration within the member, which was not externally visible and which you did not identify during the most recent inspection of the transmission line. The operator dispatched local operations staff to the project who, upon arrival found and reported a small fire caused by the transmission line fault. The fire was extinguished by the Maine Forest Service and local fire department crews during the evening of July 27, 2026.

You state you promptly dispatched local operators to the project, who checked and secured McKay Station and then proceeded to Rigpogenus Dam. At Ripogenus Dam, operators performed public safety checks and activated the siren warning system. Technicians opened two crest gates at the dam at 6:06 p.m., to resume normal flows to the West Branch of the Penobscot River. You state that you have expedited repairs to the project transmission line, which were completed by July 29, 2026, and McKay Station was brought back online by 6:00 p.m. that day.

You state that you did not conduct any field surveys downstream of McKay Station during this event, as staff were addressing the fire, securing McKay Station, and restoring river flows. You stated you assumed the effects to aquatic life in the West Branch of the Penobscot River were consistent with effects observed during an October 2022 simulated station trip, however you provided no detail on what you assumed those affects to be or the extent of fish stranding or mortality.

Public Comments

² According to the most recently approved Exhibit A (176 FERC ¶ 62,072 issued August 10, 2021), the project includes a 29.4-mile-long transmission line.

Since your July 31, 2026, filing, we have received multiple comments from the public regarding the environmental effects, including fish and aquatic macro-invertebrate kills associated with the deviation. The comments stated the outage was first reported at the Big Eddy after 4 p.m. on July 27, 2026, which the commenter believes would have been prevented had emergency flow measures at the McKay Station and or Ripogenus Dam been implemented. The commenter provided a photograph of fish killed during the event. Commentors stated flows dropped almost instantly from approximately 2,400 cfs to approximately 450 cfs and remained at that level for more than 2 hours. The sudden dewatering stranded juvenile fish along the riverbanks, and calculations filed by Trout Unlimited estimate that the event may have killed thousands of fish. Commentors also noted this was not an isolated incident, as another in event in July 2023 at the same facility left the West Branch of the Penobscot River virtually dry for more than 4 hours. Another commenter stated good Samaritans helped fight the wildfire until the Maine Forest Service arrived.

Additional Information Requested

In order to complete our review of the July 31, 2026, filing, we require the following additional information to be filed within **60 days** of this letter:

1. A description of the environmental effects. While your report explains why you did not immediately inspect the affected area after the deviation, you do not indicate if you inspected the affected area in the immediate aftermath of the deviation. Members of the public and local news agencies reported that numerous fish were killed, and other evidence of adverse environmental effects associated with the deviation were observed. Provide additional information regarding any post deviation inspection of the affected area, your assumed environmental effects, the extent of fish stranding, and actual or assumed number of fish killed by the event. You must also provide the Commission with any information that has been reported to you by outside parties regarding the incident and observed effects. Additionally, you must address the mortality estimates described by Trout Unlimited. Do you agree or not agree with their estimates?
2. You must consult with Maine Department of Inland Fish and Wildlife, Maine Department of Environmental Protection, and U.S. Fish and Wildlife Service in order to determine if they received any reports of adverse environmental effects associated with this event or whether they conducted any surveys in response to the incident. You must include any information you receive in a report to the Commission.
3. The July 31, 2026, filing indicates the fault on the project transmission line was caused by a broken cross-arm on the structure, and that the cross-arm

failed due to age-related internal deterioration within the member, which was not externally visible and was not identified during the last transmission line inspection. Your filing states that that you began a multi-year project in 2016, to pro-actively replace poles, cross arms, and insulators of the project transmission line.^{3,4} This maintenance program was also put forward in your January 19, 2024, letter as part of your interim plan for aquatic resource protection (Interim Plan).⁵ You have put forward the maintenance program as a measure to improve reliability at the Ripogenus Project in order to prevent outage events, in place of considering whether infrastructure upgrades or operational changes might need to be required in order to avoid recurring outages that cause fish kills. Trout Unlimited points out that you have had 2 recent events caused by deteriorated cross arms on the transmission line in the last 13 months, and this is an issue that dates back more than 10 years. Furthermore, Trout Unlimited stated that you made public statements that you have spent \$3 million dollars on maintenance work to improve reliability. Trout Unlimited contests that absent that information, the public record does not support Brookfield's implicit suggestion that this event reflects a program already addressing the underlying vulnerability, rather than a vulnerability that remains substantially unaddressed after a decade. Therefore, the Commission requires you to address Trout Unlimited's comments and provide an itemized accounting, by location and date, of all transmission-line inspections, maintenance, and rehabilitation work completed since 2016 on the approximately 30-mile transmission line that is part of the Ripogenus Project, together with a schedule and target completion date for any remaining work. Describe any measures you are taking to investigate the remaining crossarms for internal deterioration so that the issue does not repeat itself in the near term.

4. In addition to the transmission line maintenance proposed in your Interim Plan, you also proposed to improve system reliability by implementing a relay coordination study, with the intent being to reconfigure system relays in order

³ The maintenance program was briefly discussed by the Commission in a letter issued August 30, 2016. (Accession Number: 20160830-3011)

⁴ In a May 23, 2016, filing, you stated that June 13, 2015, August 13, 2015, and May 13, 2016, outages at the project each were caused by cross arm failures on the Ripogenus transmission line. As reported on August 24, 2015, you had maintained this transmission line by taking a 10- day outage to replace components identified during a recent inspection. During this 2015 maintenance, you stated that you focused on public safety, and thus prioritized the replacement of poles and cross arm components at all road crossings. To prevent reoccurrence, you proposed that you would, as part of its long-term maintenance strategy for this transmission line, replace more poles and cross arm components in 2016 and future years, as periodic inspections necessitate.

⁵ Accession Number: 20240119-5146

to improve transmission and generation protection. You stated that this would increase the stability and reliability of the system, thereby minimizing outages at McKay Station due to system trips at other interconnected facilities (which typically result from lightning strikes and local utility outages, either of which can “ripple through” your generating stations on the upper Penobscot). You proposed to reconfigure the system relays by March 31, 2024. You also proposed to install a back-up PLC system at McKay Station, by September 30, 2024, which will also improve system reliability and reduce station outages by enabling PLC functions to continue should the primary PLC crash or malfunction. Please provide the Commission with a status update of your implementation of these proposals.

5. Maine TU requested in their August 17, 2026, comments that the Commission direct Brookfield to clarify the source and method of acquiring the flow data represented in the chart and to provide the underlying data itself, not merely a graphic representation of it. Therefore, Commission staff direct you to respond to this comment and provide the data used to produce the graph as well as a description of the source and acquisition method of the data.
6. Provide a response to Trout Unlimited’s request that you be required to install a USGS-standard flow/temperature gage in the Telos Bridge reach below Ripogenus Dam. You must include an explanation for how the current gaging method is reliable and provides the necessary data to ensure compliance with the required flows or why it is not.
7. Trout Unlimited expresses concern regarding the above mentioned graph showing that instantaneous flows dropped below the required 400 cfs outage flow before rising above 400 cfs. Therefore, please explain how delivering the outage flow works and how this aligns with compliance with Article 402.
8. Trout Unlimited and other members of the public commented that outage events happen almost on an annual basis. Some of these events can be addressed through improved maintenance. However, many of them are not events that can be prevented like lightning strikes and car accidents. Regardless, of the cause of the outage, it has been demonstrated by the fish stranding re-licensing study filed on April 24, 2023, and the recent mortality events that the outage flow required by Article 402 does not protect fish and other aquatic organisms from stranding and significant associated mortality. Commission staff, therefore, require you to propose how you will address these significant mortality events related to project operations until such time the Commission issues a new license for the project.

Project No. 2572-148

- 6 -

The Commission strongly encourages electronic filing. Please file the requested information using the Commission's eFiling system at <http://www.ferc.gov/docs-filing/efiling.asp>. For assistance, please contact FERC Online Support. In lieu of electronic filing, you may submit a paper copy. Submissions sent via the U.S. Postal Service must be addressed to: Debbie-Anne A. Reese, Secretary, Federal Energy Regulatory Commission, 888 First Street NE, Room 1A, Washington, DC 20426. Submissions sent via any other carrier must be addressed to: Debbie-Anne A. Reese, Secretary, Federal Energy Regulatory Commission, 12225 Wilkins Avenue, Rockville, Maryland 20852. The first page of any filing should include docket number P-2572-148.

Thank you for your cooperation in this matter. Please file the required responses within **60 days** of the date of this letter. If you have any questions regarding this matter, please contact me at (202) 502-8041 or michael.calloway@ferc.gov.

Sincerely,

MICHAEL
CALLOWAY

Digitally signed by MICHAEL
CALLOWAY
Date: 2026.08.27 12:33:49
-04'00'

Michael Calloway
Aquatics Branch
Division of Hydropower Administration
and Compliance

Document Content(s)

p-2572-148_AIR.pdf.....1