

FEDERAL ENERGY REGULATORY COMMISSION
Washington, D. C. 20426

OFFICE OF ENERGY PROJECTS

Project No. 2284-045 – Maine
Brunswick Project
Brookfield White Pine Hydro LLC

January 3, 2017

Kelly Maloney
Licensing Compliance Manager
Brookfield White Pine Hydro LLC
150 Main Street
Lewiston, ME 04240

Subject: October 15, 2016 Fish Kill Incident, Article 30

Dear Ms. Maloney:

We received your filings of November 7 and December 8, 2016, responding to our information request regarding the fish mortality event that had occurred at the Brunswick Project (FERC No. 2284) on or about October 15-16, 2016. The project is located on the Androscoggin River in Cumberland and Sagadahoc Counties, Maine.¹ We were alerted of the fish kill by the Friends of Merrymeeting Bay (FOMB) in their letter dated October 28, 2016. Their report stated that 500-800 dead river herring were found at the project and at other locations downstream. The injuries to the fish included decapitation, direct strikes, and pressure injuries. The FOMB also observed that planned project maintenance was underway on October 18, 2016 and the project was not operating although the tainter gates were opened. They also noted heavy rain and spillage across the entire dam.

According to your filings, you received notification of the fish kill by FOMB and dispatched your staff to inspect the project on October 16, 2016. Staff observed some fish mortalities in the downstream boat ramp area but not in the tailrace discharge. On October 17, 2016 your staff collected approximately 1,300 juvenile river herring mortalities downstream of the project; however, no active mortality in the turbine discharge was noted. Following these efforts, a conference call was held with the Maine Department of Environmental Protection (Maine DEP) and Maine Department of Marine Resources (Maine DMR) later that afternoon.

¹ Order Amending license and Issuing New Major License. 6 FERC P 61122 (F.E.R.C.), 1979 WL 19901 (issued February 9, 1979).

As a result of the unusually large numbers of juvenile river herring observed during the period, you implemented turbine shutdowns targeting the dusk to dawn hours (7 a.m. to 7 p.m.) beginning on October 17, 2016 for the remainder of the week. Shoreline and turbine discharge surveys were then conducted daily from October 18-23 and no new mortalities were observed. In addition, periodic shoreline and turbine mortality surveys were conducted during the following week with no observed mortalities and therefore, normal project operations were resumed on October 29, 2016. In your discussions with Maine DEP and Maine DMR, it was determined that the juvenile river herring encountered at Brunswick had out-migrated from Sabattus Lake starting on October 8, 2016 when the lake association began its annual lake drawdown. Maine DMR noted that there were approximately 8-10 million juvenile river herring present in Sabattus Lake this year and that a majority likely moved out during the lake drawdown. Under normal conditions, periodic rain and other spill events would move fish out of the lake sporadically; however, river conditions reduced those events this year. Maine DMR suspects that these factors resulted in a large number of juvenile river herring moving out of the lake during the drawdown. You state that no previous reports of similar mortality events have been noted at the project in the past. In summary, your report states that you took appropriate actions to minimize continued mortality once you were made aware of the events taking place. You noted that no further mortalities occurred subsequent to those actions and you continued to monitor the project and downstream areas for the following two weeks and provided weekly passage reports to Maine DEP and DMR. The resource agencies did not file specific comments on this fish mortality event.

Under normal conditions downstream passage at the project is provided via a surface sluice and associated 18-inch pipe that discharges fish into the project tailrace. The downstream fishways are required to be operated from April 1 to December 31 annually, as river conditions allow. Your report noted that the facility was clear of debris and functioning as required during the period. It is apparent that the large release of flows from Sabattus Lake was the primary factor contributing to the mortality of river herring at the Brunswick Project. Along with heavy rain and high river flows, the downstream fish passage facility was overwhelmed resulting in significant passage through the units as well as through the spillway and gates. We agree that your immediate actions were appropriate and likely minimized further mortality once you became aware of the situation. In addition, there have no similar events occurring at the project in the recent past that would suggest problems with the downstream fish passage facility at the project. However, we recommend that you discuss the event with the Sabattus Lake Association to make them aware of the impacts related to the timing of the drawdown and request that any future unusual or large flow releases/drawdowns are communicated to you in order to allow you to implement any preventative measures to minimize fish mortalities at the project.

Thank you for your cooperation and if you have any questions regarding this letter, please contact me at (212) 273-5917 or email at *joseph.enrico@ferc.gov*.

Sincerely,

Joseph Enrico
Aquatic Resources Branch
Division of Hydropower Administration
and Compliance