

December 8, 2016

Secretary Kimberly Bose
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

RE: **Brunswick Project; FERC Project No. 2284**
Brookfield White Pine Hydro LLC

Dear Secretary:

Brookfield White Pine Hydro LLC (BWPH), the licensee for the Brunswick Project, is writing to respond to an October 28, 2016 press release (the "Press Release") filed with the Commission by the Friends of Merry Meeting Bay (FOMB) and a FERC letter dated November 10, 2016 requesting specific information regarding the Press Release. Specifically, FERC's November 10, 2016 letter requests that BWPH provide information on:

- (1) the operational status of the downstream fish passage facility (i.e., whether they were clear of debris on the days in question, whether sufficient attraction flow was available, and whether they were functioning as required);
- (2) project operation before, during, and after the incident including any operational difficulties or abnormal river conditions;
- (3) any observations you have regarding the fish kill, and your conclusions regarding what caused it to occur; and
- (4) any action you took immediately upon learning of the incident.

BWPH previously filed a letter with FERC responding to the Press Release on November 7, 2016; however, this filing will provide some additional clarification on agency consultation and respond to the above information requests outlined in FERC's November 10, 2016 letter.

Event Description and Immediate Actions

On Sunday, October 16, the Brookfield public inquiry phone line received a report from a representative of FOMB regarding some juvenile river herring mortalities observed below the Brunswick Project on Saturday, October 15 and Sunday, October 16. In response, a BWPH river operations crew member visited the site in the early evening of Sunday, October 16, 2016 and observed some juvenile fish mortalities at the Brunswick boat ramp below the Project but did not observe any bird feeding activity or fish mortality in the turbine discharge.

On the morning of Monday, October 17, a BWPH environmental employee contacted Maine Department of Marine Resources (MDMR) personnel about the juvenile river herring mortalities observed below the Brunswick Project. At that time, MDMR indicated that it had already received the same information from a member of the public. This BWPH environmental employee then visited the site and collected approximately 1,300 juvenile river herring mortalities below the Project. No other fish species mortalities were collected and BWPH did not observe any ongoing fish mortality in the project tailrace at the turbine discharge. Based on the information collected that day, BWPH implemented unit 2 and unit 3 turbine shutdowns targeting the dusk to dawn hours (7 p.m. - 7 a.m.) that same evening (Monday, October 17). These shutdowns were implemented for the remainder of the week (through October 22), in an effort to mitigate further mortalities. As described below, unit 1 was already shut down for an annual inspection.

On the morning of October 19¹, BWPH participated in a conference call with MDMR and Maine Department of Environmental Protection (MDEP) personnel to discuss the situation and discuss BWPH's actions to date and intended course of future action.

Shoreline and turbine discharge surveys below the Project were conducted daily throughout the week (October 18 through 23) by BWPH environmental personnel and no new shoreline or turbine discharge mortalities were observed. Periodic shoreline and turbine discharge surveys were also conducted during the following week (October 24 through 31) and no new mortalities were observed.

In its November 10, 2016 letter, FERC requested information regarding station operations before, during and after the incident and the status of the existing fishway. To that end, it should be noted that the facility was experiencing a planned annual outage and associated inspection of its larger, slower running unit 1 on these same dates. Only the smaller, faster running units (units 2 and 3) were alternately operating at 100% gate during this period passing inflow with no spill occurring until the evening of October 17. As described above, BWPH implemented unit 2 and unit 3 turbine shutdowns targeting the dusk to dawn hours (7 p.m. - 7 a.m.) starting on October 17. The shutdowns were implemented for the remainder of the week (through October 22), with Unit 2 and 3 alternately operating during the day. Normal project operations without nighttime shutdowns were resumed on October 23. Concurrently, the existing downstream fishway was clear of debris and functioning, as required during this time period.

Determination of Cause and Unique Circumstances Identified in Discussions with MDMR and MDEP

As noted above, on October 19, 2016, BWPH participated in a conference call with MDMR and MDEP personnel to discuss the situation, BWPH's actions to date, and its intended course of future action. From these discussions, it was discussed that the juvenile river herring encountered at the Brunswick Project were likely fish that had out migrated from Sabattus Lake starting on October 8 when the Sabattus Lake Association released water for the annual lake drawdown. MDMR noted that it annually captures adult river herring from the BWPH Brunswick Project Fishway and transports these fish to Sabattus Lake, which is the largest spawning lake for river herring in the Androscoggin River basin. MDMR estimates that approximately 8 million to 10 million juvenile river herring were present in Sabattus Lake this year and that the majority of them moved out with the discharge of water associated with the annual lake drawdown. Limited rain events, associated drought conditions and low water conditions encountered this year have resulted in reduced periodic spill events at the Sabattus Lake dam that would generally occur under normal conditions. During spill events occurring under normal hydrological conditions, juvenile river herring would leave the lake sporadically in smaller groups throughout the migration season starting in late summer into the fall. Instead, MDMR indicated that they suspected that a very large number of juvenile river herring left the lake at the same time starting on October 8, with the Sabattus Lake Association drawdown event, and arrived at the Brunswick Project later on that week.

BWPH believes that the limited number of juvenile river herring mortalities observed on October 15, 16 and 17, 2016 was a very unusual occurrence due to the unique circumstances described above. BWPH is not aware of any similar fish mortality occurrence reported by the public or observed by BWPH or its predecessor in the past at this Project.

¹ The BWPH letter dated November 7, 2016 mistakenly referred to this conference call as having occurred on October 17, 2016.

Continued Approach

BWPH took immediate action (i.e. dusk to dawn turbine shutdowns during the week of October 17) to minimize the likelihood of continued mortalities and improve downstream passage conditions at the Project and those efforts seem to have been successful as no additional mortalities were observed at the Project. BWPH will continue to provide weekly fish passage reports to the resource agencies and believes that through the actions described above, it is taking diligent and appropriate actions to minimize fish mortalities at the Project.

If you have any questions regarding this filing, please contact Bob Richter at (207) 242-5001 or at robert.richter@brookfieldrenewable.com.

Sincerely,



Kelly Maloney *for*
Manager, Licensing and Compliance

Cc: R. Richter, J.Trudell, A. Zarrella, P. McDonough, S. Michaud; BWPH

J. Enrico. M. Pawlowski, FERC

M. Brown, O. Cox; MDMR
S. Shepard, A. Bentivoglio; USFWS
J. Murphy, D. Tierney, M. Buhyoff; NMFS
K. Howatt; MDEP
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