

May 8, 2019

Cataract Project (No. 2528)
Skelton Project (No. 2527)
Bar Mills Project (No. 2194)
West Buxton Project (No. 2531)
Bonny Eagle Project (No. 2529)
Hiram Project (No. 2530)

Kimberly Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Subject: Saco River Fish Passage Assessment Agreement Amendment for Brookfield White Pine Hydro LLC's Cataract Project (No. 2528), Skelton Project (No. 2527), Bar Mills Project (No. 2194), West Buxton Project (No. 2531), Bonny Eagle Project (No. 2529), Hiram Project (No. 2530).

Dear Secretary Bose:

On behalf of Brookfield White Pine Hydro LLC (BWPH), licensee for the Cataract Project (No. 2528), Skelton Project (No. 2527), Bar Mills Project (No. 2194), West Buxton Project (No. 2531), Bonny Eagle Project (No. 2529), and Hiram Project (No. 2530), attached for filing is the *Amendment No. 2 to Saco River Fisheries Assessment Agreement* (Amendment) dated February 2019.

On March 26, 2007, FPL Energy Maine Hydro LLC, the previous licensee for the aforementioned assets, filed the *Saco River Fisheries Assessment Agreement* (SRFAA) dated February 2007, concerning fish passage and fisheries management at the above referenced projects on the Saco River in southern Maine. The 2007 Settlement incorporated fish passage recommendations and other fisheries management measures agreed to by the Parties and based upon the findings and conclusions of the 2000 – 2005 fish passage assessment report, prepared pursuant to the requirements of the original 1994 Saco River Fish Passage Agreement. Parties to the 2007 SRFAA include BWPH, the National Marine Fisheries Service (NMFS), US Fish and Wildlife Service (USFWS), Maine Department of Marine Resources (MDMR), Maine Department of Inland Fisheries and Wildlife (MDIFW), Saco Salmon Restoration Alliance (SSRA, formerly the Saco River Salmon Club); Atlantic Salmon Federation (ASF); and the Maine Council of the Atlantic Salmon Federation (MC-ASF).

After nearly 22 total years of studies, data gathering, and advancements, the Parties now agree that implementation of the 2019 Amendment will better help to advance fisheries management and fish passage requirements while still satisfying the Licensee's obligations at the referenced projects for the term of the 2007 SRFAA.

With this letter, the Amendment is being submitted to the Commission for approval. All Parties to the SRFAA agree that the Amendment is fair and reasonable, is supported by substantial evidence, and is in the public interest. The Parties agree that implementing the amended

measures to the 2007 SRFAA will satisfy Licensee's fish management and fish passage requirements.

Background

On March 27, 2007, the Licensee filed its 2000-2005 fish passage assessment report and recommendations, as part of a 1994 settlement offer for fish passage and fisheries management. This filing accompanied a comprehensive settlement agreement, the SRFAA, that incorporated the fish passage recommendations and management measures agreed to by the Parties, including state and federal fisheries resource management agencies and NGOs, and consistent with the Section 18 fish passage prescriptions filed as part of the Bar Mills relicensing.

On July 18, 2007, the FERC issued an order (120 FERC ¶1162,050) modifying and approving the Saco River Fish Passage Assessment Report and recommendations for fish passage and fisheries management by incorporating part of the SRFAA into the respective project licenses. To that end, FERC approved the applicable provisions of Section 5 of the 2007 SRFAA as an offer of settlement for the new Bar Mills Project license and incorporated these provisions as enforceable license conditions for each of the other Saco River projects, as applicable. With the new license issued for the West Buxton Project on February 15, 2018, several continuing measures of the 2007 SRFAA were incorporated as license articles and terms and conditions of the requisite Section 401 Water Quality Certification and Section 18 fish passage prescriptions as discussed in greater detail below.

Bar Mills Project

The applicable provisions of the 2007 SRFAA are incorporated into the August 26, 2008 Bar Mills Project license, as follows:

License Article 401 – consistent with the conditions of the Section 401 water quality certification and Section 18 fish passage prescriptions, Article 401 requires the filing of the plans and documentation for upstream and downstream eel and fish passage facilities and effectiveness evaluations. The schedule for submitting the required fish passage plans and documentation was filed with the FERC on March 26, 2009 wherein the 2007 SRFAA is referenced as the source document for the required schedules for fish passage plans and documentation.

Section 401 Water Quality Certification – incorporated by reference into the Project license, the Section 401 Water Quality Certification includes the provisions of the 2007 SRFAA. Condition 4 requires upstream eel passage installed and operational at the Bar Mills Project by June 1, 2014. Downstream eel passage is required to be operational by September 1, 2026 under Condition 5. Condition 6 requires upstream anadromous fish passage facilities to be installed and operational by May 1, 2016 and Condition 7 requires the licensee continue to operate and maintain downstream passage facilities at the Project.

Section 18 Fish Passage Prescriptions – Ordering Paragraph E of the License incorporates the conditions submitted by the NMFS and the USFWS under section 18 of the FPA. NMFS April 13, 2007 and USFWS April 13, 2007 Section 18 fish passage prescriptions dictate that: “fishways and/or fish passage measures shall be implemented, constructed, operated, and/or maintained by the Licensee, or provided for by the Licensee, to provide safe, timely and effective passage for Atlantic salmon, American shad, blueback herring, alewife, and American eels as...detailed in the 2007 Agreement”. Upstream eel passage is required by June 1, 2014 (NMFS Prescription 6.C.1; USFWS Prescription 11.C.1), downstream eel passage is required by September 1, 2026 (NMFS Prescription 6.C.2; USFWS Prescription 11.C.2); a “single permanent upstream anadromous fish passage facility” is required to be operational by May 1, 2016 (NMFS Prescription 6.D.1; USFWS Prescription 11.D.1) and the existing downstream fish passage facilities are required to continue to be operated and tested (NMFS Prescription 6.E; USFWS Prescription 11.E).

West Buxton Project

BWPH proposed to continue its obligations for fish passage as outlined in the 2007 SRFAA as part of its new license for the West Buxton Project, issued by FERC on February 15, 2018. Consistent with the 2007 SRFAA, the 2018 West Buxton Project license has the following obligations for fish passage:

License Article 401 – consistent with the conditions of the Section 401 water quality certification and Section 18 fish passage prescriptions, Article 401 requires the filing of the plans and documentation for upstream and downstream eel and fish passage facilities and effectiveness evaluations. In accordance with Article 401, upstream anadromous fishway designs were required to be filed by January 31, 2019, for facilities operational by May 1, 2020. A request for a one year extension of time to file fishway designs to accommodate discussions leading to the filing of this 2019 Amendment was submitted on January 25, 2019. Downstream eel passage designs are due to be filed by March 31, 2028.

Section 401 Water Quality Certification – incorporated by reference into the Project license, the Section 401 Water Quality Certification includes the provisions of the 2007 SRFAA. Condition 3 requires upstream anadromous fish passage facilities to be installed and operational by May 1, 2020 or otherwise in accordance with the 2007 SRFAA. Downstream eel passage is required to be operational by September 1, 2028 or otherwise in accordance with the 2007 SRFAA under Condition 4.

Section 18 Fish Passage Prescriptions – USFWS December 19, 2016 Section 18 fish passage prescriptions and NMFS October 5, 2017 modified Section 18 fish passage prescriptions dictate that: “Licensee shall install permanent upstream and downstream fishways and/or fish passage measures at this project. These fishways and measures shall be designed, constructed, operated, maintained, and monitored by the Licensee, or provided for by the Licensee. Those fishways shall provide safe, timely, and effective passage for the target species: Atlantic salmon, American shad, blueback herring,

alewife, and American eels during their migration periods. Provisions of this fishway prescription are consistent with the 1994 Saco River Fish Passage Agreement, the 1997 Saco River Instream Flow Agreement, and the 2007 Agreement”. Downstream eel passage is required by September 1, 2028 (NMFS Prescription VII.1.b; USFWS Prescription V.A.1.b); a “single permanent upstream anadromous fish passage facility” is required to be operational by May 1, 2018 (USFWS Prescription V.A.2) and by May 1, 2020 (NMFS Prescription VII.2); and the existing downstream fish passage facilities are required to continue to be operated and tested (NMFS Prescription VII.3; USFWS Prescription V.A.3).

Cataract, Skelton, and Hiram Projects

The July 2007 FERC Order incorporates aspects of the 2007 SRFAA into the remaining projects’ licenses, as follows:

(A) The licensee’s March 27, 2007 filing of the 2000-2005 final assessment report – Saco River fish passage adequately fulfills the reporting requirements under the licenses for the Cataract Project, Skelton Project, Bar Mills Project, West Buxton Project, Bonny Eagle Project, and Hiram Project and is approved. The licensee shall no longer file assessment reports on the need for upstream fish passage.

(B) The licensee’s recommendations for fish passage and fisheries management at the Skelton Project (FERC No. 2527), Cataract Project (FERC No. 2528), Bonny Eagle Project (FERC No. 2529), Hiram Project (FERC No. 2530), and West Buxton Project (FERC No. 2531), as modified by paragraphs (D) through (F) below, is approved.

(C) The licensee shall have both upstream and downstream eel passage operational at the projects by the following dates:

PROJECT	UPSTREAM EEL PASSAGE OPERATIONAL DATE	DOWNSTREAM EEL PASSAGE OPERATIONAL DATE
Cataract-East and West Channel Dams	June 1, 2008	September 1, 2011
Cataract-Springs/Bradbury Dam	June 1, 2010	n/a
Skelton	June 1, 2012	September 1, 2024
West Buxton	June 1, 2016	September 1, 2028
Bonny Eagle	June 1, 2018	September 1, 2030
Hiram	June 1, 2020	September 1, 2032

The licensee shall provide a single permanent upstream anadromous fish passage facility at each of the projects according to the following schedule:

PROJECT	OPERATIONAL DATE
West Buxton	May 1, 2019

Bonny Eagle	May 1, 2022
Hiram	May 1, 2025

The licensee shall notify the Commission within 30 days of each facility being completed and operational. Revised Exhibit F drawings showing each facility as-built shall be filed, for Commission approval, within 180 days of completion of each facility.

(D) The licensee shall develop, in consultation with the U.S. Fish and Wildlife Service (FWS), National Marine Fisheries Service (NMFS), and Maine Atlantic Salmon Commission (MASC), a plan for a three-year study of Atlantic salmon kelts to determine/examine downstream passage routes at select Saco River sites. The plan shall include, at a minimum, the following: (1) a phase one desktop study to determine which project have the most potential to delay/affect kelt passage; (2) a phase two study which focuses on the passage routes at no more than two selected project; (3) conducting the study in the spring (3 months) using 20 to 30 fish per year and yield the equivalent information of a radio-telemetry study. The plan shall include a description of the goals and objectives that are to be met, results to be reported, as well as a schedule for implementing the study. The licensee shall submit the plan to the FWS, NMFS, and MASC by April 1, 2009, and allow the agencies at least 30 days to comment and provide recommendations on the plan. By July 1, 2009, the licensee shall file its proposed plan with the Commission, for approval, and include all agency comments and recommendations and any response comments by the licensee. The Commission reserves the right to require changes to the plan.

(E) The licensee shall conduct a two-year semi-quantitative study of downstream passage effectiveness for clupeids (using, for example, standardized observations, video cameras, and rotary screw traps, or similar methods) at the Cataract Project during the summers of 2007 and 2008; at the Skelton Project during the summers of 2009 and 2010; and sequentially at the West Buxton Project and Bonny Eagle Project beginning the year after 6 adult clupeids per acre of impoundment (approximately 790 fish at West Buxton and 2,080 fish at Bonny Eagle) are passed or stocked above the specific project. Prior to conducting the studies, the licensee shall file a study plan which describes the goals of the study and expectation of results, as well as a description of what is to be included in the summary report to be prepared upon completion of each study. Each study plan shall include a schedule for implementing the study and filing each summary report. The study plan shall be prepared in consultation with the U.S. Fish and Wildlife Service (FWS), National Marine Fisheries Service (NMFS), and Maine Department of Marine Resources (Maine DMR). The licensee shall allow the agencies 30 days to make comments and recommendations before filing the study plan with the Commission for approval. The licensee's filing shall include any comments or recommendations on the plan and the licensee's response to any comments or recommendations received. The Commission reserves the right to require changes to the plan.

(F) The licensee shall conduct an electro-fishing survey of smallmouth and largemouth bass populations in the West Buxton Project impoundment in 2007, in the Bonny Eagle impoundment in 2008, and in the Lake Arrowhead impoundment in 2009, and provide

standard bass population data to the Maine Department of Inland Fisheries and Wildlife and the Commission by March 31, 2008, March 31, 2009, and March 31, 2010, respectively, before introduction of alewife into the impoundment or upstream waters occurs. The sample data provided for each bass survey shall include sample dates and location, habitat type, sampling depth, gear type, time and duration of the sample and prevailing weather conditions. The standard bass population data (population descriptive metrics) reported shall include number of bass collected during the sampling, species (largemouth or smallmouth), catch per unit effort, weight and length, condition factor, and population age structure and growth rates using scale samples for all Age 1+ bass. The licensee shall provide the U.S. Fish and Wildlife Service, National Marine Fisheries Service, Maine Department of Marine Resources, Maine Atlantic Salmon Commission, and MDIFW with numeric abundance data for other species collected during the bass population survey.

Since 2007, the licensee has remained consistent with the Agreement conditions by conducting the various studies outlined in Section 5 of the SRFAA and as required by ordering paragraphs D, E, and F above and by providing funding to various agencies and organizations as described in other provisions within the SRFAA. With respect to the requirements of Ordering Paragraphs D, E, and F of the 2007 FERC Order, the following studies have been completed at the Projects:

Ordering Paragraph D – Atlantic Salmon Kelt Study

On July 2, 2009, NextEra Energy Maine Operating Services, LLC, the previous licensee for the projects, filed its Saco River Kelt Passage Plan, which was approved by FERC on August 18, 2009. The Phase I Study, which discussed the five relevant projects (Cataract, Skelton, Bar Mills, West Buxton, and Bonny Eagle) with regard to their potential for affecting kelt passage considering such variables as location, intake depths, trashrack configurations and dimensions, capacity and operations, was filed with the FERC on January 27, 2011. The goal of the Phase I study was to identify, through site ranking, the most limiting project to be recommended as a field study site, with the assumption that if kelts can pass the most limiting project, passage at other projects would be more successful. The Skelton Project ranked highest among the five candidate study sites, primarily due to lack of spillway passage potential, dam height and the depth of gates.

On July 26, 2011, the licensee filed the Saco River Phase 2 Kelt Passage Evaluation Plan which was acknowledged by FERC by letter dated November 3, 2011. The plan outlined measures for a Phase 2 radio telemetry study of kelt passage routes at the Skelton and Bar Mills Projects to be conducted in 2012. However, due to recurring low returns of adult Atlantic salmon, kelt studies have been indefinitely postponed.

Ordering Paragraph E – Downstream Clupeid Passage

On February 20, 2008, the licensee submitted the 2007 Downstream Passage of Juvenile Clupeids Report at the Cataract Project. Downstream passage of clupeids using underwater video imagery was monitored via the five possible downstream passage

routes at the Cataract Project in 2007 using marked juvenile clupeids. The results indicated that downstream passage for alosine was effective at the Skelton Project and an additional juvenile clupeid downstream passage study at the Cataract Project was proposed. On June 19, 2008, the licensee filed its Juvenile Clupeid Downstream Passage Study Plan with the FERC, which was approved on September 9, 2008, which intended to replicate the video monitoring efforts of 2007 with proposed modifications to the downstream fish passage facility. However, the proposed modifications to the downstream passage facility could not be completed in time for the study and, coupled with high flows, the licensee, in consultation with the agencies, proposed to instead conduct quantitative downstream passage studies at the Cataract Project, the report for which was to be submitted to the FERC on April 29, 2010. This study was attempted in 2010, 2011 and 2012 with various reasons for incompleteness including lack of available prototype tags, extreme meteorological events, and high flows. On March 29, 2013, the licensee filed an update of the requirements of Ordering Paragraph E wherein “the fragile nature of tagging and handling juvenile clupeids combined with site specific challenges at the Cataract Project have provided multiple impediments to the successful completion of the project”. Based on this and “strong suggestive evidence that there is no issue that the Project”, a request to defer further studies was submitted. By letter dated May 13, 2013, FERC acknowledged the repeated attempts at completion and indicated that “despite the fact that you were unable to obtain conclusive data regarding downstream juvenile clupeid passage at the project, you have fulfilled all of the abovementioned (Ordering Paragraph E) requirements”.

Ordering Paragraph F – Bass Population Study

The studies at the West Buxton and Bonney Eagle Projects were conducted in compliance with and conformity to Maine Department of Inland Fisheries and Wildlife sampling and collection protocols and consisted of a habitat survey and an electrofishing survey. The study was undertaken for the West Buxton impoundment in 2007 and at the Bonney Eagle Project in 2008. The West Buxton study report was filed with the FERC on February 12, 2008 and FERC acknowledged that the report fulfills the requirements of Ordering Paragraph F on June 30, 2008. The Bonney Eagle study report was filed with the FERC on December 9, 2008 and FERC acknowledged that the report fulfills the requirements of Ordering Paragraph F on February 12, 2009.

The implementation of upstream and downstream fish passage facilities has been conducted consistent with the provisions of the Agreement and as required by the 2008 Bar Mills License, 2018 West Buxton License, and Ordering Paragraph C for the remaining projects, in consultation with the agencies, allowing for deferral as appropriate and as discussed below.

Upstream Eel Passage

Upstream eel passage facilities are in place and operational at the following Projects: Cataract-East and West Channel Dams; Cataract-Springs/Bradbury Dam; Skelton; Bar Mills West Buxton and Bonny Eagle. On April 23, 2019, BWPH, submitted the 2018 Upstream Eel Passage Monitoring Report for the Hiram Project. As a result of the

findings of the study, which resulted in low numbers of eel observed, BWPH also requested to delay upstream American eel passage construction and operation at the Hiram Project from June 1, 2020, as required by Ordering Paragraph B, until June 1, 2025. That request, supported by the NMFS, USFWS and MDMR, is pending before FERC.

Downstream Eel Passage

Downstream eel passage measures, consisting of night-time shut-downs in September and October have been implemented at the Cataract Project to date in compliance with the 2007 SRFAA and Ordering Paragraph C. Downstream eel passage at other facilities is to be installed beginning in 2024 pursuant to existing license requirements and the 2007 SRFAA.

Upstream Fish Passage

Upstream fish passage facilities exist at the Cataract and Skelton Projects, and pre-date the 2007 SRFAA.

The 2008 Project License and 2007 SRFAA require upstream fish passage to be operational at the Bar Mills Project by May 1, 2016. On November 1, 2017, BWPH filed an extension of time request to May 1, 2020 to install and commence operation of an upstream anadromous fish passage facility at the Bar Mills Project. Previous extensions of time (to May 1, 2018 and May 1, 2019) had been previously granted to avoid interference with a Maine Department of Transportation (MDOT) bridge replacement project that was occurring within the project boundary. In the 2017 request, BWPH clarified that discussions with the USFWS, NMFS, and MDMR had centered around alternative fish passage measures on the Saco River that may be more beneficial than a new fish passage facility at the Bar Mills Project. FERC approved the extension of time on January 18, 2018.

On July 24, 2017, BWPH filed an extension of time request to May 1, 2020 to construct and commence operation of an upstream anadromous fish passage facility at the West Buxton Project, in compliance with Ordering paragraph (C) of the Commission's July 18, 2007 Order and the 2007 SRFAA. BWPH requested an extension to install and commence operation of an upstream anadromous fish passage facility at the Project as a result of project relicensing, low and inconsistent river herring returns, and limited shad habitat above the Project. The extension of time was granted on October 4, 2017. As discussed above, a new license was issued for the Project on February 15, 2018 which reiterated the operational date of May 1, 2020 for upstream fish passage facilities at the Project¹.

¹ As a result of renegotiations of the 2007 SRFAA, which were expected to result in a delay of implementation of fish passage at the West Buxton Project, an extension of time to file final design plans by one year (to January 31, 2020) was requested by BWPH to allow sufficient time to file the resulting Amendment, contained herein. The extension is currently pending before FERC.

The Licensee and the Parties conduct annual and ad hoc meetings, scheduled as necessary or as part of the fishway design process, to discuss the progress, research, and advancement to the Saco River fisheries resources in accordance with the 2007 SRFAA. As a result, it has become clear that an amendment to certain areas of the original 2007 SRFAA are needed to accommodate the latest information and advancements gained as a result of the implementation of the provisions of the 2007 SRFAA undertaken to date.

Section 5 Revisions to be Incorporated as License Conditions

The 2019 Amendment (attached) includes the following applicable revisions to Section 5.3.b.1 of the 2007 SRFAA. In accordance with the 2019 Amendment, Section 5.3.b.1 is deleted in its entirety and replaced with the following:

“b. Permanent Upstream Passage Facilities

- 1. Licensee will provide a single permanent upstream anadromous fish passage facility at each of the Projects, or an alternative method agreed upon and approved by the Parties, at its cost and according to the following schedule:

Bar Mills	May 1, 2015
West Buxton	May 1, 2027
Bonny Eagle	May 1, 2029
Hiram	May 1, 2032

- a. Licensee and the other Parties agree to meet annually to discuss Licensee’s upstream fish passage efforts until passage is operational. Licensee will, by no later than May 1, 2021, commit to the final Bar Mills fish passage plan by issuing a written letter stating its plan to all of the Parties. Such letter shall be concurrently filed with FERC on the Bar Mills docket.

If the Resource Agencies determine that Licensee’s upstream fish passage intentions include a timely commitment to a fish passage design that will be more effective than that contemplated in the SRFAA, but will be completed after the May 1, 2025 deadline for Bar Mills, the Resource Agencies may agree, after consultation with the other signatories, to delay Licensee’s upstream fish passage requirements at Bar Mills, West Buxton, Bonny Eagle and Hiram on a yearly basis. Licensee agrees that any changes to the fish passage timelines set forth in this Section 5.3.b.1 shall require an adjustment to the financial amounts committed to in Section 4 of this Agreement.

- b. West Buxton Project is to be completed within two (2) years of the approved completion date for Bar Mills, including any extensions to that date that the Resource Agencies have granted under the terms of Section 5.3.b.1.

- c. Bonny Eagle Project is to be completed within four (4) years of the approved completion date for Bar Mills, including any extensions to that date that the Resource Agencies have granted under the terms of Section 5.3.b.1.
- d. Hiram Project is to be completed within seven (7) years of the approved completion date for Bar Mills, including any extensions to that date that the Resource Agencies have granted under the terms of Section 5.3.b.1.”

In addition, BWPH will commit to making improvements, as determined in consultation with the agencies, to the upstream and downstream fish passage facilities at the Cataract and Skelton Projects. BWPH will file as built drawings showing any modifications to existing facilities, once completed, and will coordinate construction of such modifications, as necessary, with the FERC New York Regional Office.

The above provisions have been carefully considered and balanced during the 2019 Amendment discussions in consideration of the management priorities of the agencies, the effect of each measure on the overall restoration of migratory species to the Saco River watershed, and their effect upon the developmental resources of the Projects. The Parties to the 2007 SRFAA and the 2019 Amendment agree that the proposed measures are both in the public interest and beneficial to the fishery resources of the watershed and will fulfill fisheries assessment and passage requirements.

BWPH requests that FERC not contravene the provisions of Section 5 therein and issue one or more FERC Orders that integrate the terms and provisions of Section 5 of the 2019 Amendment into the license conditions for the applicable Projects. If, in making its decisions, the Commission determines that any of the provisions contained in Section 5 are not within its jurisdiction to enforce, the Parties request that the Commission expressly and clearly notify the Parties of this in its order(s). BWPH is seeking subsequent modifications to its Section 401 water quality certifications for the Projects and any necessary modifications to its Section 18 fish passage prescriptions concurrently with this request.

Should you have any questions regarding this filing, please contact Matt LeBlanc at matthew.leblanc@brookfieldrenewable.com or by phone at 207-252-4870.

Thank you,



Kelly Maloney
Manager, Compliance - Northeast

Attachments: 2019 Amendment No. 2 to Saco River Fisheries Assessment Agreement

Cc: S. Michaud, N. Stevens, F. Dunlap, J. Seyfried, M. LeBlanc, J. Rancourt; BWPH

**SACO RIVER
FISHERIES ASSESSMENT AGREEMENT AMENDMENT No. 2**

**Brookfield White Pine Hydro LLC (f/k/a FPL Energy Maine Hydro LLC)
Cataract Project (No. 2528)
Skelton Project (No. 2527)
Bar Mills Project (No. 2194)
West Buxton Project (No. 2531)
Bonny Eagle Project (No. 2529)
Hiram Project (No. 2530)**

FEBRUARY 2019

AMENDMENT NO.2 TO SACO RIVER FISHERIES ASSESSMENT AGREEMENT

This Amendment No. 2 to Saco River Fisheries Assessment Agreement (the “**Amendment**”) is entered into as of February 14, 2019.

Reference is made to that certain Saco River Fisheries Assessment Agreement (SRFAA), dated as of February 2007, among FPL Energy Maine Hydro LLC (“**FPL Energy**”), U.S. Fish and Wildlife Service, National Marine Fisheries Service, Maine Atlantic Salmon Commission, Maine Department of Inland Fisheries and Wildlife (MDIFW), Maine Department of Marine Resources (MDMR), Saco River Salmon Club, Atlantic Salmon Federation, Maine Council of the Atlantic Salmon Federation (MC-ASF), Saco River Hydro, LLC and New Hampshire Fish and Game Department (collectively, the “**Original Signatories**”), as amended by that certain Amendment No. 1 to Saco River Fisheries Assessment Agreement, dated as of May 2009, among FPL Energy and the Original Signatories (as amended, supplemented or otherwise modified from time to time, the “**SRFAA**”). Unless otherwise defined herein, capitalized terms defined in the SRFAA and used herein shall have the meanings given to them in the SRFAA.

WHEREAS, Brookfield White Pine Hydro LLC (as successor in interest to FPL Energy) (“**Brookfield**” or “**Licensee**”), the U.S. Fish and Wildlife Service, National Marine Fisheries Service, Maine Department of Inland Fisheries and Wildlife, Maine Department of Marine Resources, (as successors in interest to the Original Signatories) (the “**Resource Agencies**”), Saco Salmon Restoration Alliance, Atlantic Salmon Federation, and the Maine Council of the Atlantic Salmon Federation have agreed to further amend the SRFAA as provided herein.

NOW THEREFORE, in consideration of the mutual agreements set forth herein, and for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. Amendments to SRFAA.

- (a) Section 2.19 of the SFRAA is hereby deleted in its entirety and replaced with the following:

“2.19 Adjustment of Financial Amounts

Except where otherwise specified herein, all financial amounts committed to in Section 4 of this Agreement are in 2018 dollars and shall be adjusted every three (3) years, beginning in 2020, according to the Gross Domestic Product: Implicit Price Deflator as published by the U.S. Department of Commerce.”

- (b) Section 4.1 of the SRFAA is hereby deleted in its entirety and replaced with the following:

“4.1 Funds to Support Inland Fisheries Habitat Restoration, Stream Connectivity and Management

Licensee agrees to support various fisheries management projects which may include but are not limited to: enhancing and restoring inland fisheries habitat and habitat connectivity; assessing inland fisheries populations; and/or the implementation of inland fisheries management activities within the Saco River Basin. Licensee agrees to fund such activities up to an aggregate of \$10,000 per year for eleven years (2019-2029), for a total of \$110,000.

The MDIFW shall, with input and consideration from MDMR, develop inland fisheries management activities funded under this section. For any activities located partially or wholly within Licensee’s FERC Project boundaries, MDIFW and Licensee shall, with input and consideration from MDMR, develop management activities funded under this section. Such agreement shall not be unreasonably withheld. Unless MDIFW and Licensee agree to a planned alternative schedule of activities and funding, Licensee will fund activities by \$10,000 per year for eleven years beginning in 2019, with an ability to accrue funding in escrow to cover larger planned projects. In no case shall Licensee be required to exceed the total funding required under this section.”

- (c) Section 4.2 of the SRFAA is hereby deleted in its entirety and replaced with the following:

“4.2 Funds to Support Saco Salmon Restoration Alliance

Licensee agrees to pay a one-time grant of \$36,000 for upgrades to the hatchery of the Saco Salmon Restoration Alliance (“SSRA”). Such funds will be expended by the SSRA for continued rearing and stocking of Atlantic salmon as part of the overall restoration goals for the Saco River Watershed.”

- (d) Section 4.4 of the SRFAA is hereby deleted in its entirety and replaced with the following:

“4.4 Funds to Support Public Education

Licensee agrees to provide total funding of \$10,000 to the MC-ASF for the Fish Friends program expansion exclusive to schools within the Saco River Watershed. Funding will be used expressly to provide necessary aquarium equipment and aquarium maintenance equipment for the addition of ten schools, or to replace faulty equipment at participating schools currently obtaining eggs from the SSRA hatchery. The intent of the education program will be to promote thIne cooperative fisheries management and fisheries restoration efforts on the Saco River. The Parties agree that the funding will be provided in \$2,000 installments so that equipment purchases can be made by October of each year, beginning in 2018. Exceptions to the above schedule to delay a single year’s funding by up to one year or to combine it with the funds for the following year may be requested by consensus of the Parties, which request will not be unreasonably denied by Licensee. However, in no case shall such request require the total funding by Licensee under this section to be increased beyond \$10,000. MC-ASF will manage this fund as an account at an accredited financial institution. If this account bears interest, that interest shall be part of the fund and treated no differently than funds deposited by Licensee. SSRA agrees to provide MC-ASF with one (1) itemized invoice annually for equipment purchases. The Parties agree that account debits will not be unreasonably denied or withheld. SSRA will be asked to provide an annual report to both Licensee and MC-ASF for all eligible purchases until such time that the funds are fully expended. MC-ASF agrees to provide SSRA and Licensee with annual, year-end statements from the accredited financial institution. The Parties agree that residual funds will remain in the aforementioned account until such time as they are fully expended for the purposes stated above.

Notwithstanding the above, Licensee will not be required to expend funds under this section beyond the year 2024. The Parties agree that the expansion of the Fish Friends program will be a cooperative joint effort by the MC-ASF, SSRA and Licensee.”

(e) Section 5.3.b.1 of the SFRAA is hereby deleted in its entirety and replaced with the following:

“b. Permanent Upstream Passage Facilities

1. Licensee will provide a single permanent upstream anadromous fish passage facility at each of the Projects, or an alternative method agreed upon and approved by the Parties, at its cost and according to the following schedule:

PROJECT	OPERATIONAL DATE
Bar Mills	May 1, 2025
West Buxton	May 1, 2027
Bonny Eagle	May 1, 2029
Hiram	May 1, 2032 ¹

- a. Licensee and the other Parties agree to meet annually to discuss Licensee’s upstream fish passage efforts and design at the Bar Mills Project until passage is operational. Licensee will, by no later than May 1, 2021, commit to the final Bar Mills fish passage plan by issuing a written letter stating its plan to all of the Parties. Such letter shall be concurrently filed with FERC on the Bar Mills docket.

If the Resource Agencies determine that Licensee’s upstream fish passage intentions include a timely commitment to a fish passage design that will be more effective than that contemplated in the SFRAA, but will be completed after the May 1, 2025 deadline for Bar Mills, the Resource Agencies may agree, after consultation with the other signatories, to delay Licensee’s upstream fish passage requirements at Bar Mills, West Buxton, Bonny Eagle and Hiram on a yearly basis. Licensee agrees that any changes to the fish passage timelines set forth in this Section 5.3.b.1 shall require an adjustment to the financial amounts committed to in Section 4 of this Agreement.

- b. West Buxton Project is to be completed within two (2) years of the approved completion date for Bar Mills, including any extensions to that date that the Resource Agencies have granted under the terms of Section 5.3.b.1.

¹ Provided that the Resource Agencies determine that such facility is necessary based upon the status of salmon restoration at that time.

- c. Bonny Eagle Project is to be completed within four (4) years of the approved completion date for Bar Mills, including any extensions to that date that the Resource Agencies have granted under the terms of Section 5.3.b.1.
- d. Hiram Project is to be completed within seven (7) years of the approved completion date for Bar Mills, including any extensions to that date that the Resource Agencies have granted under the terms of Section 5.3.b.1.”

2. Acknowledgements. Brookfield and the Resource Agencies hereby acknowledge and agree:

- (a) Construction and Improvements at Cataract East and West and Skelton described in paragraph (b) below, and the Springs Island nature-like fishway (“NLF”), shall be completed no later than May 1, 2020. Licensee will conduct no less than two (2) years of upstream and downstream fish passage studies for adult and juvenile alewife and American shad (the “Study”) beginning in the Spring of 2021 or the Spring following the completion of the NLF. Additional years may be needed depending on environmental conditions and Study results, but the Study period will not extend beyond a total of three (3) years for each applicable facility unless agreed upon by Licensee and the other Resource Agencies. The purpose of the Study is to assess the passage improvements made at Cataract East and West, the new NLF at Springs Island and Skelton. The Study will use standard telemetry techniques to determine near-field and far-field attraction, passage efficiencies, and downstream mortality. The design of the Study will be reviewed and approved by the Resource Agencies before filing with FERC. Annual Study results will be reviewed and used to inform subsequent studies. Upstream and downstream passage issues that may be identified based on Study results and specifically noted by the Resource Agencies will be addressed through minor structural, mechanical, operational or procedural adjustments by Licensee.
- (b) Licensee will implement the USFWS/NMFS Engineering Recommendations for Saco River Projects (“Improvements”), identified within the USFWS memorandum dated July 26, 2017 (“Memo”) and attached hereto as Attachment D, to resolve the issues related to fish passage at Cataract East and West and Skelton (“Issues”) identified therein. These Improvements are intended to be structural in nature, however, it is recognized that alternative solutions may be adopted to address the Issues, provided that: (1) the Resource Agencies agree that such solutions are more effective than the Improvements; (2) such solutions are consistent with the 2017 FWS Fish Passage Engineering Design Criteria, or are otherwise approved by the Resource Agencies; and (3) such solutions are within a similar scope and cost to the Improvements. Construction will be completed no later than May 1, 2020 (the “Construction Completion Date”) except that, if there is a deviation from the Design Schedule (as defined below) resulting from the actions of any signatory to this Agreement that is not the Licensee, the Construction Completion Date shall be extended by a period equal to the Design Schedule delay. Prior to implementing the Improvements, Licensee will undergo a complete design review process (30, 60, 90% designs) according to a design schedule (“Design Schedule”) to be established by the Resource Agencies in consultation with Licensee. The Resource Agencies must approve such designs before construction is commenced. The Resource Agencies will review the existing O&M plans, including the Cataract East and West stranding protocol, and will provide feedback to Licensee to ensure they are sufficient to avoid stranding-associated mortality of fish species.
- (c) The completion date for the Springs Island NLF remains May 1, 2020.

- (d) Section 4.3 of the SRFAA remains in effect and shall continue up to and through the Bonny Eagle Project completion date (2029) as described in Section 5.3.b.1 of the SRFAA (as amended herein).
3. Effectiveness of Amendment. This Amendment shall become effective upon execution by all of the Parties in accordance with Section 2.8 of the SRFAA (the “**Amendment Effective Date**”). Licensee shall also file with the FERC those modifications set forth in this Amendment that pertain to Section 5 of the SRFAA.
 4. Reference to and Effect on the SRFAA. On or after the Amendment Effective Date, each reference to the SRFAA shall be deemed to refer to the SRFAA as amended hereby.
 5. Continuing Effectiveness of SRFAA. As amended hereby, all terms of the SRFAA shall be and remain in full force and effect and shall constitute the legal, valid, binding and enforceable obligations of each of the parties thereto.
 6. Effect of Amendment. The execution, delivery and effectiveness of this Amendment shall not, except as expressly provided herein, operate as a waiver of any right, power or remedy of a party to the SRFAA, nor constitute a waiver of any provision of the SRFAA.
 7. Amendments and Waivers. No amendment, modification, termination, or waiver of any provision of this Amendment will be effective except in compliance with Section 2.8 of the SRFAA.
 8. Severability. Whenever possible, each provision of this Amendment will be interpreted in such manner as to be effective and valid under applicable law. In the event any provision of this Amendment is or is held to be invalid, illegal, or unenforceable under applicable law, such provision will be ineffective only to the extent of such invalidity, illegality, or unenforceability, without invalidating the remainder of such provision or the remaining provisions of this Amendment.
 9. Successors and Assigns. This Amendment shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.
 10. Governing Law. This Amendment shall be construed and governed in accordance with the Federal Power Act and Federal Law, for those portions of the Amendment within the jurisdiction of FERC. The remainder shall be construed and governed by the laws of the State of Maine, without regard to Maine’s conflict of law principles.
 11. Counterparts. This Amendment may be executed in any number of counterparts and by different parties hereto in separate counterparts, each of which, when so executed and delivered, will be deemed an original and all of which shall together constitute one and the same instrument. This Amendment may be executed and delivered by facsimile or e-mailed PDF transmission of a manually signed counterparty.

[Signature Page Follows]

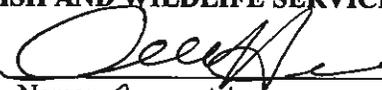
IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be executed as of the date first above written by their respective duly authorized officers.

BROOKFIELD WHITE PINE HYDRO LLC

By: _____
Name:
Title:

By: _____
Name:
Title:

U.S. FISH AND WILDLIFE SERVICE

By: 
Name: *Anna Harnis*
Title: *Maine Ecological Services
Project Leader*

NATIONAL MARINE FISHERIES SERVICE

By: _____
Name:
Title:

**MAINE COUNCIL OF THE ATLANTIC
SALMON FEDERATION**

By: _____
Name:
Title:

**MAINE DEPARTMENT OF INLAND
FISHERIES AND WILDLIFE**

By: _____
Name:
Title:

**MAINE DEPARTMENT OF MARINE
RESOURCES**

By: _____
Name:
Title:

**SACO SALMON RESTORATION
ALLIANCE**

By: _____
Name:
Title:

ATLANTIC SALMON FEDERATION

By: _____
Name:
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U.S. FISH AND WILDLIFE SERVICE

By: _____
Name:
Title:

NATIONAL MARINE FISHERIES SERVICE

By: _____
Name:
Title:

MAINE COUNCIL OF THE ATLANTIC SALMON FEDERATION

By: 
Name: GERARD EGGERS
Title: President, Maine Council

MAINE DEPARTMENT OF INLAND FISHERIES AND WILDLIFE

By: _____
Name:
Title:

MAINE DEPARTMENT OF MARINE RESOURCES

By: _____
Name:
Title:

SACO SALMON RESTORATION ALLIANCE

By: _____
Name:
Title:

ATLANTIC SALMON FEDERATION

By: 
Name: JOHN BURROWS
Title: Director, N.E. Programs

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BROOKFIELD WHITE PINE HYDRO LLC

By: _____
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Title:

By: _____
Name:
Title:

U.S. FISH AND WILDLIFE SERVICE

By: _____
Name:
Title:

NATIONAL MARINE FISHERIES SERVICE

By: _____
Name:
Title:

MAINE COUNCIL OF THE ATLANTIC SALMON FEDERATION

By: _____
Name:
Title:

MAINE DEPARTMENT OF INLAND FISHERIES AND WILDLIFE

By: _____
Name:
Title:

MAINE DEPARTMENT OF MARINE RESOURCES

By:  _____
Name:
Title: *Commissioner*

SACO SALMON RESTORATION ALLIANCE

By: _____
Name:
Title:

ATLANTIC SALMON FEDERATION

By: _____
Name:
Title:

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Title:

By: _____
Name:
Title:

U.S. FISH AND WILDLIFE SERVICE

By: _____
Name:
Title:

NATIONAL MARINE FISHERIES SERVICE

By: Michael R. J.
Name: Michael Pentony
Title: Regional Administrator

MAINE COUNCIL OF THE ATLANTIC SALMON FEDERATION

By: _____
Name:
Title:

MAINE DEPARTMENT OF INLAND FISHERIES AND WILDLIFE

By: _____
Name:
Title:

MAINE DEPARTMENT OF MARINE RESOURCES

By: _____
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By: _____
Name:
Title:

NATIONAL MARINE FISHERIES SERVICE

By: _____
Name:
Title:

MAINE COUNCIL OF THE ATLANTIC SALMON FEDERATION

By: _____
Name:
Title:

MAINE DEPARTMENT OF INLAND FISHERIES AND WILDLIFE

By: James M Connolly
Name: James M Connolly
Title: Director Bureau Resource Management

MAINE DEPARTMENT OF MARINE RESOURCES

By: _____
Name:
Title:

SACO SALMON RESTORATION ALLIANCE

By: _____
Name:
Title:

ATLANTIC SALMON FEDERATION

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MAINE COUNCIL OF THE ATLANTIC SALMON FEDERATION

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Name:
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MAINE DEPARTMENT OF INLAND FISHERIES AND WILDLIFE

By: _____
Name:
Title:

MAINE DEPARTMENT OF MARINE RESOURCES

By: _____
Name:
Title:

SACO SALMON RESTORATION ALLIANCE

By: *John Blunt*
Name: _____
Title: *president 2/6/2019*

ATLANTIC SALMON FEDERATION

By: _____
Name:
Title: