

120 FERC ¶ 62,051
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

FPL Energy Maine Hydro LLC

Project No. 2142-055, -057, & -058

ORDER APPROVING STUDY PLANS FOR FISHERIES ENHANCEMENTS
PURSUANT TO ARTICLE 401

(Issued July 18, 2007)

On March 2, 2007, FPL Energy Maine Hydro, LLC (licensee) filed three study plans for fisheries enhancement pursuant to article 401 of the license¹ and sections 3.3.3.3, 3.3.5, and 3.3.7 of the July 25, 2001 Offer of Settlement (Settlement)² for the Indian Pond Project. The project is located in the upper portion of the Kennebec River Basin in Somerset and Piscataquis Counties, Maine.

BACKGROUND AND LICENSE REQUIREMENTS

Article 401 of the project license requires the licensee to comply with conditions imposed by Sections 2.0 through 9.4 of the Settlement, with identified exceptions.

Relevant Completed Settlement Sections

Section 3.3.3.1 of the Settlement required the licensee to develop, in consultation with other members of the Fisheries Committee,³ a study plan for a desktop review to identify and characterize area waters that may contain degraded habitat. The study plan, approved on January 28, 2005, identified degraded habitat on (1) Kennebec River and its tributaries from Harris Dam to the upstream end of Wyman Lake, (2) Dead River and its tributaries from Grand Falls to The Forks, (3) Spencer Stream from Spencer Gut to Dead River, and (4) Little Spencer Stream from the outlet of Spencer Lake to Dead River.

Section 3.3.3.2 of the Settlement required the licensee to conduct the desktop review, and file a report on the results, including recommendations for habitat assessments that could be conducted. The report was approved in an order issued

¹ 106 FERC ¶ 62,021 (2004).

² Offer of Settlement Regarding Indian Pond Project, No. 2142 and Explanatory Statement, July 25, 2001.

³ The Fisheries Committee is made up of representatives from the Maine Department of Inland Fisheries and Wildlife, U.S. Fish and Wildlife Service, Trout Unlimited, The Forks Chamber of Commerce, FPL Energy, and EPRO Environmental Consulting, Inc.

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May 10, 2006.⁴ The report identifies eight tributaries with potentially degraded habitat with feasibility for habitat enhancements as described under Sections 3.3.3.3 and 3.3.3.4. Also, locations on Cold Stream and Salmon Stream were identified for further consideration for restoration projects as described under Section 3.3.7.

Settlement Sections Addressed in Licensee's March 2, 2007 Filing

Settlement Section 3.3.3.3 requires the licensee to develop, upon approval of the report required under 3.3.3.2, in consultation with the Fisheries Committee, a study plan to conduct a field evaluation and assessment of areas with potentially degraded habitats, as identified in the desktop review. The licensee is to file the study plan with the Commission for approval, within 6 months of approval of the desktop review.

Under Section 3.3.5, the licensee is to develop, in consultation with the Fisheries Committee, a study plan to conduct periodic habitat/population assessments at index sites where no restoration projects are proposed, and where projects have been implemented. The licensee is to file the study plan with the Commission for approval, within 6 months of the approval of the desktop review.

Under Section 3.3.7, the licensee is to develop, in consultation with the Fisheries Committee, a study plan for construction of a series of habitat restoration projects. The plan is to include post-construction monitoring. The licensee is to file the study plan with the Commission for approval, within 6 months of the approval of the desktop review.

On January 31, 2007, the licensee was granted an extension of time for filing the study plans identified in Settlement sections 3.3.3.3, 3.3.5, and 3.3.7, until February 28, 2007, to enable completion of necessary consultation.

LICENSEE'S PLANS

Section 3.3.3.3: Study Plan for Field Evaluation of Degraded Habitat

According to the licensee's study plan, on August 22 and 23, 2006, representatives of the Fisheries Committee inspected a total of 17 locations where logging roads provided access to eight streams: Cold Stream, Tomhegan Stream, Fish Pond Stream, Durgin Brook, Salmon Stream, Enchanted Stream, Stony Brook, and Alder Pond Brook. The inspections were a preliminary assessment of locations that might warrant further investigation for habitat improvement. At each location, needs and feasibility of channel modifications and installation of instream structures were discussed. Two sites were recommended for stream improvement measures, one on Cold Stream at an old dam site

⁴ 115 FERC ¶62,162 (2006).

(CS1), and one on East Branch Enchanted Stream near its junction with the main stem Enchanted Stream (ES3).

The licensee proposes detailed field assessments at CS1 and EC3 to identify topographic, geomorphic, hydrologic, and biologic conditions. The plan listed limiting factors for the design and installation of fish habitat enhancement measures, and provided summaries of habitat data that is known, and data that is needed, for the two sites. Seven types of enhancement measures that could be used were described: gravel placement, woody debris collectors, increasing habitat complexity, log weirs, improvements to channel-floodplain connection, and bank stabilization. Selection of appropriate measures would be based on hydrogeomorphic information collected during the site characterization studies.

Estimated manpower requirements for site characterization, construction, clean-up, and post-construction monitoring were provided. Work would be overseen by a team of at least three individuals: a licensee fisheries biologist, a fluvial geomorphologist, and a representative of the Fisheries Committee. The team would use additional help at different stages of the projects. The licensee envisions restoration projects being constructed in late summer/early fall 2008.

The plan indicates post-construction monitoring would include, at minimum, inspection of the channel and habitat structures in the late spring/early summer after annual snowmelt, and during low-flow conditions in late summer/early fall.

Section 3.3.5: Study Plan for Habitat/Population Assessment Studies

For habitat/population assessment studies, the licensee proposes to use the two degraded areas identified in the plan required under Section 3.3.3.3, CS1 and ES3, as two habitat restoration study sites. The licensee also proposes to use two index sites where no activities are proposed, which are located immediately upstream of CS1 and ES3.

Initial baseline assessments at each site would be performed in late summer through late fall 2007. Initial stream morphology and hydrology measurements including, but not limited to, depth, velocity, volume, wetted width, bank full width, substrate type, and longitudinal and cross-section profiles would be performed at each site. In addition, electrofishing and benthic macroinvertebrate surveys would be performed, and water quality parameters including dissolved oxygen (DO), temperature, pH, specific conductivity, and alkalinity would be monitored. Macroinvertebrate sampling and data analysis would follow rapid bioassessment protocols used by the Maine Department of Environmental Protection (MDEP), temperature data would be gathered with continuous data loggers, and other water quality parameters would be measured using Maine Department of Inland Fisheries and Wildlife (MDIFW) protocols.

As indicated above, the licensee envisions restoration projects at sites CS1 and ES3 being constructed in late summer/early fall 2008. In the fall one year later, follow-

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up assessments would be conducted at sites CS1 and ES3 and the two index sites, using the same measurements, surveys, and protocols followed in the baseline assessment. Annual assessments using these same methods would be performed during the two years following the first follow-up assessment. The assessments would be performed by two licensee staff persons trained in environmental sciences and quantitative electrofishing, and one Fisheries Committee member.

The licensee would prepare brief annual progress reports and submit them to the Fisheries Committee members by December 31. These progress reports would include collected annual data and a short summary of the results, so that any need for minor adjustments to the restoration projects could be addressed.

The plan also indicates that, within 6 months of the third assessment, the licensee would file a report with the Commission documenting the findings of the assessments. A draft of the report would be provided to the members of the Fisheries Committee for review and comment prior to the filing. The report filed with the Commission would contain Fisheries Committee comments, and recommendations for continuation or termination of the annual assessment, and any additional enhancements or maintenance commitments, if any, as deemed necessary by the Committee.

Section 3.3.7: Study Plan for Fisheries Habitat Restoration Projects

The study plan for habitat restoration projects proposes construction and monitoring of licensee-funded erosion protection measures at five stream sites, and the creation of a salmonid spawning area in a side-channel of the Kennebec River. The sites were identified for further study in the licensee's desktop review report pursuant to Section 3.3.3.2, and through the Fisheries Committee site visits in August 2006. The proposed activities would be contingent on securing landowner permission and all necessary permits. The licensee envisions performing the proposed work in the late summer/early fall of 2008.

Erosion Protection Measures

At site SS1 on Salmon Stream, and sites CS1 and ES3, erosion is being caused by All-Terrain Vehicle (ATV) crossings. The licensee proposes to install large boulders to stop ATV crossing at each site, and reseed the areas. At site FPS1 on Fish Pond Stream, erosion is occurring near the stream's mouth at the Kennebec River, where the stream has begun to form a new channel on an old adjacent road. The licensee proposes redirecting and armoring the stream away from the road. At site DB1 on Durgin Brook, there is a snowmobile bridge that is laying in the streambed, causing erosion and possibly obstructing fish passage. The licensee would work with a local snowmobile club to raise the bridge and secure it to the banks.

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The licensee proposes to visit the erosion protection sites to document their condition one year following completion of the erosion control measures, and then twice more, on an annual basis.

Side-Channel Spawning Area

At site BF1 on the Kennebec River, there is a side channel area that has been identified as a salmonid spawning area at certain river flows. The licensee proposes to re-engineer the area so that it is connected to the river at a flow of 300 cubic feet per second, the project's minimum flow at that location, so fish can successfully spawn in the area. This would involve excavating a channel and then redistributing spawning gravel.

Within one month of construction of the side channel, the licensee would conduct baseline monitoring of the site using stream morphology and hydrology measurements including, but not limited to, depth, velocity, volume, wetted width, bank full width, substrate type, and longitudinal and cross-section profiles. In addition, electrofishing and benthic macroinvertebrate surveys would be performed, and water quality parameters including DO, temperature, pH, specific conductivity, and alkalinity would be monitored. Macroinvertebrate sampling and data analysis would follow rapid bioassessment protocols used by the MDEP, temperature data would be gathered with continuous data loggers, and other water quality parameters would be measured using MDIFW protocols.

In the fall one year later, follow-up monitoring would be conducted at the side channel site, using the same measurements, surveys, and protocols followed in the baseline assessment, with the addition of a redd count. Annual monitoring using these same methods would be performed during the two years following the first follow-up assessment.

Enhancement Projects Reporting

The licensee would prepare brief annual progress reports and submit them to the Fisheries Committee members by December 31. These progress reports would include collected annual data and a short summary of results, so that any need for minor adjustments to the projects could be addressed.

Within 6 months of completion of the third spawning channel assessment and third erosion protection site visit, the licensee would file a report with the Commission documenting the findings of the assessments. A draft of the report would be provided to the members of the Fisheries Committee for review and comment prior to the filing. The report would contain Fisheries Committee comments, and recommendations for continuation or termination of annual assessments, and any additional enhancements or maintenance commitments, if any, as deemed necessary by the Committee.

CONSULTATION

Drafts of the study plans were distributed to the members of the Fisheries Committee on October 6, 2006. A consultation meeting of the Fisheries Committee was then held on February 8, 2007, and oral comments from the members were incorporated into the three study plans. Consensus was reached on all three study plans. All Fisheries Committee members were then supplied with copies of the final report at the same time that the report was filed with the Commission.

U.S. Fish and Wildlife Service Comments

Written comments were supplied by the U.S. Fish and Wildlife Service (FWS) committee member in a letter dated February 16, 2007. The majority of the FWS comments were incorporated into the final study plans. However, several comments were not clearly addressed. Regarding the study plan for field evaluation of degraded habitat required under Section 3.3.3.3, the FWS recommended that a coordination meeting be held after the pre-project monitoring and feasibility study at each project, and that a coordination meeting also be held at the end of the monitoring period to evaluate results and the effectiveness of the project. The FWS recommended further consultation to discuss stream restoration alternatives over a broader area, noting that current sites were selected near roadways for the access of heavy equipment.

Regarding the study plan for habitat/population assessment studies under section 3.3.5, the FWS noted that some of monitoring proposed in the plan may need to be completed during certain time periods to be meaningful, such as redd counts, seasonal aquatic habitat and fish population monitoring.

The FWS also recommended that the side-channel restoration project under Section 3.3.7 include a maintenance commitment, since the area is subjected to a wide range of flows due to project operation.

In addition, the FWS noted that MDIFW raised the issue of invasive smallmouth bass presence in the monitored streams. The FWS believes that this issue should be investigated as part of the process to enhance and restore coldwater fisheries. The FWS recommended a study plan to review existing information and describe potentials for bass invasions into project waters, conduct surveys to determine the presence of bass in waters for which bass presence is not known, define the passage criteria for bass at barriers, and locate and measure barriers in area streams not known to harbor bass. In its February 28, 2007 study plan filing, the licensee indicated that the Fisheries Committee had discussed invasive smallmouth bass, and had decided to perform an assessment using money from the fisheries habitat restoration fund created under the Settlement. The licensee indicated that the committee's assessment would be based on the recommendations provided by the FWS, and would also include proposals to install barriers to smallmouth bass if deemed necessary and feasible. The licensee indicated that the assessment would take place in 2007, and a report would be filed with the Commission by December 31, 2007.

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DISCUSSION AND CONCLUSION

The licensee's fisheries enhancement study plans, filed March 2, 2007, pursuant to license article 401 and sections 3.3.3.3, 3.3.5, and 3.3.7 of the Settlement, satisfy the requirements of article 401 and the Settlement.

To help ensure that effective monitoring occurs and that the Fisheries Committee has adequate opportunities for review and input, the committee should consider the recommendations described in the February 16, 2007 FWS letter, and incorporate them into the study plans where it determines that the recommendations will aid in the success of the work under Settlement.

Regarding the plans for assessment of smallmouth bass, the licensee should file a report with the results of the assessment with the Commission by December 31, 2007, detailing its findings under the elements identified in the FWS letter and any proposals determined through the assessment to install barriers to smallmouth bass. The smallmouth bass assessment report should include evidence the Fisheries Committee members had at least 30 days in which to review and comment on the report, copies of any comments received, and responses to comments indicating how they were accommodated in the filed report.

The information to be collected in the three fisheries enhancement studies proposed by the licensee should allow the Fisheries Committee to move forward with work that would benefit fisheries resources in the project area, in compliance with license article 401 and sections 3.3.3.3, 3.3.5, and 3.3.7 of the Settlement for the Indian Pond Project. The licensee's study plans should be approved.

The Director orders:

(A) FPL Energy Maine Hydro, LLC's (licensee) three study plans for fisheries enhancement, filed March 2, 2007, pursuant to license article 401 and sections 3.3.3.3, 3.3.5, and 3.3.7 of the July 25, 2001 Offer of Settlement, are approved.

(B) The licensee shall file, by December 31, 2007, a report containing the results of the Fisheries Committee's assessment of smallmouth bass. The report shall detail findings under the elements identified in the FWS letter, and identify any proposals for the installation of barriers to smallmouth bass. The smallmouth bass assessment report shall include evidence that the Fisheries Committee members had at least 30 days in which to review and comment on the report, copies of any comments received, and responses to comments indicating how they were accommodated in the filed report.

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(C) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of this order, pursuant to 18 C.F.R. § 385.713.

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Chief, Biological Resources Branch
Division of Hydropower Administration
and Compliance