

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission (FERC)
888 First Street, NE
Washington, DC 20426

FILED ELECTRONICALLY

Feb. 1, 2010

RE: Compliance by Lockwood Project (FERC No. 2574), Hydro Kennebec Project (FERC No. 2611), Shawmut Project (FERC No. 2322) and Weston Project (FERC No. 2325) with License Requirements for safe downstream passage of adult Atlantic salmon, Kennebec River, Maine.

Dear Ms. Bose,

Pursuant to 18 CFR 385.206 of Commission Rules, Friends of Kennebec Salmon and Friends of Merrymeeting Bay file this complaint against the above-captioned licensees for violating mandatory conditions of their federal licenses.

By Commission license amendment dated Sept. 16, 1998 (84 FERC ¶61,227), the Commission licenses for the above projects state:

"In the event that adult shad and/or adult Atlantic salmon begin to inhabit the impoundment above the project, and to the extent that Licensee desires to achieve interim downstream passage of out-migrating adult Atlantic salmon and/or adult shad by means of passage through turbine(s), Licensee must first demonstrate, through site-specific quantitative studies designed and conducted in consultation with the resource agencies, that passage through turbine(s) will not result in significant injury and/or mortality (immediate or delayed)."

Commission records show that since 2006 and every year thereafter, adult Atlantic salmon have been transported to waters above these dams to spawn. After spawning, these adult Atlantic salmon must swim downstream past these dams to the Atlantic Ocean to continue their lifecycle.

Commission records show that none of the licensees for these projects have conducted "site-specific quantitative studies designed and conducted in consultation with the resource agencies, that passage through turbine(s) will not result in significant injury and/or mortality (immediate or delayed)" for adult Atlantic salmon, as their licenses require.

Lockwood Dam:

In December 2007, the Lockwood licensee conducted a limited study of downstream adult Atlantic salmon passage at the dam, using 19 adult Atlantic salmon of domesticated origin. Of the 19 salmon released above the dam, nine did not pass downstream over the dam during the study. One of these salmon was found dead in the project trashracks during the study. The ultimate fate of the other eight salmon which did not pass over the dam is unknown. The results of this study were filed with the Commission in 2008 as part of the licensees' joint Kennebec Hydro Developers Group annual report.

The Dec. 2007 Lockwood study design, objectives and results shows it cannot be accepted as a

quantitative, site-specific study of turbine survival for adult Atlantic salmon as required by the license. The study authors state this repeatedly. First, they say at 7, "the kelts available for this study were of domestic brood stock origin hatchery fish living their entire life in a hatchery tank setting with no exposure to a riverine setting. For discussion purposes, FPL Energy suggests that using these hatchery fish may introduce some variable into the study that renders the results somewhat suspect."

They further state at 7: "As described in the methods section, the radio tags used in this study were large tags purchased with the idea that domestic brood stock hatchery kelt for this study would be of a similar size to natural migrants (*i.e.*, 760 mm range). However, the kelts obtained from the hatchery were much smaller (*i.e.*, 480-630 mm) than expected so the tags that were purchased were probably too large. Therefore, some injury from the tagging process may have occurred and may have resulted in some fish mortalities or some fish regurgitating the tags."

They further state at 5 that turbines were partly operating or not operating at all for much of the study: "All turbine units operated during the majority of the study at gate settings ranging from 40-100%; however, complete station shutdowns for portions of the night and early morning occurred on nine days due to frazil ice in the canal."

The Lockwood license requires the licensee "must first demonstrate, through site-specific quantitative studies designed and conducted in consultation with the resource agencies, that passage through turbine(s) will not result in significant injury and/or mortality (immediate or delayed)."

The 2007 study was not designed to meet this objective, nor did it even coincidentally achieve it. According to the study, three salmon went through the project turbines. One salmon was found "stationary" in the project tailrace, suggesting it was killed. Because the study had no way of following the other two fish downriver after passage through the turbines, it is unknown if these two fish passed through the turbines alive, dead or injured. Due its design and implementation, the Dec. 2007 study was unable to determine if passage through the turbine(s) will result in "significant injury and/or mortality (immediate or delayed)."

The objective of the study is described at 6: "Although the sample size was small, the primary objective of the radio telemetry study, estimating the proportion of Atlantic salmon kelt utilizing available passage routes at Lockwood under two scenarios, was fulfilled."

This study objective does not address the license condition at issue, which states: "In the event that adult shad and/or adult Atlantic salmon begin to inhabit the impoundment above the project, and to the extent that Licensee desires to achieve interim downstream passage of out-migrating adult Atlantic salmon and/or adult shad by means of passage through turbine(s), Licensee must first demonstrate, through site-specific quantitative studies designed and conducted in consultation with the resource agencies, that passage through turbine(s) will not result in significant injury and/or mortality (immediate or delayed)."

Hydro Kennebec Dam:

Commission records show the Hydro Kennebec Dam licensee has not conducted "site-specific quantitative studies designed and conducted in consultation with the resource agencies, that passage through turbine(s) will not result in significant injury and/or mortality (immediate or delayed)" for adult Atlantic salmon, as their license requires prior to adult allowing Atlantic salmon to have access to their project turbines.

Since 2006, the Hydro Kennebec licensee has attempted to deploy a flexible, kevlar "fish boom" above the project turbine intake as a diversion barrier to downstream migrating fish. A Commission letter dated June 10, 2009 from B. Peter Yarrington of the Division of Hydropower Administration and

Compliance states that in 2007 the boom was not installed until May 20, 2007 and in 2008 the boom was not installed until May 29, 2008 due to high river flows. These installation dates are after Atlantic salmon kelts would be migrating past the dam during the spring. Mr. Yarrington's letter further states that the effectiveness of the boom at diverting fish, when it is installed and operating, is not yet known and has never been tested with adult Atlantic salmon.

Shawmut Dam:

Commission records show the Shawmut Dam licensee has not conducted "site-specific quantitative studies designed and conducted in consultation with the resource agencies, that passage through turbine(s) will not result in significant injury and/or mortality (immediate or delayed)" for adult Atlantic salmon, as their license requires prior to adult allowing Atlantic salmon to have access to their project turbines.

Weston Dam:

Commission records show the Weston Dam licensee has not conducted "site-specific quantitative studies designed and conducted in consultation with the resource agencies, that passage through turbine(s) will not result in significant injury and/or mortality (immediate or delayed)" for adult Atlantic salmon, as their license requires prior to adult allowing Atlantic salmon to have access to their project turbines.

Violation of Licenses:

Commission records show that since 2006 the licensees of these dams have annually allowed adult Atlantic salmon access to the turbines of these dams without conducting the quantitative, site-specific turbine mortality studies required by license. Licensees' failure to conduct these studies, while simultaneously allowing adult Atlantic salmon annually released above their dams to have access to the project turbines in 2006, 2007, 2008 and 2009, is a violation of license.

Compliance of this complaint with Rule 206(b)(6):

Commission Rule 206(b)(6) reads: "State whether the issues presented are pending in an existing Commission proceeding or a proceeding in any other forum in which the complainant is a party, and if so, provide an explanation why timely resolution cannot be achieved in that forum;"

The issues in this complaint are not pending in an existing Commission proceeding or a proceeding in any other forum in which the complainants are a party.

Remedy Requested:

Maine Dept. of Marine Resources records show that approx. 22 adult Atlantic salmon were transported above these dams in 2009 to the Sandy River to spawn. These adults will migrate downstream past these dams this spring, from April to June, to the Atlantic Ocean as kelts. These salmon will have access to the project turbines of all four dams, creating a high risk that they will be killed or severely injured in the turbines of one of the four dams during their downstream migration from the Sandy River.

Since the Commission's license amendments were issued in 1998, the licensees have had eleven years to conduct quantitative, site-specific turbine mortality studies of adult Atlantic salmon at their dams, but have elected not to do so. In 2006, the licensees began annually transporting Atlantic salmon above these dams without implementing any effective measures to keep these salmon from entering the turbines of these dams.

The licensees' failure to conduct these studies since 1998, and the failure of the state and federal agencies since 2006 to enforce this highly specific license condition, greatly limits the remedy which we can now request. It will take years for quantitative, site specific studies of turbine mortality of adult Atlantic salmon to be conducted at the dams.

The only "real-world" remedy available now which will allow for compliance with license conditions for these dams and will protect adult Atlantic salmon kelts migrating down the Kennebec River past these dams in 2010 is for the dam owners to suspend generation at the projects during April-June of each year unless and until proven, effective barriers have been installed at the projects which prevent adult Atlantic salmon from gaining access to the project turbines. We request these generation shutdowns begin on April 1, 2010.

Sincerely,

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cc:
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FPL Energy Maine Hydro
Maine DEP, Bureau of Land & Water Quality
NOAA-Fisheries
USFWS, Maine Field Office
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