



JANET T. MILLS
GOVERNOR

STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES
21 STATE HOUSE STATION
AUGUSTA, MAINE
04333-0021

PATRICK C. KELIHER
COMMISSIONER

May 19, 2021

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

RE: Notice of Application for Surrender of License for the Lower Mousam Hydroelectric Project (P-5362)

Dear Secretary Bose:

The Maine Department of Marine Resources (MDMR) is writing in response to the *Notice of application for surrender of license, soliciting comments, motions to intervene, and protests* for the Lower Mousam Hydroelectric Project (P-5362) filed by FERC on April 21, 2021. This notice includes the surrender and decommissioning plan for the Lower Mousam Projects. MDMR believes decommissioning these projects must, at a minimum, include adequate fish passage that shall be operated by the owner. Such passage shall be scaled for future expanded populations of native aquatic organisms with further consideration of water quality, and safety. Furthermore, each sight must have a viable long-term maintenance plan and associated funding.

Background

The Lower Mousam Project (Project) consists of three concrete gravity dams with associated hydroelectric generating facilities on the Mousam River in Kennebunk, Maine, which are owned and operated by Kennebunk Light and Power District (Applicant). The Kesslen Dam is located in the village of Kennebunk, approximately 3.9 miles from the ocean. The 18-foot high, 140-foot long Kesslen dam is topped with flashboards, and creates an impoundment of approximately 25 acres. The Twine Mill Dam is located approximately 2.5 miles upstream from the Kesslen Dam. The 18-foot high, 233-foot long Twine Mill Dam has an 81-foot long spillway, is topped with 3-foot high flashboards, and creates an impoundment of approximately 12 acres. The Dane Perkins Dam, located approximately 0.5 miles upstream from the Twine Mill Dam, is 12-foot high, 84-foot long, has a 50-foot long spillway, 2.5-foot high flashboards, and creates an impoundment of approximately 25 acres. The powerhouse at each dam contains a single turbine-generator unit. The units at the Kesslen Dam and the Dane Perkins Dam are rated at 150 kW and the one at the Twine Mills Dam is rated at 300 kW.

On November 2, 2020 the applicant filed a Proposed Plan and Schedule to File Surrender Application with FERC. On November 5, 2020 FERC replied and accepted the Plan for Surrender and decommission of the Project. In February 2021, the applicant mailed a draft surrender plan to MDMR. On March 12, 2021 MDMR filled our response the draft surrender plan with FERC (20210312-5087). On March 31, 2021, the applicant filed a surrender application for the project with FERC.

In the surrender application, the applicant proposes to surrender its license which expires March 31, 2022. The applicant indicates that more reliable and cost-effective sources of electricity are available, and the project is no longer cost-effective to operate. The applicant proposes to decommission the project by removing all flashboards, disconnecting leads from generators, removing all generation and electrical equipment, as well securing each project development with fencing. The dams would remain in place and no ground disturbing activities would occur.

Also in the surrender application, the application asserts that the decommissioning plan will have no environmental effects. The applicant goes on to describe the Mousam River above Kesslen Dam as inaccessible to fish due to “natural falls” at the site of the dam and other falls in the river. The surrender application asserts that fish passage has not been required at the Projects historically. Further, the surrender application indicates that no changes are proposed to recreational access including existing boat launch and river access sites, and that preservation of Project impoundments will enhance recreational opportunities.

Comments on the Environmental Report and Description of Environmental Effects (Section VI.)

Based on our review of the decommission plan included in the surrender application, MDMR does not agree that the Project facilities will have no environmental effects. MDMR supports the comments of the Maine Department of Environmental Protection in regard to impacts to water quality. The presence of the Dane Perkins and Twine Mill dams cause or contribute to lower water quality, specifically DO and aquatic habitat, in these reaches of the Mousam River. The Kesslen Dam impoundment also likely causes or contributes to lower water quality, but no water quality data was collected in the impoundment and so no conclusions can be reached. Waters that support habitat for aquatic organisms are part of Maine’s water quality standards and are degraded by the lack of fish passage to historic habitats, which are between and above these projects. Dam removal or partial breach to increase the flow of water through the impoundments would correct the water quality impacts to the river and its habitats.

Based on our review of the decommission plan included in the surrender application, MDMR does not agree that the proposed plan for decommissioning will have no effect on fish and aquatic habitat within the Project Boundaries. The Maine Department of Inland Fisheries and Wildlife has documented the presence of American eel in the watershed above the three dams. In addition, limited fyke-net sampling conducted by the Wells National Estuarine Research Reserve and video studies conducted by the Rachel Carson National Wildlife Refuge have documented the presence of six species of anadromous fish (alewife, blueback herring, American shad, rainbow smelt, Atlantic tomcod, and striped bass) and one catadromous species (American eel) in the Mousam River downstream of the Kesslen Dam. Historic habitat for most, if not all of these species, extends past the most upstream project. The proposed surrender in place decommission plan will not address the primary impact of the Projects: the dams block access to historic habitat for diadromous species that are present within the project boundaries. Dam removal or partial breach at the three dams would greatly increase the anadromous fish resources in the river. There are approximately 40 acres of habitat between the Kesslen Dam and the fourth dam on the Mousam River (Old Falls Dam) that should produce large runs of blueback herring, American shad, and possibly alewife.

The applicant asserts in the surrender application that natural falls blocked fish passage above the Projects and that fish passage has not been required at the Projects historically. The applicant includes of references to an 1872 map and descriptions of falls or drops in the river, but these documents are not

evidence of barriers to diadromous fish. These descriptions include the amount of drop in the river, but do not include the distance over which that drop is measured. Without including a distance of measurement, the amount of drop cannot be used to identify a barrier to fish passage. Furthermore, the presence of pools, steps, or other attributes in the riverbed at the site would need to be included to assess fish passage at any site. In addition to MDMR's comments above, the nexus between diadromous fish and the Project has also been documented in the FERC record for the Projects during the application for licensing process of American First Hydro. FERC staff recommendations in the study plan determination (20180720-3006) provide a summary of this documentation. Furthermore, MDMR notes that habitat, as a designated use in Maine's water quality standards, generally includes connecting river segments so that anadromous fish can access historic freshwater spawning habitat. Further, the Atlantic States Marine Fisheries Commission (ASMFC) is an Interstate Compact, ratified by the member states and approved by the U.S. Congress in 1942, to manage the states' shared migratory fishery resources and to cooperate in promoting and protecting Atlantic coastal fishery resources. Maine is an active member of ASMFC, and MDMR scientists represent the State on the Shad and River Herring Technical Committee and the American Eel Technical Committee.

Pertinent goals and objectives of the Shad and River Herring Fishery Management Plan (ASMFC 1985) are to:

- Improve habitat accessibility and quality, including addressing fish passage needs at dams and other obstructions, improving water quality, addressing river flow allocations to support habitat needs, and preventing mortality at water withdrawal facilities.
- Initiate stocking programs in historical habitat that do not presently support natural spawning migrations, expand existing stock restoration programs, and initiate new programs to enhance depressed stocks.

Pertinent goals and objectives of the American Eel Fishery Management Plan (ASMFC 2000) are to:

- Protect and enhance the abundance of American eel in inland and territorial waters of the Atlantic states.
- Contribute to the viability of American eel spawning populations.
- Protect and enhance American eel abundance in all watersheds where eel now occur.
- Where practical, restore American eel to those waters where they had historical abundance but may now be absent by providing access to inland waters for glass eel, elvers, and yellow eel and adequate escapement to the ocean for pre-spawning adult eel.

None of the three dams currently provide upstream or downstream passage for multiple species of diadromous and resident fishes and the surrender application will not address this impact. The lack of passage at these three dams, along with the presence of the impoundments created by the dams, has hindered the development of these fish populations and negatively impacted commercial and recreational fisheries opportunities.

The applicant also asserts in the surrender application that no changes are proposed to recreational access including existing boat launch and river access sites, and that preservation of Project impoundments will enhance recreational opportunities. While this is true for some types of recreation, many other types of recreation are impeded due to the dams. It is possible that popular striped bass fishing in the lower river would be much enhanced with robust prey sources such as blueback herring, eels, shad, and alewives accessing productive historic habitats. Run of river canoeing and kayaking and other types of riverine recreation are also impeded by the dams. There are also continued hazards of

dams as drowning and impingement risks, increased flooding risk, and potential impacts to downstream critical infrastructure.

Additional Comments

The Decommission Plan is not Consistent with Environmental Considerations

“As described in Section VI of this surrender application, the Mousam River has developed a particular ecosystem over the centuries since dams were first constructed that is a stable home to a variety of aquatic resources.” By asserting that the Mousam River has “developed a particular ecosystem” due to the dams on the river, the applicant is asserting that the dams have has a positive impact on the natural resources of the river. This statement is patently false, which has been shown by the comments of all of the natural resource agencies on the draft surrender application. Please refer to our comments on the Environmental Report and Description of Environmental Effects in the above section.

The Decommission Plan is not Consistent with Environmental Considerations

In several places in the Surrender Application, the applicant makes asserts that the proposed decommissioning plan is consistent with economic considerations. The applicant goes on to claim that “other possible approaches to Project decommissioning represent an unreasonable financial risk and burden that would be borne by the District’s ratepayers.” By other possible approaches, the applicant is referring to dam removal and fish passage among other possibilities. The applicant failed to fully address the costs associated with long-term maintenance of the Projects post relicensing, even though these costs have been shown to be greater than the costs of dam removal. A Hydropower Facility Alternatives Assessment Study was completed by Wright-Pierce in May 2016¹ and a third-party review of that study was completed by GZA GeoEnvironmental, Inc. in June of the same year². Both the alternatives study and the review identified appropriate and reasonable alternatives and described the costs, benefits, and challenges for each alternative. A key finding of these reports is, “Cost analysis of the various alternatives indicates that the life-cycle cost of maintaining one or more of the dams will likely be greater than removal of the dams.”² In other words, removing the dams will cost less than the long-term maintenance of the three dams that make up the Project. The costs for long-term maintenance of the three dams would be borne by the District’s ratepayers, as there are few if any funding assistance opportunities for maintaining decommissioned hydropower dams. By proposing to surrender the dams in place, MDMR is concerned that applicant is choosing to burden its rate payers with the maintenance costs associated with the dams for perpetuity or until the applicant relinquishes ownership and responsibility for the dams, which may burden the State of Maine or municipalities.

Further, the applicant’s surrender plan does not provide a stable future for maintenance of the dams as it does not include dedicated financial resources for this purpose. In their comments on the draft surrender application, Mousam Kennebunk River Alliance and Maine Rivers made the following statement:

“There must be a plan for ongoing maintenance of the structures. MKRA/MR suggest that a condition of surrender be that KLPD must have a long term, nonrevocable bond to cover dam maintenance and the effect of potential catastrophic failure.”

In response to MKRA/MR’s comments the applicant stated that “the District will continue to maintain the dams consistent with its obligations. Moreover, the District carries insurance to protect its ratepayers from the liabilities associated with dam ownership.” While insurance may protect the District’s

¹ Kennebunk Light and Power District Hydropower Facility Alternatives Assessment Study, Wright-Pierce (2016).

² Third Party Review of Wright-Pierce Financial Analysis Methodologies, GZA GeoEnvironmental, Inc. (2016).

ratepayers from costs associated with catastrophic failure, insurance does not relieve the financial burden on long-term maintenance or other types of impacts. There are no legally binding provisions in the surrender application that require the applicant to provide any future funds for long-term maintenance of the projects. The lack of dedicated funding is concerning as the long-term maintenance costs of the dams are unavoidable as long as the dams remain in place. MDMR is concerned that the applicant may attempt to relinquish their responsibility to maintaining the dams after the license surrender. The State of Maine is already burdened with the responsibility to remove abandoned or otherwise derelict dams throughout the State. The additional burden of the three dams associated with the Project are facilities that have been used by the applicant under the current license should be permanently rectified as part of the license surrender.

For these reasons, MDMR requests that FERC require the applicant to remove or breach the dams as a preferred alternative. At minimum, the applicant must provide adequate fish passage that shall be operated by the owner and establish a sufficient dedicated fund for the long-term maintenance of the dams in order to ensure the conditions of surrender can be met following license surrender. MDMR is concerned that the long-term maintenance of the dams would likely be borne by the District's ratepayers, with a possible default relinquishing ownership and a burden on the State of Maine, and thus we recommend dam removal or breach as the most consistent with economic, safety, and environmental considerations.

Thank you for the opportunity to review and comment on the Surrender Application for the Lower Mousam Hydroelectric Project. Please direct any questions by email to Casey.Clark@maine.gov.

Sincerely,



Patrick C. Keliher, Commissioner

cc: Todd Shea, General Manager, KLPD
Sean Ledwin, Gail Wippelhauser, MDMR
John Perry, James Pellerin, DIFW
Kathy Howatt, DEP
Julianne Rosset, Corbin Hilling, USFWS
William McDavit, NMFS