

UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE NORTHEAST REGION

One Blackburn Drive Gloucester, MA 01930-2298

Magalie R. Salas, Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, DC 20426

RE: Project No. 12666-000 COMMENTS

Dear Secretary Salas:

This letter is in response to the Federal Energy Regulatory Commission's (Commission) notice of application (Notice) by Maine Tidal Energy Company for a preliminary permit for the Kennebec Tidal Energy Hydroelectric Project in the Kennebec River, Maine. Although the scope of the Notice is limited to preliminary planning and economic analysis, the ultimate project has the potential to significantly impact trust resources of NOAA's National Marine Fisheries Service (NMFS). Accordingly, NMFS anticipates that the Commission and/or any other Federal permitting agency, such as the Army Corps of Engineers (Corps), will need to perform an analysis of environmental impacts under the National Environmental Policy Act (NEPA) should the project's scope progress. Further, the Commission will need to consult with NMFS pursuant to the statutory authorities outlined below before authorizing installation in the involved waterway, even if the installation is limited to data collection devices or a small scale experimental pilot study.

Maine Tidal Energy's Application

On March 27, 2006, Maine Tidal Energy Company filed a preliminary permit application for the Kennebec Tidal Energy Hydroelectric Project (FERC Project No. 12666) with the Commission. The proposed project would be located in the Kennebec River estuary between Chops Point and West Chops Point, Sagadahoc County, Maine and would consist of 50 Tidal in Stream Energy Conversion (TISEC) devices consisting of: (1) rotating propeller blades, (2) integrated generators with a capacity of 0.5 to 2.0 MW, (3) anchoring systems, (4) mooring lines, and (5) interconnection transmission lines. The project is estimated to have an annual generation of 8.76 gigawatt-hours per-unit per-year, which would be sold to a local utility. As noted in the Commission's Notice, a preliminary permit, if issued by the Commission, does not authorize construction. The work proposed under the preliminary permit would include economic analysis, preparation of preliminary engineering plans, and a study of environmental impacts. Based on the results of these studies, Maine Tidal Energy Company would decide whether to proceed with the preparation of a development application with the Commission to construct and operate the project.

The tidal energy project proposed under this application represents novel technology with the potential for significant adverse effects to all marine resources that utilize the Kennebec River for spawning, rearing and migration, including marine and diadromous fish and marine mammals. The preliminary permit application contains very little detail on the specifics of the proposed project and no analysis of the potential impacts to resources under NMFS' jurisdiction. Such an analysis would be required as part of a development application to construct and operate the project, whether on a pilot or full scale. The analysis must be sufficient to meet the requirements of NEPA and the Federal Power Act, as well as the Commission's consultation obligations under the various laws noted below.

According to section q of the Notice, a preliminary permit, if issued, does not authorize construction. As stated above, the work proposed under the preliminary permit would include economic analysis, preparation of preliminary engineering plans, and a study of environmental impacts. These studies will allow the applicant to assess the feasibility of the proposed project. We assume that these studies are all desk studies and do not require or involve in-water work. As a result, this preliminary permit, if issued, does not itself pose any risk to living marine or diadromous resources. The development application would require full documentation, analysis of potential impacts, and full consultation obligation requirements under the variety of laws mentioned previously and later in this letter. Because the studies being proposed during the preliminary permit phase do not require in-water work and the preliminary permit does not authorize any construction or installation of structures in the river, we have chosen not to intervene in this project at this time. If and when a development application is submitted, it must contain a great deal more information and analysis and at that time NMFS will determine whether intervention is appropriate.

National Marine Fisheries Service's Trust Resources

NMFS has federal statutory responsibility for protection, mitigation, and enhancement of marine and anadromous fish resources and marine mammals that may be directly affected by this project. Those authorities include: protection of marine and anadromous fish and their habitat under the Magnuson-Stevens Fishery Conservation Act (16 USC 1801, et seq.); diadromous species under the Fish and Wildlife Coordination Act (16 USC 661, et seq.); marine mammals pursuant to the Marine Mammal Protection Act (16 USC 1361, et seq.); and, threatened and endangered species under the Endangered Species Act (16 USC 460, et seq.). These same statutory authorities also obligate any Federal agency, including the Commission, to consult with NMFS before taking any action that might adversely affect NMFS trust resources.

The Kennebec River estuary supports numerous diadromous fish species, providing habitat for Atlantic salmon, shortnose sturgeon, American shad, river herring, rainbow smelt, Atlantic tomcod, striped bass, sea lamprey, Atlantic sturgeon and American eel. Several species of marine mammals are common residents or occasional visitors to the waters of the Kennebec River estuary including gray seals, harbor seals, and harbor porpoise. The construction and operation of the numerous generation facilities proposed in the river could adversely affect fish populations and marine mammals in the Kennebec River estuary through disturbance/alteration of habitat and interaction with the generating facilities.

Shortnose sturgeon and the Gulf of Maine Distinct Population Segment of Atlantic salmon are listed as endangered under the Endangered Species Act. On March 11, 1967, shortnose sturgeon (*Acipenser brevirostrum*) were listed as endangered throughout the species range. NMFS assumed jurisdiction for shortnose sturgeon under a 1974 government reorganization plan (38 FR 41370). As noted in NMFS' 1998 Recovery Plan for shortnose sturgeon, a population of this federally endangered fish is recognized to exist in the estuarine complex formed by the Sheepscot, Kennebec, and Androscoggin rivers. A spawning population of shortnose sturgeon is known to occur in the Kennebec River. The adult population in the Kennebec River was estimated at 7,222 in 1992 based on tagging and recapture efforts from 1977-1981. Shortnose sturgeon migrating within the estuarine complex formed by the Sheepscot, Kennebec, and Androscoggin rivers must pass between Chops Point and West Chops Point. Therefore, NMFS expects that shortnose sturgeon could be affected by the development phase of the proposed tidal project.

On December 17, 2000 (65 FR 69459), the Gulf of Maine Distinct Population Segment (DPS) of Atlantic salmon (*Salmo salar*) was jointly listed by NMFS and the U.S. Fish and Wildlife Service as endangered under the ESA. The Atlantic salmon DPS encompasses all naturally reproducing remnant populations of Atlantic salmon from the Kennebec River downstream of the former Edwards Dam site, northward to the mouth of the St. Croix River. The proposed project is located within the geographic range of the DPS and thus has the potential to affect the listed salmon. A status review of additional Atlantic salmon populations, including the Kennebec River population, is currently being conducted by a Biological Review Team led by NMFS. This status review is expected to be available in 2006.

Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) are distributed along the entire East Coast of the United States and have been designated a Species of Concern by NMFS. Many populations, including those found in Maine, have undergone drastic declines in abundance since the late 1800s. Consequently, NMFS has initiated a status review for this species to determine if listing as threatened or endangered under the ESA is warranted. If it is determined that listing is warranted, a final rule listing the species could be published within a year from the date of publication of the listing determination or proposed rule.

Atlantic sturgeon are known to exist in the Kennebec River. One hundred and fifty-seven Atlantic sturgeon have been captured in the Kennebec River in scientific sampling programs since 1977. The capture of adult male Atlantic sturgeon in ripe condition near the head-of-tide during sampling in June and July of 1994 presents strong evidence that a spawning population persists in the Kennebec River. While Atlantic sturgeon receive no substantive or procedural protection under the ESA, NMFS recommends that project proponents consider implementing conservation actions to limit the potential for adverse effects on Atlantic sturgeon from proposed projects.

Under Section 7(a)(2) of the ESA, each Federal agency is required to insure that any action they authorize, fund or carry out is not likely to jeopardize the continued existence of any endangered species or threatened species. Because the current action being contemplated by the Commission

is limited to approval of a preliminary permit which does not authorize any in-water work or construction, there will be no effects to listed species and there is no need for a consultation under Section 7 of the ESA at this time. Should the application proceed with preparation of a development application to construct and operate the project, the Commission must initiate section 7 consultation to evaluate the potential impact of those activities on listed shortnose sturgeon and Atlantic salmon.

Additionally, the entire Kennebec River and many of its tributaries have been designated as Essential Fish Habitat (EFH) for Atlantic salmon under the Magnuson-Stevens Fishery Conservation and Management Act (MSA). Under the 1996 Amendments (PL 104-267) to the MSA (16 U.S.C § 1801 et seq. (1998)), the Commission is required to consult with NMFS if the Commission's action or proposed action that it funds, permits, or undertakes, may adversely impact any EFH. The Amendments broadly define EFH as "waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." EFH has been designated for over a dozen federally managed species in the Kennebec-Sheepscot-Androscoggin rivers estuary. Under the MSA, the Commission is obligated to consult with NMFS concerning this matter.

As noted previously, the Kennebec River estuary supports numerous other diadromous fish species including American shad, Atlantic sturgeon, river herring, rainbow smelt, Atlantic tomcod, striped bass, sea lamprey, and American eel. Pursuant to the Fish and Wildlife Coordination Act (16 USC 661, et seq.), the Commission is required to consult with NMFS if an action modifies a water body. The Commission is required to consider recommendations from NMFS to prevent loss of and damage to fish and wildlife resources. If at some point the Commission proposes to issue a permit to allow the installation of TISEC or other devices in the Kennebec River, NMFS will provide recommendations to protect diadromous fish resources in the river.

All marine mammals receive protection under the Marine Mammal Protection Act (MMPA) of 1972, as amended. The MMPA prohibits, with certain exceptions, the take of marine mammals in U.S. waters and by U.S. citizens on the high seas, and the importation of marine mammals and marine mammal products into the U.S. The MMPA established a Federal responsibility to conserve marine mammals with management vested in the Department of Interior for sea otter, walrus, polar bear, dugong, and manatee and Department of Commerce for cetaceans (e.g., whales, dolphins, porpoises) and pinnipeds (e.g., seals). NMFS may issue permits under MMPA Section 104 (16 U.S.C. 1374) to persons, including federal agencies such as the Commission, that authorize the taking or importing of specific species of marine mammals. As previously indicated, several marine mammals including gray seals, harbor seals, and harbor porpoise occur in the Kennebec River estuary and thus could be affected by the proposed tidal project.

Conclusion

The limited nature of the Commission's preliminary permit and Notice suggest that the applicant presently seeks to perform desk-top feasibility studies and not engage in any in-water work or installation. Accordingly, NMFS does not presently seek to intervene in this matter. If, however, the scope of anticipated work in this matter shifts from that specifically outlined in the

Commission's Notice, then NMFS reserves its right to seek intervention in the future. Additionally, to the extent that in-water work and/or installation is proposed either in full or as part of an experimental pilot, then NMFS anticipates that the environmental impacts of such work would need be analyzed pursuant to NEPA.

We encourage the Commission and the applicant to work with NMFS as project plans become more developed to identify and evaluate the potential for impacts to the species under NMFS' jurisdiction. Informal discussions can greatly facilitate consultation if a decision is made to file a development application at a later stage. NMFS should be consulted early in the planning process for our advice on impact assessment studies. Additionally, if any in-water studies are proposed, NMFS should be contacted to determine if the Commission has a consultation obligation under any of the statutes mentioned above.

Thank you for the opportunity to comment on this application. While NMFS is not requesting intervenor status at this time, NMFS requests to be added to the service list for this project. Should you have any questions regarding these comments, please contact Jeff Murphy at (207)866-7379 at our Maine Field Station.

Sincerely,

Mary A. Colligan

Assistant Regional Administrator

for Protected Resources

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