



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 1

1 CONGRESS STREET, SUITE 1100  
BOSTON, MASSACHUSETTS 02114-2023

OFFICE OF THE  
REGIONAL ADMINISTRATOR

July 23, 2009

Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Room 1A  
Washington, DC 20426

RE: Comments on the Scoping Document for the Half Moon Cove Tidal Power Project FERC No. P-12704

Dear Secretary Bose:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act we submit the following comments as part of the NEPA scoping process for the proposed Half Moon Cove Tidal Power Project proposed by Tidewalker Associates (Tidewalker) in Cobscook Bay, between Eastport and Perry, Maine. We request that our comments be considered as you work to establish a scope of analysis for the proposed project under NEPA.

Our comments are based on information provided in the Federal Energy Regulatory Commission's (FERC) May 26, 2009 Scoping Document noting the Commission staff intent to prepare an Environmental Assessment (EA) for the project. The scoping document also notes that it may be determined at some point in the future that it is necessary to prepare an Environmental Impact Statement (EIS) for the project. We recognize that under NEPA agencies may prepare an EA to help inform the decision as to whether an EIS is required. However, in view of the large size, potential impacts, and precedent setting nature of this project we recommend that FERC proceed directly to preparation of an EIS. According to the information provided the project entails the construction of a 1,200-foot-long, 31-foot-high rock filled dam (barrage) extending between the southern terminus of Old Eastport Road and the Northern terminus of Old Route 190 in Cobscook Bay to create an impoundment basin in Half Moon Cove. The barrage would house a concrete powerhouse with two turbine generating units with a total installed capacity of 16 megawatts (MW). The flooded portion of the impoundment basin area would cover 880 acres of Half Moon Cove at high tide and 250 acres at low tide.

EPA acknowledges the potential benefits (air quality and energy supply diversification) associated with increased usage of tidal resources to generate power in New England. We support development of environmentally sound renewable energy projects in a manner that addresses the concerns articulated in the scoping document and in this letter, and in a manner consistent with any applicable environmental permits and mitigation identified during the NEPA

617-918-1010

Internet Address (URL) • <http://www.epa.gov/region1>

Recycled/Recyclable • Printed with Vegetable Oil Based Inks on Recycled Paper (Minimum 30% Postconsumer)

process.

As you know, the construction and operation of the Half Moon Cove Project could result in a wide range of direct, indirect (secondary) and cumulative impacts to environmental resources that are within EPA's areas of jurisdiction and expertise. Based on our review of available information, we believe the scoping document has identified many of the environmental concerns that should be fully examined but we have identified below several areas where we believe the scope of analysis should be expanded. We are particularly interested in a comprehensive assessment of potential impacts (direct, indirect, and cumulative) from construction and operation of the facility on the aquatic resources in Cobscook Bay, Half Moon Cove and Passamaquoddy Bay and along the proposed 7.1 mile long 34.5-kilovolt (kV) transmission line between the project and Pembroke, Maine. The extent of analysis that will be needed to appropriately examine this project's impacts and alternatives, as outlined in the scoping document and in this letter, in our judgment clearly underscores that an EIS is more appropriate than an EA in this case (see in particular Question 36a of the Council on Environmental Quality's 40 Most Asked Questions Concerning CEQ's NEPA Regulations).

### **Alternatives**

Section 3.3 of the scoping document notes, "Commission staff will consider alternative recommendations for operational or facility modifications, although none have been identified yet." The development of a comprehensive alternatives analysis for NEPA purposes and ultimately to support permitting under Section 404 of the Clean Water Act should be based on the purpose and need statement (basic project purpose statement for Section 404 purposes). In this case, however, we note that the scoping document does not include a purpose and need statement. Typically in New England projects that require a Corps permit and environmental analysis under NEPA are coordinated through a single, concurrent environmental review/permitting process called the "Corps Highway Methodology." We recommend that such a process be followed in this case as it has proved efficient and successful. We also recommend that FERC work closely with the federal agencies during the development of the project purpose and need early on during the development of the NEPA analysis. Early coordination on the appropriate range and geographic scope of alternatives should parallel the development of a range of alternatives required under the Corps of Engineers' permit process pursuant to Section 404 of the Clean Water Act.

CEQ's regulations implementing NEPA at Section 1502.14 explain that a reasonable range of alternatives should be presented and compared to allow for a "clear basis for choice among options by the decision maker and the public." FERC should fully evaluate a range of alternative sites and technologies for development of a tidal power facility and supporting infrastructure and should describe site development options that can avoid or minimize impacts. In addition to the proposed project and the no action alternative, FERC should evaluate the other potential project sites, discuss any sites that were considered and eliminated from detailed analysis, and describe the screening process used to eliminate alternatives.

In addition to alternative sites, we recommend that FERC evaluate alternative construction methods and alternative means to operate and maintain the facility, consistent with the project purpose and need. For example, the analysis should include alternative operational schemes (e.g., seasonal restrictions on operations should they be necessary to prevent impacts to marine organisms). The impacts associated with each alternative should be explained as well as how the preferred alternative (including mitigation measures) would be designed to avoid adverse effects to environmental, social and cultural resources. We recommend that the information be presented in a manner that allows for a comparison of impacts across alternatives.

An investigation of alternative alignments for the transmission line to avoid impacts should also be analyzed.

### **Aquatic Habitat/Marine Impacts**

Given the potential for direct impacts to the marine environment from construction and operation of the facility and the potential for indirect and cumulative effects on organisms and habitat in the impoundment area and water column, we believe FERC should provide a detailed description of the aquatic habitat in the project area as well as the wetlands/water bodies along the route of the proposed transmission line.

The document should describe the portions of the work that will involve discharging dredged or fill material in wetlands or other waters of the United States that will be subject to the permit requirements of Section 404 of the Clean Water Act. Discharge activities must comply with EPA's regulations issued under Section 404 (b)(1), referred to as "EPA's 404 (b)(1) Guidelines" (40 CFR Part 230), which require the following: that there be no less environmentally damaging practicable alternative to the proposed action; that the activity not cause or contribute to violations of state water quality standards or jeopardize endangered or threatened species; that the activity not cause or contribute to significant degradation of waters of the United States; and that all practicable and appropriate steps be taken to minimize potential adverse impacts to the aquatic ecosystem (Section 230.10). The document should include an evaluation of ways in which each alternative and supporting infrastructure can be designed/sited to avoid aquatic impacts.

Unavoidable impacts to wetlands, surface water resources, intertidal and subtidal habitats and wildlife should be fully disclosed. These impacts include but are not limited to: direct filling; temporary impacts resulting from access for construction purposes; indirect impacts, such as clearing impacts resulting in a change (either permanent or temporary) of cover type within a wetland (e.g., converting a forested wetland to an emergent or scrub/shrub wetland) and indirect impacts resulting from erosion or sedimentation into wetlands or waterbodies. The discussion of unavoidable impacts should include a conceptual discussion of anticipated compensatory mitigation for losses to wetlands and other waters and cover type conversions from construction and operation of the project, as well as impacts to state and federally listed endangered species. In addition, all construction practices which will be utilized to minimize impacts should be documented. Specifically, standard conditions to protect wetlands should be documented in

addition to steps which may be taken to reduce impacts to particularly sensitive areas such as vernal pools.

The document should also discuss the mortality to various forms of plankton resulting from transiting through the proposed turbines. The document should then attempt to predict the long term viability of the biological community in Half Moon Cove in light of the predicted mortality from the turbines and from changes in the tidal regime and water depths. EPA encourages FERC to work closely with state and federal resource agencies to develop consensus regarding the scope of analysis for marine studies.

We also recommend that the document:

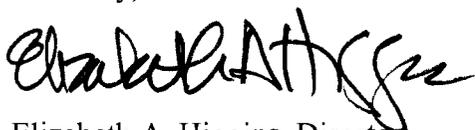
- discuss the advantages and disadvantages associated with each of the alternatives and the rationale for preferring one over another;
- identify any wetlands along the transmission line route (either within the right-of-way or immediately adjacent to it) that support rare and exemplary natural communities. If any of these areas exist, we recommend that the document describe specific mitigative measures to ensure that they will be protected from potential direct and indirect impacts. The locations of temporary and permanent access roads should be clearly identified relative to these unique wetland areas and a discussion provided to explain how the wetland ecosystems will be protected from indirect impacts associated with these roads;
- describe the long-term right-of-way maintenance techniques planned for the transmission line proposed for the project. The discussion should include an analysis of the effects of maintenance techniques on plant life and wildlife habitat and should explain whether herbicides will be used and whether specific buffer zones will be established around wetlands where herbicide application would be prohibited.

### **Cumulative Impacts**

We believe the cumulative impacts of this project and other proposed and reasonably foreseeable projects in the region, including various LNG proposals, should be analyzed and provided in the document.

Thank you for the opportunity to provide scoping comments. We look forward to working with FERC to help refine the scope of the NEPA analysis. We stand ready to review the revised scoping document and to attend interagency coordination meetings as appropriate and as our resources allow. Should you have any questions or wish to discuss our concerns, please contact Timothy Timmermann of the Office of Environmental Review at 617/918-1025.

Sincerely,

A handwritten signature in black ink, appearing to read "Elizabeth A. Higgins". The signature is stylized and cursive.

Elizabeth A. Higgins, Director  
Office of Environmental Review

Document Content(s)

TidewalkerScopingtoFERC7-23-09pdf.PDF.....1-5