

UNITED STATES OF AMERICA 138 FERC ¶ 62,078  
FEDERAL ENERGY REGULATORY COMMISSION

Natural Currents Energy Services, LLC

Project No. 14228-000

ORDER ISSUING PRELIMINARY PERMIT  
AND GRANTING PRIORITY TO FILE LICENSE APPLICATION

(February 3, 2012)

1. On July 15, 2011, Natural Currents Energy Services, LLC (Natural Currents) filed an application for a preliminary permit, pursuant to section 4(f) of the Federal Power Act (FPA),<sup>1</sup> to study the feasibility of the proposed Avalon Tidal Energy Project No. 14228 (Avalon Project or project) to be located on the Ingram Thorofare in Cape May County, New Jersey.

**I. Project Proposal**

2. The proposed project would consist of: (1) installation of 10 to 30 NC Sea Dragon or Red Hawk tidal turbines at a rated capacity of 100 kilowatts; (2) an estimated 700 meters in length of additional transmission infrastructure; and (3) appurtenant facilities. The project is estimated to have an annual minimum generation of 3,504,000 kilowatt-hours with the installation of 10 units. There are no federal or state lands associated with the project.

**II. Background**

3. The Commission issued public notice of Natural Current's permit application on November 8, 2011. The New Jersey Board of Public Utilities (the Board) filed a notice of intervention on November 17, 2011.<sup>2</sup> Comments were filed by the National Marine Fisheries Service – Northeast Region (NMFS), the U.S. Environmental Protection Agency – Region II (EPA), the U.S. Army Corps of Engineers – Philadelphia District (Corps), and the U.S. Department of the Interior (Interior).

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<sup>1</sup> 16 U.S.C. § 797(f) (2006).

<sup>2</sup> Under Rule 214 (a) of the Commission's Rules of Practice and Procedure, the Board became a party to the proceeding upon timely filing of its notice of intervention. 18 C.F.R. § 385.214 (a) (2011).

### **III. Discussion**

#### **A. Consultation and Study Requirements Under the Permit**

4. NMFS states that the Ingram Thorofare, Townsends Inlet, and the surrounding waters have been designated as Essential Fish Habitat (EFH) under the Magnuson-Stevens Fishery Conservation and Management Act (MSA) for a number of federally managed species, and the Commission must initiate consultation with NMFS pursuant to the requirements of the MSA, regarding any action that may adversely affect EFH.

5. NMFS states that federally listed sea turtles and Atlantic sturgeon are found seasonally in New Jersey coastal waters; several species of marine mammals are common residents or occasional visitors to coastal waters of New Jersey; and that consultation may be necessary for any permits, authorizations, leases, easements, or rights of way issued by the Commission.

6. NMFS requests that a detailed, site-specific aquatic resource sampling plan be provided to NMFS for review prior to its implementation. NMFS states that 1 full year of baseline aquatic resource monitoring is needed prior to the installation or testing of any turbines in the waterway with sampling taking place at least once a month in January, February, July, August, and December, and more frequent sampling is necessary to characterize the use of the area by anadromous fish during the spring (March – June) and early fall (September – November); that water quality monitoring should be taken during each aquatic resource sampling event; and sampling of the benthic community should be done seasonally for at least 1 year.

7. EPA suggests the following issues be analyzed during the application and National Environmental Policy Act (NEPA) processes: (1) effect of the turbines on navigation and the hydrodynamics of the Ingram Thorofare; (2) cumulative impacts of this and any other reasonably foreseeable projects planned for the Ingram Thorofare, especially to fish and invertebrates, water quality, and hydrodynamics; (3) environmental justice impacts; and (4) detailed descriptions of the Sea Dragon unit and mounting equipment. EPA states that both bridges are owned and maintained by the New Jersey Department of Transportation (New Jersey DOT), and that since the bridges are potential sites for the Sea Dragon units, New Jersey DOT should be listed as an agency that “there is a reason to believe would likely be interested in or affected by such application.”

8. EPA recommends that Natural Currents begins discussions and consultations with all federal, state, and local agencies that will be involved with permitting or reviewing this project as soon as possible to ensure that the appropriate studies and monitoring plans are agreed upon by all parties before Natural Currents submits a Draft Pilot License by mid-year 2012 (as per the Figure 6 Schedule of Activities).

9. Interior states that the Townsends Inlet of the project area is nesting habitat of the federally listed piping plover; the federally listed annual plant, seabeach amaranth, can occur in suitable habitat on any Atlantic beach in New Jersey; and the shorebird, red knot, which is a candidate species for federal listing may occur in New Jersey year-round. Interior states: (1) that further consultation pursuant to section 7 of the Endangered Species Act will be required to avoid adverse effects to the piping plover, (2) that surveys for seabeach amaranth will be needed if work activities are to occur on beaches from May into the fall season, and (3) that timing of work activities could adversely affect red knots.

10. Interior states that the proposed project site is within the Avalon-Stone Harbor Marsh Macrosite and the Townsends Inlet Macrosite designated by the New Jersey Natural Heritage program to underscore the value to fish and wildlife resources of these bay and estuary tidal waters, and is also designated by the U.S. Fish and Wildlife Service (FWS) as Priority Wetlands pursuant to the Emergency Wetlands Resources Act of 1986 (EWRA) (P.L. 99-645). Interior recommends that Natural Currents consults with the FWS, NMFS, and state natural resources agencies to obtain more detailed information regarding necessary studies and potential mitigation measures.

11. In addition to the study needs mentioned above, Interior requests information to address: (1) essential fish habitat, (2) impacts to fish resulting from impingement on screens or entrainment in turbines, (3) the potential impact of the proposed project on colonial waterbirds, and (4) the level of environmental contaminants in the sediments and water columns pre- and post-project.

12. The Corps states that pursuant to section 10 of the Rivers and Harbors Act and section 404 of the Clean Water Act, a Department of the Army permit is required for work or structures in navigable waters of the United States and the discharge of dredged or fill material into waters of the United States including wetlands. Any proposal to perform regulated activities within areas of federal jurisdiction requires Department of the Army authorization from the Corps prior to any work taking place within those areas.

13. A preliminary permit does not authorize a permittee to undertake construction of the proposed project. The purpose of a preliminary permit is to study the feasibility of the project, including studying potential impacts. The Commission has not sought to place all relevant study requirements in preliminary permits.<sup>3</sup> Rather, the studies to be undertaken by a permittee are shaped by the Commission's filing requirements for development applications. Potential development applicants are required to consult with appropriate state and federal resource agencies and affected Indian tribes, conduct all reasonable studies requested by the agencies, and solicit comments on the applications

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<sup>3</sup> See, e.g., *Continental Lands Inc.*, 90 FERC ¶ 61,355 at 62,177 (2000).

before they are filed.<sup>4</sup> The concerns raised in the comments are premature at the preliminary permit stage, in that they address the potential effects of constructing and operating the proposed project. Should the permittee file a license application, these issues will be addressed in the licensing process. Further, permit conditions have been framed to ensure that the permittee does not tie up a site without pursuing in good faith a study of the project's feasibility.<sup>5</sup>

## **B. Sufficiency of Application**

14. NMFS and Interior state that additional information for the size, shape, operation, and proposed location of the turbine units, the method of installation, structures needed for installation, and transmission lines or any other associated structures needed for the operation of the turbines should be provided.

15. Section 4.81 of the Commission's regulations requires that a permit application include a description of the proposed project facilities, *to the extent possible*. During the permit term, the permittee would investigate the feasibility of the proposed project and further develop the details of the necessary project facilities. As such, more specific information on the location and description of the proposed project facilities would be provided during the preparation of any development application.

## **IV. Permit Information**

16. Section 4(f) of the FPA authorizes the Commission to issue preliminary permits for the purpose of enabling prospective applicants for a hydropower license to secure the data and perform the acts required by section 9 of the FPA,<sup>6</sup> which in turn sets forth the material that must accompany an application for license. The purpose of a preliminary permit is to preserve the right of the permit holder to have the first priority in applying for a license for the project that is being studied.<sup>7</sup> Because a permit is issued only to allow the permit holder to investigate the feasibility of a project while the permittee conducts investigations and secures necessary data to determine the feasibility of the proposed

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<sup>4</sup> See 18 C.F.R. § 4.38 (2011).

<sup>5</sup> See *City of Richmond, Va.*, 53 FERC ¶ 61,342 at 62,247 (1990).

<sup>6</sup> 16 U.S.C. § 802 (2006).

<sup>7</sup> See, e.g., *Mt. Hope Waterpower Project LLP*, 116 FERC ¶ 61,232 at P 4 (2006) ("The purpose of a preliminary permit is to encourage hydroelectric development by affording its holder priority of application (i.e., guaranteed first-to-file status) with respect to the filing of development applications for the affected site.").

project and to prepare a license application, it grants no land-disturbing or other property rights.<sup>8</sup>

17. During the course of the permit, the Commission expects that the permittee will carry out prefilings consultation and study development leading to the possible development of a license application. The prefilings process begins with preparation of a Notice of Intent (NOI) and Pre-Application Document (PAD) pursuant to sections 5.5 and 5.6 of the Commission's regulations.<sup>9</sup> The permittee must use the Integrated Licensing Process unless the Commission grants a request to use an alternative process (Alternative or Traditional Licensing Process). Such a request must accompany the NOI and PAD and set forth specific information justifying the request.<sup>10</sup> Should the permittee file a development application, notice of the application will be published, and interested persons and agencies will have an opportunity to intervene and to present their views concerning the project and the effects of its construction and operation.

18. This permit includes conditions to closely monitor the progress of the permittee's activities. In addition to the six-month progress reports required of the permittee, this permit will also require the permittee to file, within 45 days of the issuance date, a schedule of activities to be carried out under the permit and target dates for completion of these activities. At a minimum, this schedule shall include: (1) the filing of the NOI and PAD within one year of permit issuance, along with any request to use the traditional or alternative licensing process in lieu of the Integrated Licensing Process; or (2) the filing of an NOI and Draft License Application for a Pilot Project within two years of the permit issuance with a request for the necessary waivers to the Integrated Licensing Process to pursue hydrokinetic pilot project licensing procedures. If the periodic progress reports required by Article 4 of this permit do not show significant progress, or if the permittee fails to comply with any other conditions for financial reasons or otherwise, the permit may be cancelled.

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<sup>8</sup> Issuance of this preliminary permit is thus not a major federal action significantly affecting the quality of the human environment. A permit holder can only enter lands it does not own with the permission of the landholder, and is required to obtain whatever environmental permits federal, state, and local authorities may require before conducting any studies. *See, e.g., Three Mile Falls Hydro, LLC*, 102 FERC ¶ 61,301 at P 6 (2003); *see also Town of Summersville, W.Va. v. FERC*, 780 F.2d 1034 (D.C. Cir. 1986) (discussing the nature of preliminary permits).

<sup>9</sup> 18 C.F.R. §§ 5.5 and 5.6 (2011).

<sup>10</sup> *See* 18 C.F.R. § 5.3 (2011).

19. A preliminary permit is not transferable. The named permittee is the only party entitled to the priority of the application for license afforded by this preliminary permit. In order to invoke permit-based priority in any subsequent licensing competition, the named permittee must file an application for license as the sole applicant, thereby evidencing its intent to be the sole licensee and to hold all proprietary rights necessary to construct, operate, and maintain the proposed project. Should any other parties intend to hold during the term of any license issued any of these proprietary rights necessary for project purposes, they must be included as joint applicants in any application for license filed. In such an instance, where parties other than the permittee are added as joint applicants for license, the joint application will not be eligible for any permit-based priority.<sup>11</sup>

The Director orders:

(A) A preliminary permit is issued for the Avalon Tidal Energy Project No. 14228 to Natural Currents Energy Services, LLC, for a period effective the first day of the month in which this permit is issued, and ending either 36 months from the effective date or on the date that a development application submitted by the permittee has been accepted for filing, whichever occurs first.

(B) Within 45 days of the issuance date of the permit, a schedule of activities proposed by the permittee during the three-year permit term, leading to the filing of a development application. At a minimum, this shall include filing, within one year of the date of issuance of this permit, a notice of intent to file a license application (NOI) and pre-application document (PAD), accompanied by, if desired, a request to use the Traditional Licensing Process or Alternative Licensing Process in lieu of the Integrated Licensing Process, or the filing of an NOI and Draft License Application for a Pilot Project no later than two years from the date of issuance of this permit with a request for the necessary waivers to the Integrated Licensing Process to pursue hydrokinetic pilot project licensing procedures. The PAD shall include a time frame for consulting with federal, state, and local agencies, tribes, non-governmental organizations, and any other interested entities; and for developing and filing a preliminary list of issues identified and studies related to these issues needed to develop a license application.

(C) This preliminary permit is subject to the terms and conditions of Part I of the Federal Power Act and related regulations. The permit is also subject to Articles 1 through 4, set forth in the attached standard form P-1.

(D) This order constitutes final agency action. Any party may file a request for rehearing of this order within 30 days of the date of its issuance, as provided in section

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<sup>11</sup> See *City of Fayetteville*, 16 FERC ¶ 61,209 (1981).

313(a) of the Federal Power Act, 16 U.S.C. § 8251 (2006), and section 385.713 of the Commission's regulations, 18 C.F.R. § 385.713 (2011).

John B. Smith, Chief  
Mid-Atlantic Branch  
Division of Hydropower Licensing

**Form P-1 (Revised April 2011)****FEDERAL ENERGY REGULATORY COMMISSION****TERMS AND CONDITIONS OF  
PRELIMINARY PERMIT**

**Article 1.** The purpose of the permit is to maintain priority of application for a license during the term of the permit while the permittee conducts investigations and secures data necessary to determine the feasibility of the proposed project and, if the project is found to be feasible, prepares an acceptable application for license. In the course of whatever field studies the permittee undertakes, the permittee shall at all times exercise appropriate measures to prevent irreparable damage to the environment of the proposed project. This permit does not authorize the permittee to conduct any ground-disturbing activities or grant a right of entry onto any lands. The permittee must obtain any necessary authorizations and comply with any applicable laws and regulations to conduct any field studies.

**Article 2.** The permit is not transferable and may, after notice and opportunity for hearing, be canceled by order of the Commission upon failure of the permittee to prosecute diligently the activities for which a permit is issued, or for any other good cause shown.

**Article 3.** The priority granted under the permit shall be lost if the permit is canceled pursuant to Article 2 of this permit, or if the permittee fails, on or before the expiration date of the permit, to file with the Commission an application for license for the proposed project in conformity with the Commission's rules and regulations then in effect.

**Article 4.** No later than the last day of each six-month period from the effective date of this permit, the permittee shall file a progress report. Each progress report must describe, for that reporting period, the nature and timing of what the permittee has done under the pre-filing requirements of 18 C.F.R. sections 4.38 and 5.1-5.31 and other applicable regulations; and, where studies require access to and use of land not owned by the permittee, the status of the permittee's efforts to obtain permission to access and use the land. Progress reports may be filed electronically via the Internet, and the Commission strongly encourages e-filing. Instructions for e-filing are on the Commission's website at <http://www.ferc.gov/docs-filing/efiling/efiling.asp>. To paper-file instead, mail four copies of the progress report to the Secretary, Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, D.C. 20426.