



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
1315 East-West Highway
Silver Spring, MD 20910

THE DIRECTOR

April 30, 2007

William Guey-Lee
Office of Energy Projects
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington D.C. 20426

RE: Notice of Inquiry and Interim Statement of Policy for Preliminary Permits for Wave, Current, and Instream New Technology Hydropower Projects [Docket No. RM07-08-000]

Dear Mr. Guey-Lee:

The National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS) appreciates the opportunity to provide comments on the Federal Energy Regulatory Commission's (FERC) Notice of Inquiry for Preliminary Permits for Wave, Current, and Instream New Technology Hydropower Projects (NOI). FERC is seeking comments on its procedures with respect to the treatment of preliminary permits under Part I of the Federal Power Act (FPA) for wave, current, and instream new technology hydropower projects.

NMFS is the Federal agency with jurisdiction over marine, estuarine, and diadromous fish resources and marine mammals, pursuant to a number of statutory authorizations including, but not limited to, the following: *See* Reorganization Plan No. 4 of 1970, 84 Stat. 2090, as amended; the Fish and Wildlife Coordination Act (FWCA) 16 U.S.C. §§ 661 and 662; the Magnuson-Stevens Fishery Conservation and Management Act, as

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amended by the Sustainable Fisheries Act and the 2006 Reauthorization Act, 16 U.S.C. §§1801 *et seq.*; the Endangered Species Act (ESA), 16 U.S.C. §§ 1531 *et seq.*, and the Marine Mammal Protection Act (MMPA), 16 U.S.C. §§ 1361, *et seq.*

Pursuant to the authorities cited above, NMFS has responsibilities to ensure the protection and enhancement of marine mammal and diadromous fish resources and their habitats that may be affected by FERC's issuance of preliminary permits and any subsequent in-water testing for new hydropower technology. NMFS' comments below propose approaches for both the issuance and oversight of preliminary permits and any ensuing deployment of pilot projects for in-water testing.

The proposed hydrokinetic projects that are the subjects of pending applications for, or recently issued, preliminary permits consist of new technologies that have never been deployed at commercial scales in estuarine, coastal, or marine environments.

Applicants and resource agencies therefore have limited experience with the installation, operation, and removal of these technologies in these new environments. As a result, all participants have at best a limited understanding of the potential impacts to living marine resources and their habitats. Predictions have been made regarding some of the potential impacts, but limited empirical research has been conducted to verify them. The long-term, cumulative impacts of the proposed technologies are not known.

Given these gaps in the knowledge base, NMFS encourages FERC to proceed with permitting and licensing in a precautionary manner by using pilot projects to assess new

technologies under variable conditions in disparate locations. NMFS believes the use of pilot projects will help address knowledge gaps and will provide applicants information that will help inform the scaling, deployment, and operation of full-build project licenses. Filling these knowledge gaps is critical to all participants in this process: to apply for and obtain a license, an applicant will need technical and environmental information that will allow it to support its application; and to carry out the activities mentioned above, NMFS will need information on the environmental impacts of new technologies, including the interactions with marine life and impacts to habitat. NMFS believes testing through in-water pilot projects at appropriate scales and with sufficient monitoring will allow for a better understanding of critical issues and, ultimately, suitable approaches to the licensing process.

NMFS recommends FERC develop, in concert with Federal resource agencies, new regulations that will address the unique issues that new hydrokinetic technologies present. FERC's current process for preliminary permitting was not designed to accommodate in-water pilot projects and the larger information requirements for understanding potential environmental effects. However, many permit applicants have proposed pilot testing to gather information that will support informed decisions in the licensing process. Indeed, although the Commission has generally disclaimed authority or responsibility to regulate such in-water testing, applicants are planning and proceeding with in-water testing in connection with their preliminary permits and planned license applications. Currently, the only oversight being exercised over these in-water pilot or demonstration projects is piecemeal oversight by other Federal or state agencies having authority over discrete

aspects of such projects. A new comprehensive regulatory process for issuing preliminary permits, in conjunction with the exercise by FERC of jurisdiction regarding the deployment and operation of pilot projects would facilitate efforts by all parties to balance the need for energy generation and resource protection. NMFS proposes a dual-track permitting scheme for hydrokinetic projects. Applicants who propose in-water pilot testing would use a new track that is an enhancement over the current preliminary permit process, while those that do not envision any in-water activities prior to licensing could use a process similar to the current preliminary permit process. NMFS provides comments and recommendations below regarding this new approach to preliminary permitting. However, to develop the details of this approach, NMFS encourages FERC to convene an agency workgroup with diverse representation that could help develop a process to address the new issues associated with hydrokinetic project permitting. First, we discuss why it is critical for FERC to assert jurisdiction over in-water pilot or demonstration projects.

The Need and Basis for FERC to Exercise Jurisdiction Over Pilot Projects

NMFS discourages FERC from leaving decisions about whether pilot projects may be tested in water to other agencies exercising authorities that do not have as their focus the coordinated development of electric power. While NMFS appreciates that FERC has determined that a flexible approach to development of these new technologies is needed, NMFS encourages FERC to analyze whether its decision not to exercise jurisdiction over certain pilot, or demonstration, projects is consistent with either the letter or the spirit of the Federal Power Act (FPA).

In its order granting relief from the FPA’s provisions requiring licensing or permitting for the Verdant Roosevelt Island Tidal Energy Project (RITE), *see* 111 FERC ¶61,024 (April 14, 2005), FERC acknowledged that Section 23(b) of the Act on its face applied to the proposed installation of demonstration units, because the project would be in navigable waters.¹ *Id.* at 2 (¶7). FERC also acknowledged that Congress did not provide or discuss in the Act or in legislative history any suggestion that the Act’s requirements could be waived as to temporary, experimental projects such as pilot projects. *Id.* ¶8. FERC appears to have concluded that, since Congress did not expressly *preclude* flexibility for such temporary, experimental projects, FERC was free to create such flexibility based on a number of policy considerations. In its order, FERC determined that “relief” from the otherwise applicable provisions of the Act could be granted, so long as the project would use experimental technology, would exist for only a short period and for the purpose of conducting studies in preparation for a license application, and would not have an independent effect on interstate commerce (by either connecting directly to the interstate grid or by displacing sales of power from it by supplying power locally). *Id.* at 3 (¶¶ 9-10 and n.4).

NMFS recommends FERC require some form of permit or license under the FPA for in-water testing, because the FPA does not *expressly provide for deviations* from the

¹ Section 23(b) of the FPA states: “It shall be unlawful for any person, State, or municipality, for the purpose of developing electric power, to construct, operate, or maintain any dam, water conduit, reservoir, power house, or other works incidental thereto across, along, or in any of the navigable waters of the United States, or upon any part of the public lands or reservations of the United States (including the Territories), . . . except under and in accordance with the terms of a permit . . . , or a license granted pursuant to this chapter.” 16 U.S.C. § 817(1).

permitting and licensing requirements in this situation. For projects such as the RITE project, which are to be located in navigable waters, FERC need not separately consider whether there is an impact to interstate commerce. Section 23(b) on its face and as interpreted in caselaw appears to contemplate that there be an inquiry into the effect on interstate commerce only for projects in *non-navigable* waters. See *Farmington River Power Co. v. Federal Power Commission*, 455 F.2d 86, 90 (2d Cir. 1972). For projects in navigable waters, no showing of impacts to interstate commerce from a particular project should be required. See *FPL Energy Maine Hydro LLC v. F.E.R.C.*, 287 F.3d 1151, 1154 (D.C. Cir. 2002) (“Pursuant to section 23(b)(1) of the Federal Power Act (FPA), 16 U.S.C. § 817(1), a *non-federal hydroelectric project must be licensed if it is located on a navigable water of the United States*, as defined by 16 U.S.C. § 796(8), or if other criteria not relevant to this case are met.”) (emphasis added). See also NOI at 2-3 (¶ 4) (recognizing differing jurisdictional basis for navigable versus non-navigable waters).

NMFS recognizes that, for pilot projects that are proposed to be located in *non-navigable waters*, there is a requirement to make a finding that there is an impact to interstate commerce before a license or permit may be required.² However, there is no reason to

² Section 23(b) also states: “Any person, association, corporation, State, or municipality intending to construct a dam or other project works across, along, over, or in any stream or part thereof, other than those defined in this chapter as navigable waters, and over which Congress has jurisdiction under its authority to regulate commerce with foreign nations and among the several States shall before such construction file declaration of such intention with the Commission, whereupon the Commission shall cause immediate investigation of such proposed construction to be made, and if upon investigation it shall find that the interests of interstate or foreign commerce would be affected by such proposed construction, such person, association, corporation, State, or municipality shall not construct, maintain, or operate such dam or other project works until it shall have applied for and shall have received a license under the provisions of this chapter. If the Commission shall not so find, and if no public lands or reservations are affected, permission is granted to construct such dam or other project works in such stream upon compliance with State laws.” 16 U.S.C. § 817(1)

limit the bases upon which such an impact could be shown to impacts on the interstate sale of power, as is suggested in the Verdant Order. For example, substantial impacts to diadromous fish may independently constitute an impact to interstate commerce and require FERC to exercise jurisdiction over the project. *U.S. Dept. of Commerce v. F.E.R.C.*, 36 F.3d 893, 895-96 (9th Cir. 1994). FERC should consider whether there may be evidence of such impacts from any particular proposed pilot project or type of project prior to determining whether a license or permit under the FPA should be required.

NMFS encourages FERC to acknowledge its full responsibilities under the FPA. NMFS believes FERC has overlooked some of these responsibilities by taking the position it has taken to date – that is, issuing preliminary permits with knowledge that some permit seekers intend to pursue in-water testing but without exercising jurisdiction to determine whether and under what conditions such testing should occur *as part of the process of issuing the preliminary permit* or some other FPA-based mechanism.³ Where a statute unambiguously directs regulation of a particular matter, the agency so charged may not decline to regulate without articulating a sound basis for that decision that rests on factors articulated in the statute itself; the agency may not create new exceptions based on policy considerations that are not expressly allowed to be considered under the statute.

Massachusetts v. EPA, 549 U.S. ---, 127 S.Ct. 1438 (No. 05-1120, U.S. April 2007)

(Clean Air Act case).

³ FERC should bring together its multiple authorities to comprehensively regulate in this area. For example, its authority under FPA § 5, 16 U.S.C. § 798 (directing FERC to set forth conditions for maintaining priority under the preliminary permit) should be used to ensure that the permittee complies with all sideboards and mitigation recommended by resource agencies in connection with any in-water testing.

The Integral Nature of In-water Pilot Projects to Overall Development of Electric Power

FERC should take an active and meaningful role in regulating the installation and operation of in-water pilot projects, which are and will continue to be an important component of developing new technologies due to the differences between these technologies and conventional hydropower projects. Pilot testing has not been a part of conventional hydropower project permitting because their technologies are relatively well proven, and the installation of a pilot dam is not necessarily feasible. However, pilot testing for new hydrokinetic technologies will be an integral step in gathering information necessary for making informed decisions during the licensing process.

Applicants obtain preliminary permits and propose in-water pilot projects for the primary purpose of gathering information and maintaining priority of application for a subsequent license. The provisions of the FPA clearly apply to in-water testing of demonstration units. A turbine that generates power, whether on land or in the water, is a turbine or powerhouse that is subject to FERC's authority. See *Aqua Energy Group*, 102 FERC ¶61,242, at 8-9 (Feb. 28, 2003) (buoys are powerhouses because they contain equipment for the generation of power). NMFS does not understand FERC's claim of statutory authority to license powerhouses or turbines on land and in the water, except when they are installed as a demonstration project. Where such units are generating power, with the purpose of gathering information to determine whether the company will apply for a license for a hydrokinetic power project, they are clearly an integral part of the overall development of electric power. Their operation is the first step in possible eventual

connection to the interstate power grid. Installing a demonstration unit is thus installation of a “power house, or other works incidental thereto” for “the *purpose of developing electric power,*” which places the activity squarely within the jurisdiction of FERC under Section 23(b) of the FPA. *See* 16 U.S.C. § 817(1) (emphasis added).

NMFS believes FERC should not base its determination to assert jurisdiction over such projects on the assertion that the projects may not hook into the interstate power grid immediately. FERC should acknowledge the intimate connection between the filing of an application for a preliminary permit, the installation of a demonstration project, and an ultimate application for a license for a full build-out project. These are all part of an overall single course of action in the development of electric power, and each should be regulated as part of a cohesive program of FERC-issued permitting or licensing. The fact is that, while a preliminary permit on its face may not authorize in-water testing, many applicants would not pursue in-water testing absent the priority in line for license application assured to them by virtue of holding a preliminary permit. Indeed, many applicants have described plans for in-water testing in their preliminary permit applications. The installation of demonstration facilities is tied to the preliminary permit and license application and should not be evaluated and permitted completely separately and without involvement of FERC.

NMFS recommends FERC take an active and meaningful role in regulating the conditions of in-water pilot projects so that regulation of these important new developing uses of the public waterways will not be left to a patchwork of state and Federal

regulations and permitting processes. The FPA clearly empowers, and indeed requires, FERC to regulate placement of power houses and incidental works for the purpose of developing electric power in navigable and other Federal waters. NMFS believes that FERC, by exercising its jurisdiction over all phases of this activity, can fulfill its role of ensuring that such power is developed only to the extent consistent with a balancing of relevant interests and without unmitigated environmental impacts. NMFS believes the same function cannot be performed by piecemeal regulation of some aspects of the in-water testing by other agencies with other primary authorities. Going beyond these minimum obligations, FERC could provide further leadership and facilitation in this arena by not only exercising jurisdiction over installation of pilot projects, but also serving as a coordinator among and liaison to the other state and Federal agencies with authority over certain aspects of the test projects.

A Front-loaded Process Will Yield Efficiency and Effectiveness

Investment by all licensing parties in a front-loaded preliminary permitting process would ultimately result in a more efficient, less contentious licensing process. NMFS believes FERC and other Federal and state agencies, industry, and other parties should use the preliminary permit process more effectively to address issues that may arise in the first-time deployment of new technologies in estuarine, coastal, and marine environments. Once FERC begins active oversight and regulation of in-water pilot project testing, it can further improve the preliminary permit process and enhance its value in several ways, including the following recommendations:

- FERC should require applicants to coordinate with all potential affected parties, including interested agencies, from the outset of permit issuance. The initial inclusion of all parties can improve permitting efficiency by reducing the chances that additional parties will come to the table later in the process with new issues;
- FERC should require the applicant to cooperatively identify issues and develop study methods to address them. As mentioned above, new hydrokinetic technologies have a new set of associated issues that have not been addressed before. The parties to a permit (and ultimately the license) will have a diverse set of concerns and methods for addressing the issues. A coordinated effort to design studies that address these concerns will facilitate results that are less biased than a study approach conducted unilaterally by the applicant. Such cooperation at an early stage will reduce the possibility of conflicts at the licensing stage by ensuring the development of a more complete scientific record of likely project effects based on data gathered during pilot testing;
- FERC should require more attention to environmental reporting in its six-month progress reports. Since FERC issued its Interim Statement of Policy to review and oversee preliminary permits with a “strict scrutiny” approach,⁴ NMFS has not experienced improved coordination or more thorough identification or investigation of environmental issues. Many progress reports submitted to date have not included any substantial information regarding effects to the

⁴ NMFS also respectfully urges the Commission to develop another label for its proposed approach to avoid confusion that may result from the fact that “strict scrutiny” (*see* NOI at 10 (¶ 16)) is a term of art in the body of law emanating from the Equal Protection Clause of the Fourteenth Amendment to the United States Constitution.

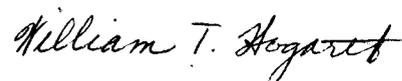
environment. FERC should consider requiring applicants to identify and describe, as appropriate, in the periodic reports the following at a minimum:

1. Resource agencies that have filed comments or motions of intervention;
 2. Species that agencies have indicated may be affected by the project;
 3. Resource agencies that have been contacted by the applicant;
 4. Permitting agencies and required permits;
 5. Description of proposed environmental studies;
 6. Applicant point of contact for environmental studies and related issues;
 7. Meeting schedule for environmental study process; and
 8. Progress in adhering to schedule.
- FERC should also require applicants to identify all relevant resource areas and any existing, relevant designations applicable to estuarine, coastal, and marine areas. Currently, preliminary permit applications require the identification of resource areas, such as Wild and Scenic Rivers and Wilderness Areas, that fall within the project boundary or are affected by the project. The requirement to identify these types of resource areas was developed with the traditional inland locations of conventional dams in mind. As such, it is too limited to encompass all the concerns and relevant designations that may apply to the types of areas where hydrokinetic projects are likely to be located: estuarine, coastal, and marine areas. Such designations may include essential fish habitat (EFH), habitat areas of particular concern (HAPC), National Marine Sanctuaries, National Estuarine Research Reserves, and critical habitat identified under the Endangered Species Act.

The issuance of preliminary permits, or a new variation, presents a valuable opportunity to identify and investigate issues early on in the process of developing a new technology for the purpose of generating electric power. This approach also presents an opportunity to improve the efficiency of the overall permitting and licensing process. While FERC views the licensing process as “completely distinct from the permit process,” NOI at 4 (¶ 6), this is not true in practice. An effective preliminary permit process integrated with regulation of in-water testing and, ultimately, licensing allows all parties to gather information and answer questions, contributing to a less contentious and more productive licensing process. When all parties can initially work to identify issues and develop methods to investigate them, the likelihood of long and protracted consultations is reduced.

NOAA Fisheries looks forward to working with FERC to advance the development of wave current, instream new technology hydropower projects in an environmentally sound manner. Please contact Mr. Thomas Bigford, Chief, Habitat Protection Division, NOAA Fisheries Office of Habitat Conservation at (301) 713-4300 x131, if you have any questions or require any additional information.

Sincerely,



William T. Hogarth, Ph.D.
Assistant Administrator for Fisheries