



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
PROGRAM PLANNING AND INTEGRATION
Silver Spring, Maryland 20910

NOV 2 2007

Ms. Kimberly D. Bose
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Dear Ms. Bose,

The National Oceanic and Atmospheric Administration (NOAA) has reviewed the Federal Energy Regulatory Commission's (FERC) Proposed Licensing Process for Hydrokinetic Pilot Projects: A Framework for Discussion, FERC Docket Number AD07-14-000. NOAA has enclosed comments on the proposed process that reflect the expertise of our agency and statutory authorities to protect and conserve marine trust resources.

NOAA has expertise that could be useful to FERC as it proceeds with efforts to license hydrokinetic energy pilot projects. NOAA offers FERC that expertise and looks forward to continuing discussions on the licensing process for these technologies.

If FERC has questions regarding the comments or broader issues related to hydrokinetic energy pilot projects please contact our points of contact listed below:

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NOAA appreciates the opportunity to provide comments on this effort.

Sincerely,

Paul N. Doremus
Acting Assistant Administrator
for Program Planning and Integration

Enclosure



**THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION'S (NOAA)
COMMENTS ON
THE FEDERAL ENERGY REGULATORY COMMISSION'S (FERC)
HYDROKINETIC ENERGY PILOT PROJECT LICENSING PROCESS**

November 2, 2007

The National Oceanic and Atmospheric Administration (NOAA) appreciates this opportunity to provide written comments on the Federal Energy Regulatory Commission's (FERC) "Pilot Project Licensing Process," as well as the opportunity FERC afforded Regional Administrator Bob Lohn to provide oral comments and participate in FERC's workshop in Portland, Oregon on October 2, 2007. NOAA further appreciates the efforts of the Commission and its staff in the development of the proposed pilot license process and is supportive of the leadership role FERC has taken in encouraging and providing a regulatory framework for this new hydroelectric technology.

As we discuss further below, NOAA supports the development of a pilot licensing process, and believes the proposal outlined in the FERC document "The Proposed Licensing Process for Hydrokinetic Pilot Projects" (*hereinafter*, the "white paper") is a good first step toward developing such a process.¹ NOAA understands that FERC's intent in establishing a pilot licensing process is to facilitate development of pilot hydrokinetic projects and provide opportunities to gather information on the environmental impacts of this new technology. We look forward to continuing to work with FERC in the development of this pilot license process and related procedures, by providing our expertise in marine resource protection issues, with the goal of creating more regulatory certainty and environmental protection in the context of a rapidly developing new technology.

Introduction

NOAA is the Federal agency entrusted with stewardship of the nation's living marine resources, national marine sanctuaries, and coastal zone interests.²

¹ In the white paper, FERC proposes a new licensing process for pilot hydrokinetic projects. The process would allow for licensing to be completed in as few as six months for licensing terms of up to five years. The process would be available for projects that are small, can be removed, and are not located in environmentally sensitive areas, provided the applications contain adequate environmental information. The projects will be decommissioned and removed, and the site restored at the end of the licensing period, unless the applicant applies for a full license.

² NOAA implements a variety of statutory authorities to protect and conserve its trust resources. The following authorities are likely to be implicated or triggered by projects proposed in U.S. waters:
(*continued . . .*)

- Magnuson-Stevens Fishery Conservation and Management Act (MSA);
- Marine Mammal Protection Act (MMPA);
- Endangered Species Act (ESA);
- National Marine Sanctuaries Act (NMSA);
- Coastal Zone Management Act (CZMA);
- Oil Pollution Act (OPA);

As stewards of the nation's marine resources, NOAA encourages the development of alternative energy (*i.e.*, non-fossil fuel based energy), including hydrokinetic energy. At the same time, hydrokinetic projects may present immediate risks to various marine and aquatic resources, displace commercial and recreational fisheries, and alter habitats.

Pilot projects can be effective in guiding future large-scale developments so that they are environmentally sound. Based on NOAA's experience to date with both the Roosevelt Island Tidal Energy project in New York and with the Finavera wave energy project proposed to be located in the Olympic Coast National Marine Sanctuary, it is clear that the existing FERC licensing and permitting processes are not appropriately designed for research and development of new hydrokinetic technologies.

A formalized FERC pilot license process, established through informal notice-and-comment rulemaking and accompanied by full review under the National Environmental Policy Act (NEPA), would improve the existing regulatory landscape and provide clear expectations and parameters for applicants, federal and state agencies, and other project stakeholders for the siting, environmental protection, monitoring, evaluation, and decommissioning requirements of such projects. As we noted above, FERC's pilot project license proposal is a good first step toward developing such a licensing process.

NOAA supports a FERC process that facilitates collection of appropriate environmental data that will provide the basis for informed exercise of our statutory mandates to conserve marine resources. NOAA executes its mandates by consulting with federal action agencies, and by offering advice, recommendations, and, in certain instances, mandatory conditions. NOAA relies on science-based information for its consultation processes. Significant data needs are associated with the planning, construction, and operation of pilot projects in addition to larger, full-scale projects. These data are critical for guiding NOAA consultations, as well as other required environmental assessments used to support federal agency decisions.

NOAA offers the following comments and recommendations to ensure that FERC's future hydrokinetic pilot licensing process is effective in facilitating both agencies' mandated responsibilities. Our comments are presented in four sections: (I) Comments Specific to the Proposed Licensing Process; (II) Comments on Procedures Proposed to Implement the Licensing Process; (III) Comments on Section 5.18 Application Contents (White Paper Appendix B); and (IV) Comments on the Proposed Standard Pilot License Articles (White Paper Appendix C).

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- Ocean Thermal Energy Conversion Act (OTEC);
 - Fish and Wildlife Coordination Act (FWCA);
 - Federal Power Act (FPA); and
 - National Environmental Policy Act (NEPA).

I. Comments Specific to the Proposed Licensing Process

A. Threshold Criteria and Definitions

The proposed protocol contains undefined or not well-explained terms and thresholds that are susceptible to multiple interpretations. NOAA provides specific comments below, and in Section II recommends that these terms (and other issues) be addressed through rulemaking.

1. The proposed 5-megawatt (MW) threshold for projects that may use the proposed pilot licensing process is not well supported and is potentially inappropriate. While a 5 MW project may generate a small amount of energy compared to traditional hydropower projects, it does not necessarily follow that its environmental impacts will be equally minimal. For example, the Verdant RITE project at 5 MW could require well over 100 turbine units – a significant footprint in the East River (Verdant’s updated permit proposal for 1-1.5 MW would utilize 20-40 units). The number of units and/or MW limits, therefore, may not be the appropriate criteria to use when determining whether a proposed project is appropriate for a given site.
2. FERC should define “sensitive designations” through rulemaking. FERC has stated that the pilot project licensing process will not be available to projects proposed in waters with sensitive designations. NOAA agrees with FERC that specific areas of the marine environment contain sensitive resources and should be excluded from consideration when siting hydrokinetic power projects. As lead agency for the management of living marine resources, NOAA manages several resources and related designations pursuant to our statutory authorities, including Essential Fish Habitat-Habitat Areas of Particular Concern, Critical Habitat for ESA-listed species, national marine sanctuaries, migratory corridors, and key fishing grounds. Activities that occur within these areas receive high levels of scrutiny to ensure that impacts to NOAA trust resources are avoided or minimized. Excluding these areas from the pilot project license process will protect them from potential project impacts as well as further streamline the pilot licensing process.
3. FERC should also define “unacceptable environmental effects” to living marine resources and their habitats through rulemaking. FERC has proposed that a pilot project resulting in such unacceptable environmental effects during the license period will be altered, shutdown, or removed and the site remediated. NOAA strongly supports this requirement and the monitoring efforts that will be critical in determining when “unacceptable environmental effects” have occurred. Because of the collective inexperience in permitting, operating, monitoring, and regulating these new technologies in the marine environment, NOAA recommends FERC evaluate on a project-by-project basis the severity of an environmental effect. However, NOAA believes certain environmental effects will generally warrant project alteration, shutdown, or removal of a pilot project

for any project at which they occur. We are interested in working with FERC to develop such a list of effects. Some impacts that could be considered for this list, depending on the context and circumstances, include:

- Injury or lethal impacts to a marine mammal not authorized pursuant to the Marine Mammal Protection Act;
- Injury or killing of any individual of an ESA-listed species (subject to terms and conditions of any incidental take statement that has been issued as part of a formal interagency consultation);
- Significant alteration of habitat and ecosystem functions;
- Significant alteration of migratory patterns of migratory fish; and
- Loss of or injury to the resources of a national marine sanctuary.

While a single, isolated instance of the above effects might not ordinarily be considered “unacceptable,” their occurrence as part of a pilot would be significant cause for concern. Such impacts occurring from a pilot project suggest that the same devices at larger scales would cause problems for populations of such species.

The above list of effects is a starting point for discussions of the appropriate level of, or criteria for, “unacceptable environmental effects” for specific pilot projects. These criteria will ultimately be determined at project-level consultations or reviews under appropriate statutory authority (such as Section 7(a)(2) of the ESA, 16 U.S.C. § 1536(a)(2)).

Where project-specific unacceptable effects are identified, FERC should recite those unacceptable effects and the remedy for each in their pilot project license. The kind and scale of effects that would trigger project alteration should be distinctly different in nature from those that would trigger project shut down or removal. NOAA suggests that FERC address each of these independently. Those effects requiring alteration of a pilot project should also be tied to the monitoring portion of the license conditions. Project alteration could be based on results of annual monitoring and be triggered by observed minor project effects. Project shutdown or removal could also be tied to monitoring, but be triggered by more serious effects.

4. FERC should not limit its analysis of species impacts to species that are already imperiled, threatened, or endangered. The proposed “standard pilot license articles” and other aspects of the white paper appear to focus concern on endangered or threatened species. NOAA is dedicated to the conservation and sustainable management of all living marine resources under its jurisdiction, not only those that have been listed as threatened or endangered. NOAA therefore encourages FERC to not only focus its impact analysis on listed or “sensitive” species, such as Species of Concern or Species of Greatest Conservation Need, but also those state-, tribal-, and federally managed species, their habitats, and

forage that provide ecological and economic value through their current population health.

B. Licensing Process

1. The proposed process should expressly accommodate federal resource agency exercise of authorities pursuant to Federal Power Act (FPA) sections 18, 4(e), 10(j), and 10(a). It is currently unclear how FERC anticipates that the relevant resource agencies will participate and exercise such authorities. Through rulemaking, FERC should develop explicit steps in the pilot project license process for receiving conditions, prescriptions and recommendations. Because there is no basis for placing pilot licenses outside the most fundamental resource protection provisions of the FPA, or for treating them in this respect differently from how projects that have been granted “exemptions” are treated, FERC should describe the steps in the pilot license process, including how it envisions resource agency exercise of these authorities. Furthermore, the licensing process must place a high value on providing necessary and sufficient information to allow NOAA and the other resource agencies to exercise their FPA authorities.
2. As proposed, the six month review period for completion of the licensing process does not provide sufficient time for NOAA to complete our statutorily mandated scientific review and consultation procedures according to time frames under existing regulations. As noted above, NOAA is charged with implementing the Endangered Species Act, Marine Mammal Protection Act, the Essential Fish Habitat provisions of the Magnuson-Stevens Act, the National Marine Sanctuaries Act, and other authorities. We understand that prospective applicants are expected to contact various agencies, and other entities, as they develop their draft application. While there are many benefits to engaging in substantive discussions with the resource agencies at the early stages of pilot project development, most of NOAA’s consultations cannot be initiated until FERC submits the required information (*e.g.*, EFH Assessment, Biological Assessment). Absent complete information, consultation under these regulatory authorities could not commence and FERC’s proposed timelines would not be achievable.

Further, FERC’s NEPA analysis should be provided at the earliest possible time, and sufficient time must be allowed after that point for full consideration of the resource agencies’ mandates. NEPA regulations state that expert agency comments and public scrutiny are essential to a complete analysis. Full consideration of environmental impacts may be precluded if the NEPA analysis is provided at the end of the process, effectively limiting the amount of time for review and consultation. We discuss the implications for review under four specific statutes (the Coastal Zone Management Act, Endangered Species Act, Marine Mammal Protection Act, and National Marine Sanctuaries Act) below.

- a. Under the Coastal Zone Management Act (CZMA) coastal states have up to six months to review an application for a preliminary permit for a pilot project. Given potential state-applicant negotiations on CZMA compliance and possible state CZMA objections and subsequent appeals by the applicant under the CZMA, six months may not provide enough time. FERC should alter the proposed process to ensure that environmental impacts are disclosed at the earliest possible time and that sufficient time is allowed for these processes.
- b. The proposed process also should expressly accommodate formal consultation under the Endangered Species Act (ESA). Based on timeframes provided in the statute and regulations for interagency cooperation (50 CFR Part 402), a formal consultation under section 7 of the ESA can last up to 135 days. An informal consultation is not subject to deadlines but usually lasts 30 days. Consultations cannot be initiated until NOAA Fisheries receives all information required (see 50 CFR § 402.14(c)). If the Biological Assessment (BA) issued by FERC does not have all of the required information, consultation cannot be initiated. Initiation may be further delayed if FERC deems the BA inadequate and relies on the EA. The pilot license process should include additional time for NOAA Fisheries (and the U.S. Fish and Wildlife Service, if appropriate) to review the BA or EA (about 30 days), time for FERC or the applicant to respond to any information requests or comments (at least 14 days), and time for a formal consultation (135 days). Increasing the processing time of the pilot license not only would allow time for review and analysis, but also would provide time for applicants and FERC to develop appropriate project and environmental information and respond to resource agencies' concerns.³
- c. If impacts to marine mammals are anticipated, issuance of an "incidental harassment authorization" under the Marine Mammal Protection Act (MMPA) can take up to four months from receipt of a complete application, while the rulemaking required for issuance of a "letter of authorization" to take marine mammals lethally or by serious injury typically requires between seven and 18 months. The pilot license applicant would likely be the applicant for the incidental take authorization, and this MMPA process can be conducted separately from

³ Early Section 7 consultation under Section 7(a)(3) may be an option for prospective applicants. Applicants can contact NOAA Fisheries in advance of filing the draft or final application, with a written certification of their proposal and their intent to implement the proposal. An early consultation follows the process of a formal consultation and thus the information requirements are the same. However, early consultation may be difficult, given that certain aspects of the proposed project or environmental impact information may not be fully developed. The early consultation may result in a preliminary biological opinion which can later be confirmed as a final biological opinion, if there are no significant changes, before the pilot license is issued (50 CFR Section 402.11(e)). Early consultations should be begun during or before pre-application activities.

the pilot licensing. However, the applicant should expect to begin certain activities only after the authorization is granted.

- d. Section 304(d) of the National Marine Sanctuaries Act requires federal agencies to consult with the Secretary of Commerce (through NOAA) on federal actions both internal and external to a national marine sanctuary that are likely to destroy, cause the loss of, or injure sanctuary resources. Upon consultation, NOAA has 45 days to provide reasonable and prudent alternatives to the proposed action prior to the agency taking final action. The FERC process should allow sufficient time for this required consultation and the development of alternatives for hydrokinetic proposals that may trigger this threshold.
3. Regarding the important issue of establishing “baseline conditions,” NOAA acknowledges that for many areas, little or no baseline environmental information is currently available. However, baseline information is critically needed as a reference point to enable resource agencies to adequately assess project effects. Where baseline environmental information is limited, FERC could require that the licensee conduct studies for the first year or two of the license to gather baseline information before placing the pilot facility into the water. FERC should ensure that any “complete application” submitted by an applicant meets strong criteria for prior evaluation of the site and vicinity in terms of living resource uses and establishment of baseline conditions. There should be a thorough evaluation of potential impacts to living aquatic and marine resources and their habitats. FERC is obligated to demonstrate, in advance of facility deployments, likely impacts to fish and wildlife known to use the proposed project site. This baseline data should be analyzed as part of the requisite site-specific NEPA analysis.

C. Information Needs and Monitoring Protocols

1. FERC, in consultation with NOAA, other state, tribal, and federal resource agencies, and the applicant, should develop study and monitoring protocols to address data gaps and management questions for project siting, construction, operation and removal. FERC is proposing to license new technologies in a new operating environment, wherein there exists a high level of uncertainty as to project environmental effects, including direct and indirect effects, on coastal and marine resources. Studies and monitoring protocols should focus on gathering the necessary information to inform current management decisions and those of future projects. Information gathered from studies and monitoring efforts will help FERC and NOAA in their future management and regulatory decisions for potential project expansion, changes in design, and/or appropriateness of a particular project site. Studies and monitoring should be directed to address case-specific questions that must be considered in the licensing process. Adaptive management strategies should be considered in this process to address technological and environmental limitations for effective monitoring.

2. Study and monitoring plans should be included under the Pre-Application Activity part of the proposed process. Since this is a critical item in gathering information about the project, the review and consideration of the study and monitoring plans should begin as early in the process as possible. Discussions with resource agencies should begin even as early as an applicant develops their pre-application documents. Applicants should consult with NOAA in development of study and monitoring plans, and NOAA should review and approve the plans prior to FERC's approval to ensure that they provide information needed and useable by the agency.
3. Monitoring efforts should extend for the duration of the pilot license, at a minimum, and possibly for a period after decommissioning. Studies should provide sufficient baseline (pre-construction) data to characterize existing environmental conditions and living marine resource utilization (to be submitted with the application), and sufficient data to allow a thorough analysis of the impacts to living marine resources from the pilot project itself, as well as those that would be expected to result from project expansion and/or full scale development.

D. Project Removal and Operation Extensions

As discussed previously, FERC has proposed to require project removal at the end of the license or in the event of "unacceptable environmental effects." The pilot project license process should explicitly state that there should be no expectation on the part of the applicant that a transition to a traditional (standard) 30-50 year FPA license would be granted; therefore, a licensee should always expect to remove the project at the end of the pilot license term. FERC should include, as a condition of pilot project licenses, appropriate measures for ensuring complete project removal, if deemed necessary or at the expiration of the term of the license, as well as for providing any mitigation for unacceptable project-related environmental impacts. The process and operations for complete removal and mitigation of the project and associated systems, as well as verification of financial capability to implement the process, should be incorporated into the license.

NOAA recommends FERC consider additional phased license procedures for the incremental build-out of these types of hydrokinetic projects. One approach could be to develop a second phase license for the build out of a pilot project to 50% of full (or an appropriate level), thereby allowing the applicant to derive income, and FERC and its partner agencies to examine project impacts. In addition, FERC should examine how information from a pilot project can be scaled-up to a fully built-out project. Information gathered during the pilot license term may not be directly applicable to the same project at larger scales. In particular, the environmental impacts that occur with a few devices in the water may grow, possibly exponentially in severity, with expansion of the project (see comments on cumulative impacts below). This issue should be addressed during the pilot

licensing stage, possibly in a monitoring plan, so that relevant information is gathered appropriately while the pilot project is in the water. This information can then be used during reviews under NEPA, ESA, and other mandates for subsequent phases of the project if it moves forward. The environmental review at later stages would be essential before any transition from the pilot process and would contribute to an adaptive management approach.

As previously noted, the industry is nascent and there is little baseline information on individual small pilot projects or the much larger turbine installations that might follow a pilot project. Cumulative impacts are unknown or speculative. Both the resource agencies and industry need an opportunity for adaptive management in the development of a project moving, for example, from 4 turbines to 100. An interim or secondary license phase of 5 years with similar standard license articles identifying the circumstances that would require shut-down and financial assurances for decommissioning and removal would be both supportive of both industry and marine conservation objectives and might be one way to operationalize adaptive management. FERC should engage NOAA, other resource agencies, and the industry soon to begin discussions on how pilot projects will play a role in adaptive management approaches for implementing full-build licenses.

II. Comments on Procedures Proposed to Implement the Licensing Process

A. Administrative Procedure Act - Informal Rulemaking

FERC's proposed pilot license process appears to be an implementation of a new legislative rule that should be established through notice and comment rulemaking as governed by the Administrative Procedure Act (APA) (5 U.S.C. §§ 551, *et seq.*). Because the proposed pilot licensing program is a significant new exercise of FERC's delegated authority to develop substantive standards to implement the FPA, and would establish important procedures that would be binding on the public for an entire class of proposed projects, it falls under the APA's procedures requiring prior notice-and-comment. Rulemaking would provide a defined process for public input and transparent, systematic development of key issues. Rulemaking, and its accompanying NEPA analysis, would clarify many of the proposed licensing process standards being proposed in the pilot license process.

FERC has used the public rulemaking process for its other licensing procedures to good effect, and there are even more reasons to use that approach here, where facing new technology, little baseline environmental information, and unknown environmental impacts. Systematized public comment, and FERC response, would be useful in soliciting and incorporating broad expertise and input, leading to a clear and robust record on the many issues raised in the pilot license process white paper.

B. National Environmental Policy Act

To accompany its rulemaking, FERC should undertake a programmatic environmental analysis to address the licensing and installation of hydrokinetic projects on both the east and west coasts, in rivers and in other coastal and marine areas. Hydrokinetic project proposals contemplate novel technologies with environmental impacts that are presently uncertain. These new technologies have the potential to block migratory corridors and present hazards to certain marine and diadromous fish, marine mammals, listed species, and marine habitats and ecosystems.

Project-level environmental review alone may not be able to capture seasonal- and ecosystem-level patterns across multiple project sites and within sub-ecosystems and watersheds. Broad-scale information will be essential in identifying cumulative impacts and the suitability of an individual and/or multiple projects in a particular area. Furthermore, rulemaking would benefit from, and be meaningfully informed by, a programmatic NEPA document and associated cumulative impacts analysis.

In addition, a programmatic NEPA analysis containing a nationwide siting analysis, broken down regionally, would assist in determining the best sites for hydrokinetic projects that would have minimal environmental impact. Currently, hydrokinetic energy developers are proposing project sites based primarily on the quality of the energy generating resource they are considering (*e.g.*, tidal height, wave height, wave frequency, flow rates, velocity, *etc.*) as well as access to the power transmission grid. While some project sites may possess high energy-generation potential, they may contain sensitive resources that could be affected by project construction and/or operations (see comments in section I(A)(2) regarding “sensitive designations”). Clear identification of appropriate project sites will contribute to the goal of certainty and streamline the permitting process.

1. In both its programmatic and project-level NEPA analyses, FERC should explain how the location, scope, and design of a pilot project or the pilot licensing process may affect the range of available alternatives for a full-build project or an expanded licensing process. Siting of pilot projects has implications for full-build projects and the overall NEPA review. Under the proposed process, siting of pilot projects may predetermine the full-build project location without proper site analysis. NEPA requires disclosure of information gaps, as well as any irreversible and irretrievable commitments of resources resulting from implementation of the project.
2. NEPA further requires FERC to conduct a cumulative impacts analysis to determine whether a single project or multiple pilot projects should be licensed within a small or confined area. Depending on circumstances, a single project could have substantial impacts. In areas where oceanographic data indicate desirable conditions for hydrokinetic technologies, multiple developers may be interested in applying for pilot projects. If such situations were to arise, FERC

could use the NEPA process recommended above to examine the aggregate effects of multiple pilot projects/pilots in an area. In addition, the cumulative effects analysis should take into consideration the impacts of other coastal development projects in the area of a proposed pilot project, including traditional and alternative energy facilities, which may have impacts relevant to the analysis.

III. Comments on Section 5.18 Application Contents (White Paper Appendix B)

1. Applicable Laws section. This discussion should also include other statutes that may be applicable beyond the Marine Mammal Protection Act, such as the National Marine Sanctuaries Act.
2. Fish and Aquatic Resources and Wildlife and Botanical Resources sections. There may be additional NOAA trust resources impacted beyond fish and marine mammals, and those should be described in these sections of the application. NOAA recommends broadening the discussion in these sections to include the impacts of the proposed project on a wider variety of marine resources, including benthic and pelagic resources and Species of Concern. These sections should include community and habitat descriptions of those resources.

Section 5.6(d)(3)(vii) "Rare, threatened, and endangered species." The term "rare species" is not defined. Rare species should include Species of Concern and state-declared Species of Greatest Conservation Need in addition to candidate and other "special status" species. "Special status" should also be defined.

3. Project Location, Facilities, and Operation section. This discussion should include oils, hydrocarbons, anti-fouling compounds, and other hazardous materials that may be used by the project.
4. Recreation, Land Use, and Ocean Use section. Any description of exclusion zones in this section should include the statutory authorities and proposed methods for implementation and enforcement. Authorities for area use exclusions should also be an element incorporated in the pilot license articles. NOAA concurs with inclusion of proximity to marine sanctuaries and other protected areas as an element of project description that would be required by § 5.6(d)(3)(viii)(F)(1).
5. Environmental Analysis section. The list of anticipated environmental impacts should include any potential entanglement hazard for marine mammals, sea turtles, or other aquatic wildlife

IV. Comments on the Proposed Standard Pilot License Articles (White Paper Appendix C)

1. Throughout the standard pilot license articles, the term “National Marine Fisheries Service” should be replaced with “National Oceanic and Atmospheric Administration.” This is appropriate as consultations may be required with various programs and offices within NOAA, not just NMFS.
2. NOAA supports the general concept of standard license articles. However, it is clear that in many cases these articles will have to be modified to fit the specifics of the situation. NOAA recommends using these as examples of required conditions, and making it clear that the conditions will be tailored to the needs of each project and each site and resources affected.
3. To ensure full consideration and conservation of NOAA trust resources, any plans developed through the proposed standard license conditions (*e.g.*, the monitoring plan developed pursuant to proposed standard Article #2) must be approved by NOAA, not simply developed in consultation with NOAA. The general exclusion zone plan article (Article #3) should also be developed in consultation with NOAA, insofar as any exclusion area would affect commercial or recreational fishing vessels. Once a licensee develops plans in consultation with NOAA and NOAA approves the plan, it will be submitted to FERC for their approval and inclusion in the license.
4. NOAA agrees that monitoring is essential to resolve uncertainty associated with some environmental effects as is suggested by standard Article #1. When monitoring is an element considered in the NEPA analysis as mitigating the effects of the proposed activity, submission of a monitoring plan after license approval but 90 days in advance of installation is too late in the process to provide resource agencies adequate time to review and assist in the development of the monitoring plan. Instead, the monitoring plan should be developed and approved by NOAA and other appropriate resource agencies prior to pilot project license issuance. Once the plan is developed and approved by NOAA, the plan will be submitted to FERC for their approval for inclusion in the license.
5. The annual report required by proposed standard Article #1 should also recommend appropriate modifications to the monitoring plan, if deemed necessary.
6. It is noted that Article # 1 gives agencies 30 days to review and comment on a draft monitoring plan before a final plan is submitted to FERC. Furthermore, it is noted that Article #5 requires the project removal plan 180 days in advance of project installation. It is more appropriate to have the monitoring plan developed and approved before the removal plan is developed.

7. Consultation with and approval by appropriate agencies prior to any removal required by Article #5 is recommended, in order to allow for an evaluation of whether leaving some project components in place may have fewer adverse effects on the environment than their removal.
8. NOAA fully supports the general financial assurance article (Article #6). Because other state and federal agencies also may have statutory requirements that the applicant provide such assurance, FERC may wish to consider editing this language so that these requirements are not duplicated.