

PMC-EF2a

(2010)

**U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION**



RECIPIENT: University of Maine

STATE: ME

PROJECT TITLE : Maine Tidal Power Initiative

Funding Opportunity Announcement Number Congressionally Directed Project	Procurement Instrument Number DE-EE0000298	NEPA Control Number GFO-10-347	CID Number GO0
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Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:

Description:

- B3.1** Onsite and offsite site characterization and environmental monitoring, including siting, construction (or modification), operation, and dismantlement or closing (abandonment) of characterization and monitoring devices and siting, construction, and associated operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis. Activities covered include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. Specific activities include, but are not limited to:
- A9** Information gathering (including, but not limited to, literature surveys, inventories, audits), data analysis (including computer modeling), document preparation (such as conceptual design or feasibility studies, analytical energy supply and demand studies), and dissemination (including, but not limited to, document mailings, publication, and distribution; and classroom training and informational programs), but not including site characterization or environmental monitoring.
- B3.3** Field and laboratory research, inventory, and information collection activities that are directly related to the conservation of fish or wildlife resources and that involve only negligible habitat destruction or population reduction
- B3.6** Siting, construction (or modification), operation, and decommissioning of facilities for indoor bench-scale research projects and conventional laboratory operations (for example, preparation of chemical standards and sample analysis); small-scale research and development projects; and small-scale pilot projects (generally less than two years) conducted to verify a concept before demonstration actions. Construction (or modification) will be within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible).

Rational for determination:

The Maine Tidal Power Initiative will develop baseline resource and environmental data for the Cobscook Bay and Western Passage in Maine to evaluate the approach for future tidal power applications.

Tasks 1-3 are comprised of activities including: Computer simulation, measurements of tidal flow and force, laboratory turbine testing, acoustic surveying, visual observations, rod, reel and release fishing, using local (human) population for species identification (mostly avian and mammal species).

In Task 4, the Maine Tidal Power Initiative will deploy a pre-commercial test turbine in the Cobscook Bay. The prototype turbine generation unit (46' wide x 14' high x 11' deep), will be mounted on a work barge anchored off Shackford Head near Eastport, the barge will be anchored using 4 mooring lines. The generation unit will be deployed approximately 14 feet below the water (top of the unit). Depths in Cobscook Bay off Shackford Head reach to almost 150 ft. The turbine will be deployed for 6 months. The turbine will have 4 cameras documenting how the local fauna react to the turbine, these video feeds will be monitored daily. This will allow for real time aquatic-take numbers to be compiled, if the take reaches an unacceptable amount the project will be stopped and the turbine will be removed from its temporary location.

The Army Corps of Engineers (ACOE) has reviewed the proposed project and issued a permit for the deployment of this pre-commercial test turbine. Army Corps of Engineers have concluded, "Based on our review of the information you provided (Regarding- Beta Pre-commercial Turbine Generator "45'x 14'x 11' in the Cobscook Bay), we have determined that your project will have only minimal individual and cumulative impacts on waters and wetlands of the United States. Your work is therefore authorized by the U.S. Army Corps of Engineers under the enclosed Federal Permit, the Maine Programmatic General Permit (PGP)."

The stipulations within that permit will be strictly adhered to; these requirements have been addressed in the award language for this project. The electricity generated during testing will be used to charge batteries for the off-shore U.S. Coast Guard (USCG) fleet. The generator will not be grid connected during deployment therefore the Federal Energy Regulatory Committee (FERC) was not part of this consultation process. However, FERC has issued a preliminary permit for the conceptual engineering, study of environmental impacts and economic analysis portion of this project.

National Oceanic and Atmospheric Administration (NOAA), specifically the National Marine Fisheries Service (NMFS) have been consulted by USCOE regarding Section 7 consultation under the Endangered Species Act (ESA). The following statement can be found in the ACOE consultation request with NMFS, "The ACOE has made the preliminary determination that the proposed project, inclusive of the special conditions noted above, is not likely to adversely affect listed Atlantic salmon and has requested NMFS concurrence with this determination... Based on the determination that all effects, if adverse, will be insignificant or discountable, NMFS concurs with the ACOE's determination that the proposed project is not likely to adversely affect the GOM DPS of Atlantic salmon. This concludes consultation pursuant to Section 7 of the ESA for this project."

Additional consultation with NOAA was completed by DOE on May 17, 2010. During this informal consultation, a NOAA representative from the Maine Office stated, "Since the Section 7 between NMFS and Corps already considered the potential effects of net sampling on listed Atlantic salmon, no further action under the ESA is needed at this time concerning DOE's 2009 funding to the University of Maine." Stipulations of the ESA Section 7 consultation concluded by the Army Corps allowed for the net sampling to occur only until the end of September, 2010. DOE will initiate a subsequent ESA Section 7 consultation to allow for the University of Maine to continue sampling through 2011, pending concurrence from NOAA for these activities.

It is with the information outlined above the DOE has determined that this project will not have any significant impacts to human health and/or environment. This project is hereby Categorically Excluded under A9 "Information Gathering", B3.1 "Environmental Monitoring", B3.3 "Research related to conservation of Fish and Wildlife" and B3.6 "Small Scale Research and Pilot Projects".

NEPA PROVISION

DOE has made a conditional NEPA determination for this award, and funding for certain tasks under this award is contingent upon the final NEPA determination.

Insert the following language in the award:

You are restricted from taking any action using federal funds, which would have an adverse affect on the environment or limit the choice of reasonable alternatives prior to DOE/NNSA providing either a NEPA clearance or a final NEPA decision regarding the project.

Prohibited actions include:

Conducting net sampling past September 20, 2010 as described in the US Army Corps ESA Section 7 consultation requirements and their Programmatic General Permit. This is conditional pending the outcome of a secondary ESA Section 7 consultation by DOE for net sampling activities past September 30, 2010.

This restriction does not preclude you from:

Conducting activities as described by the final SOPO for this award under stipulations set forth by:

*SPECIAL CONDITIONS FOR DEPARTMENT OF THE ARMY, PROGRAMMATIC GENERAL PERMIT, NO. NAE-2007-01712.

If you move forward with activities that are not authorized for federal funding by the DOE Contracting Officer in advance of the final NEPA decision, you are doing so at risk of not receiving federal funding and such costs may not be recognized as allowable cost share.

Insert the following language in the award:

You are required to:

You are required to follow all requirements outlined within the ACOE's Maine Programmatic General Permit (PGP).

SPECIAL CONDITIONS FOR DEPARTMENT OF THE ARMY
PROGRAMMATIC GENERAL PERMIT
NO. NAE-2007-01712

1. The permittee shall assure that a copy of this permit is at the work site whenever work is being performed and that all personnel performing work at the site of the work authorized by this permit are fully aware of the terms and conditions of the permit. This permit, including its drawings and any appendices and other attachments, shall be made a part of any and all contracts and sub-contracts for work which affects areas of Corps of Engineers' jurisdiction at the site of the work authorized by this permit. This shall be done by including the entire permit in the specifications for the work. If the permit is issued after construction specifications but before receipt of bids or quotes, the entire permit shall be included as an addendum to the specifications. The term "entire permit" includes permit amendments. Although the permittee may assign various aspects of the work to different contractors or sub-contractors, all contractors and sub-contractors shall be obligated by contract to comply with all environmental protection provisions of the entire permit, and no contract or sub-contract shall require or allow unauthorized work in areas of Corps of Engineers jurisdiction.

2. This authorization requires you to 1) notify us before beginning work so we may inspect the project, and 2) submit a Compliance Certification Form. You must complete and return the enclosed Work Start Notification Form(s) to this office at least two weeks before the anticipated starting date. You must complete and return the enclosed Compliance Certification Form within one month following the completion of the authorized work and any required mitigation (but not mitigation monitoring, which requires separate submittals).

3. Except in the surface area physically occupied by the structures, the permittee shall permit normal fishing and/or recreational and commercial boating activity to occur.

4. This operation represents a temporary test of the site's and the equipment's potential. Consequently, this is a limited authorization for the 2009/2010 test period. All structures shall not be installed prior to November 8, 2009 and shall be removed in their entirety from the site no later than March 31, 2010 and stored upland. Future occupation of the site or others in the area will require separate permits from the Corps, the State of Maine, and the municipality.

5. All gear with the exception of mooring tackle shall be suspended above the bottom at all stages of the tide and no gear is authorized to be stored on the bottom.

6. This permit for does not eliminate the need to obtain local harbormaster approval or conform to local harbor management plans. If, in the best interest of overall navigation and under harbormaster direction, it becomes necessary to relocate the structures, prior written authorization from the Corps is not required. No structures may be relocated into a Federal Navigation Project. If relocation occurs, the permittee shall provide the Corps with a copy of the harbormaster approval and a plan and coordinates depicting the new location of the structures.

7. The permittee is required to mark the structures in accordance with appropriate US Coast Guard Regulations and to contact 1st Coast Guard District, Aids to Navigation Office at 617-223-8337.

8. The permittee must monitor ambient and operational noise levels during beta testing operations as well as the presence of seals at the site and their behavior in response to prototype operations. The details of the monitoring plan shall be coordinated with NMFS prior to implementation. The monitoring plan and the results of this monitoring shall be provided to NMFS at 17 Godfrey Drive, Suite 1, Orono, Maine 04473; ATTN: Jeff Murphy.

Special Condition 4 of the general permit has been (ACOE) amended to allow the structures to remain in place and operational until September 30, 2010. After September 30, 2010, all structures shall be removed in their entirety from the site and stored upland. Future occupation of the site or others in the area will require separate permits from the Corps, the State of Maine, and the municipality. Unless another permit extension is granted, in which case all stipulations therein must be followed.

The University of Maine must also comply with NOAA's request under the ESA Section 7 consultation that net catching cease and additional consultation be reinitiated if any of the following occur:

- (a) if new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered in the consultation;
- (b) if the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the consultation; or,
- (c) if a new species is listed or critical habitat designated that may be affected by the identified action.

Note to Specialist :

None Given.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION

NEPA Compliance Officer Signature


NEPA Compliance Officer

Date:

5/18/10

FIELD OFFICE MANAGER DETERMINATION

Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office