PMC-EF2a

(2.0602)

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

RECIPIENT: Snohomish County PUD **STATE:** WA

PROJECT TITLE : Acoustic Effects of Hydrokinetic Tidal Turbines

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000069	DE-EE0002654	GFO-0002654-002	0

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:

B3.3 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:

Snohomish County Public Utility District (PUD) is proposing to use DOE and cost-share funding to study of the acoustic effects of hydrokinetic tidal turbines at the site of the District's Admiralty Inlet pilot project. Activities would include the purchase and configuration of instrumentation, the deployment and retrieval of the instrumentation packages on the seabed, the simulation and measurement of sound propagation by a tidal turbine, and experimentation (conducted at Pacific Northwest National Labs) on the effects of turbine noise signals on representative aquatic species.

To carry out the proposed project plan, the Snohomish PUD has partnered with the Northwest National Marine Renewable Energy Center at the University of Washington (NNMREC-UW), Pacific Northwest National Laboratory (PNNL), and Sea Mammal Research Unit, Ltd (SMRU Ltd).

Project tasks include:

Task 1: Site Monitoring (previously CX'd)

Task 2: Turbine Noise (field testing – NEPA holding pending ESA consultation)

Task 3: Interpreted Presence and Behavior of Marine Mammals (previously CX'd)

Task 4: Effect of Turbine Noise on Aquatic Species

Task 5: Management and Reporting (previously CX'd)

A previous NEPA review and determination occurred on April 29, 2010 for this award. Task 1, 3 and 5 were determined to qualify for DOE categorical exclusions A9, B3.1 and B3.3.

This determination is being conducted to re-review task 4. The scope of this task has changed; PUD and their sub-recipients would no longer use the information from Task 2 to conduct their research and development activities for task 4. Task 2 continues to be held pending consultation with the National Marine Fisheries Service (NMFS). The new scope for Task 4 would involve collecting and analyzing previously recorded data on the sound field generated by Open-Hydro turbines, as measured at other deployment locations (rather than them being the ones to conduct the field analysis).

PUD's sub-recipient, Pacific Northwest National Laboratory (PNNL), would use this information to conduct

experiments at its Marine Sciences Laboratory (MSL) in Sequim, Washington on the north Olympic Peninsula. These experiments would consist of acoustic "dose" studies involving hatchery-raised juvenile salmon. The hatchery-raised juvenile Chinook salmon would be exposed to varying levels of noise in order to investigate their reactions and potential risks posed by turbine operation.

PNNL is a DOE National Laboratory and conducts and complies with NEPA for all actions conducted on their campus, such as this project. They have established permits in place for collection and testing of fish species. PNNL facilities comply with the Animal Welfare Act (AWA) regulations contained in 9 CFR Part 2, Subpart 2C, Section 2.37 that require each Federal research facility that uses animals to establish an Institutional Animal Care and Use Committee (IACUC).

A DOE-approved lab-wide integrated safety management (ISM) program is in place at PNNL. This program integrates environment, safety, and health (ES&H) requirements into the processes for planning and conducting Laboratory work to effectively protect the workers, the public, and the environment. The lab submits ISM performance objectives, measures, and commitments each year to DOE for approval.

PNNL has the following permits in place project work being conducted on their campus under this PUD project:

- National Pollutant Discharge Elimination System (NPDES) permit
- Wastewater disposal permit
- Animal care protocol (PNNL has an accredited Institutional Animal Care and Use

Task 2 involves activities requiring Endangered Species Act coordination and possible permitting by NMFS. Coordination with this agency by DOE and Snohomish PUD and the acquisition of permits has not occurred. Impacts related to this task are not known; therefore a NEPA determination cannot be made at this time. Task 2 is currently unallowable under NEPA.

DOE has determined that the impacts related to Task 4 are anticipated to have negligible or no affects on the human and natural environment. This task is consistent with actions outlined in DOE's categorical exclusion B3.3 (field research, inventory, and information collection activities that are directly related to the conservation of fish or wildlife resources and B3.6 (indoor bench-scale research projects and conventional laboratory operations) and are, therefore, categorically excluded from further NEPA review.

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:
Task 2 activities.
This restriction does not preclude you from:
Preliminary work to facilitate and complete the permitting and coordination requirements by NMFS/NOAA for task 2 field work

Tasks 1, 3, 4 and 5

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:
Submit an additional EF1 pertaining to all activities being performed under task 2. Include all applicable information and appropriate documentation relating to NMFS/NOAA permitting and consultation.
This award has NEPA conditions placed on all activities under task 2. These tasks require additional information submitted to NEPA and are unallowable activities at this time. NEPA recommends that this award be placed on ASAP approval, if not done so already.

Note to Specialist :

Review completed by Laura Margason 5/24/11

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 5/25/2011
NEPA Compliance Officer

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 Manager's attention.
☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____
Field Office Manager