

PMC-EF2a

(20402)

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



RECIPIENT: Snohomish County PUD

STATE: WA

**PROJECT TITLE :** Development of Post-Installation Monitoring Capabilities

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
CDP	DE-EE0000301	GFO-0000301-003	EE301

**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:

- 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.
- B3.1** 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:
- 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

## Rational for determination:

Snohomish Public Utility District (SnoPUD) is proposing to use Congressionally Directed Federal funding through DOE to develop and verify monitoring capabilities which would be implemented as post-installation environmental monitoring for their proposed Puget Sound Pilot Tidal Energy Project in the State of Washington. The primary focus for the project would be the development of near-field monitoring capabilities to observe interactions in the immediate vicinity of turbine rotors, in order to address concerns about the risk of post-installation blade strike. Additionally, equipment suitable for post-installation passive acoustic monitoring would be tested and the potential for cross-talk between different active acoustic instruments would be evaluated.

The project activities would be lead by SnoPUD's subawardee's, the Northwest National Marine Renewable Energy Center (NNMREC) and the University of Washington.

## Project tasks include:

## Task 1 – Near-field Monitoring

- Subtask 1.1 - System design and test procedures
- Subtask 1.2 - System testing (in-water testing and monitoring, CX B3.1 and B3.3)
- Subtask 1.3 - System Specifications
- Subtask 1.4 - Near-field Monitoring Plan

## Task 2 – Passive Acoustic Monitoring

- Subtask 2.1 - Ambient Noise
- Subtask 2.2 - Marine Mammal Monitoring Plan
- Subtask 2.3 - Southern Resident Killer Whale Monitoring, Operation and Protection Plan

## Task 3 - Current Velocity Monitoring

- Task 4: Component Packaging
- Task 5: Monitoring Cost Estimation
- Task 6: Project Management and Reporting.

This project would not involve the final design of a tidal power system nor any construction/destruction related activities. Activities will be limited to in-water environmental monitoring, data gathering, and report generation.

A previous NEPA review and determination occurred on April 22, 2010 for this award. After this review, tasks 1.1, 5 and 6 were determined to qualify for DOE categorical exclusion A9. Tasks 1.2 - 1.4, and tasks 2-4 were put on a

NEPA hold pending additional information on project tasks and consultations with the US Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS).

This NEPA review is being conducted for tasks 1.2 - 1.4 and tasks 2 - 4. The scope of these tasks involves conducting in-ocean testing and monitoring activities that would take place in Lake Union, Lake Washington, and Admiralty Inlet in Puget Sound, Washington. The testing and monitoring proposed under these tasks would assess the acoustic signature of a hydrokinetic turbine using recordings from an Open-Hydro device and assess site-specific measurements for the proposed tidal pilot project site. Task activities would also involve testing passive acoustic instrumentation for monitoring marine mammal presence or absence in the vicinity.

Tasks 1.2, 1.3 and 1.4 would involve testing the light and camera configuration developed in subtask 1.1 to determine the minimum level of artificial light necessary to identify species around the proposed tidal power system. Task 2 would involve conducting passive acoustic monitoring at the sites to monitor ambient noise, noise from a proposed operating turbine, and marine mammal presence/absence (as indicated by echolocation activity). Task 3 would involve conducting current velocity monitoring to monitor the inflow conditions for the proposed tidal-power turbines. Lastly, task 4 would involve of integrating the monitoring capabilities described in Tasks 1-3 into one component package that would be applied to the future monitoring of the proposed tidal-power project.

Because work would occur adjacent to, and in, the ocean, it has the potential to impact species and their critical habitat listed under the Endangered Species Act (ESA). The National Marine Fisheries Service (NMFS) and the US Fish and Wildlife Service (USFWS) were consulted for each of their respected trust resources in compliance with Section 7 of ESA. Consultations were also conducted to understand the potential impacts to additional species protected under the Marine Mammals Protection Act and the Magnuson–Stevens Fishery Conservation and Management Act.

On June 15, 2011, DOE initiated informal consultation under Section 7 of the Endangered Species Act (ESA) and submitted a consultation letters to NMFS and USFWS. A NMFS letter dated July 14, 2011 concurred with DOE's determination that funding SnoPUD (and their partners, NNMREC-UW) to conduct the in-water testing and monitoring in Lake Union, Lake Washington, and Admiralty Inlet is not likely to adversely affect ESA listed marine species or their designated critical habitat under NMFS's jurisdiction and that DOE's consultation responsibilities were complete. A USFWS letter, dated July 7, 2011, also concurred with DOE's determination that funding SnoPUD is not likely to adversely affect ESA listed species or their designated critical habitat under their jurisdiction.

Based on the impact analysis presented in the Biological Evaluation, the short-duration of project activities and completed consultations with NMFS and the USFWS, DOE has determined that the impacts related to Tasks 1.2, 1.3, 1.4, 2, 3, and 4 are anticipated to have negligible or no effects on the human and natural environment. These tasks are consistent with actions outlined in DOE's categorical exclusions A9 (information gathering and data analysis), B3.1 (offsite site characterization and environmental monitoring) and B3.3 (field research, inventory, and information collection activities that are directly related to the conservation of fish or wildlife resources) and is, therefore, categorically excluded from further NEPA review.

#### NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Insert the following language in the award:

You are required to:

Adhere to the committed measures as outlined in the Biological Evaluation:

- Adhere to the NMFS-recommended BMPs during all vessel operations, including the transits to and from the survey areas in order to avoid or reduce impacts on protected marine species and their habitats, particularly as they pertain to protected species awareness and avoidance;
- adhere to the Guidelines for Operations when whales are sighted; and
- if Southern Resident killer whales are reported to be present in Admiralty Inlet (as informed by local observed networks), testing would be discontinued until the whales transit 5 km beyond the Project area.

Note to Specialist :

This concludes the review for this project - all tasks are allowable under NEPA.

Review completed by Laura Margason

**SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.**

NEPA Compliance Officer Signature:   
NEPA Compliance Officer

Date: 7/15/2011

**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: \_\_\_\_\_  
Field Office Manager

Date: \_\_\_\_\_