

PMC-EF2a

(20402)

**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-0002654-003	EE2654

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
- B3.1** 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:

**Rational for determination:**

Snohomish County Public Utility District (SnoPUD) is proposing to use DOE and cost-share funding to study of the acoustic effects of hydrokinetic tidal turbines around the site of SnoPUD's Admiralty Inlet tidal 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 on the effects of turbine noise signals on representative aquatic species.

To carry out the proposed project plan, SnoPUD 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 and monitoring)
- Task 3: Interpreted Presence and Behavior of Marine Mammals (previously CX'd)
- Task 4: Effect of Turbine Noise on Aquatic Species (previously CX'd)
- Task 5: Management and Reporting (previously CX'd)

Previous NEPA reviews and determinations occurred on April 29, 2010 and on May 25, 2011 for this award. After these reviews, tasks 1, 3 and 5 were determined to qualify for DOE categorical exclusions A9, B3.1 and B3.3 and task 4 qualified for a B3.6.

This NEPA review is being conducted for task 2. The scope of this task involves conducting in-ocean testing and monitoring activities that would take place in Lake Union, Lake Washington, and Admiralty Inlet, Washington. The testing and monitoring 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.

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 Task 2 are anticipated to have negligible or no effects on the human and natural environment. This task is consistent with actions outlined in DOE's categorical exclusions 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.

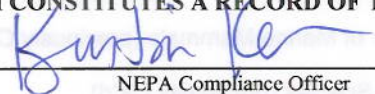
Note to Specialist :

This completes the NEPA review for this project - NEPA review for all tasks is complete subject to the commitments noted above.

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 :**