

PMC-ND  
(1.08.09.13)

**U.S. DEPARTMENT OF ENERGY**  
**OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY**  
**NEPA DETERMINATION**



RECIPIENT: University of Washington

STATE: WA

**PROJECT TITLE :** Marine Mammal Behavioral Response to Tidal Turbine Sound

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
DE-FOA-0000816	DE-EE0006385	GFO-0006385-002	GO6385

**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:

<b>A11 Technical advice and assistance to organizations</b>	Technical advice and planning assistance to international, national, state, and local organizations.
<b>B3.3 Research related to conservation of fish, wildlife, and cultural resources</b>	Field and laboratory research, inventory, and information collection activities that are directly related to the conservation of fish and wildlife resources or to the protection of cultural resources, provided that such activities would not have the potential to cause significant impacts on fish and wildlife habitat or populations or to cultural resources.

**Rationale for determination:**

The Department of Energy, (DOE) is proposing to provide funding to the University of Washington (UW) to characterize the behavioral response of harbor porpoises and pinnipeds to the sound produced by marine energy converters, using a simulated sound source. The proposed project would analyze the behavioral responses of marine mammals to marine energy converter sounds, as well as demonstrate the effectiveness of shoreline observers and localizing passive acoustics to describe the distribution and use of marine mammals around marine renewable energy projects.

A previous NEPA determination was completed for this award (GFO-0006385-01; December 5, 2013). Previously, UW proposed to study behavioral responses of marine mammals around a pair of active tidal turbines which were to be deployed in northern Admiralty Inlet, Puget Sound, Washington, by the Public Utility District No. 1 of Snohomish County. Since that determination the project scope has significantly changed as the tidal turbines will no longer be deployed. No work was undertaken by UW on the previous SOPO and pursuant the original NEPA determination. UW has now submitted a new SOPO which is reviewed by this NEPA determination.

The revised SOPO contains six tasks divided into two budget periods, plus project management and reporting. Budget Period 1 would include Tasks 1 and 2, while Budget Period 2 would include Tasks 3 - 6. There would be a go/no/go determination between budget periods. This determination only reviews tasks under Budget Period 1.

The six tasks are as follows.

Task 1 would involve selection and demonstration in a laboratory of simulated marine energy converter sounds. Sounds would be tested in a laboratory setting and would not be introduced into the marine environment.

Task 2 would involve initial shoreline observations of marine mammals. Shoreline observations would occur from Admiralty Head, Whidbey Island, WA utilizing a scan sampling approach with binoculars and an SLR camera. Under Task 2 UW would also work to obtain any necessary NMFS marine mammal permits.

Task 3 would involve the deployment of the simulated sound into the marine environment. The sound simulator would be deployed into the marine environment from a moored vessel. This would include three deployments, each consisting of six hours of sound simulation, over a six day period.

Task 4 would include observations of marine mammals during the sound deployments. Observation methods in Task

4 would be the same as those used in Task 2.

Task 5 would include modeling sound and marine mammal behavior, to evaluate the correlation between the simulated sound and observed marine mammal behavior.

Task 6 would include completion of a report synthesizing the results of the study.

Laboratory and office work would be completed at the University of Washington at facilities designed for laboratory and office work. Additional office work would take place at the offices of SMRU consulting in Friday Harbor, Washington. Applicable health and safety procedures would be followed at all sites.

Tasks 3 – 6, in Budget Period 2, would involve activity occurring within the tidal waters of Admiralty Inlet. Waters of Admiralty Inlet may include species listed as threatened and/or endangered, and may include critical habitat. Meaningful analysis of this proposed work cannot be completed until UW provides to DOE a Biological Evaluation of the project, and DOE completes any necessary consultation.

Based on review of the project information and the above analysis, DOE has determined that Tasks 1 and 2 of the proposed project, as well as project management and reporting, would not have a significant individual or cumulative impact to human health and/or environment. DOE has determined the proposed tasks are consistent with actions contained in DOE categorical exclusions A9 "Information gathering, analysis, and dissemination" and B3.3 "Research related to conservation of fish, wildlife and cultural resources" and is 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 3 – Sound simulation
- Task 4 – Marine mammal observations
- Task 5 – Evaluation of behavioral effects
- Task 6 – Study synthesis

This restriction does not preclude you from:

- Task 1 – Selection of sound simulation
- Task 2 – Preliminary marine mammal observations

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.

Note to Specialist :

Water Power Program  
This NEPA determination does require a tailored provision  
NEPA review completed by Roak Parker May 11, 2016

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

NEPA Compliance Officer Signature:  Date: 5/12/2016  
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: \_\_\_\_\_  
Field Office Manager

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

