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

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000816	DE-EE0006385	GFO-0006385-001	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:

A9 Information gathering, analysis, and dissemination	Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)
B3.3 Research related to conservation of fish, wildlife, and cultural resources	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 to characterize the behavioral response of killer whales, harbor porpoises, and pinnipeds to the sound produced by tidal turbines. The proposed project would produce a description of the temporal and spatial variation in sound produced by a pair of tidal turbines, 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. These activities would be part of a larger demonstration project by Public Utility District No. 1 of Snohomish County which is deploying a pair of tidal turbines in northern Admiralty Inlet, Puget Sound, Washington.

The University of Washington is proposing to deploy five drifting hydrophone spar buoys that would be released from a small boat approximately 1 km southwest of Keystone Harbor/Admiralty Head in the Admiralty Inlet, Puget Sound, WA to collect turbine sound data and marine mammal sound data from hydrophones on the turbine foundation. The buoys would measure ambient sound prior to the installation of the turbines, followed by sound measurements after the installation of each turbine. The small boats to deploy the buoys would be equipped with standard marine safety gear, as required by the US Coast Guard including a life raft, personal floatation devices, Emergency Position Indicating Radio Beacons, signal flares, and VHF radios. Additionally, the boat operators would adhere to NOAA's Best Management Practices for General In-Water Work Including Boat and Diver Operations to limit any effects of vessel operations on marine mammals.

Shoreline observations of marine mammals would occur from Fort Casey State Park at Admiralty Head, Whidbey Island, WA utilizing equipment such as reticular binoculars or a theodolite. The University has previously conducted observations from this location which required coordination with park staff to ensure that the observations did not interfere with park operations. A similar level of coordination would be utilized for this project.

Laboratory work would be completed at Pacific Northwest National Laboratory in Seattle, WA. Activities would include computer modeling and report writing to document project findings for inclusion in the Tethys Knowledge Management System. Additional analysis of acoustic and marine mammal data, as well as hydrophone calibration would be completed at the University of Washington in Seattle, WA. Applicable health and safety procedures would be followed at both sites.

The in-water monitoring activities that would be undertaken as part of the proposed action are described in the monitoring and mitigation plans for the tidal turbine demonstration project and have been included in the environmental review for the demonstration project coordinated by the Federal Energy Regulatory Commission (FERC). All permits for this activity would be obtained as part of the FERC licensing process from the associated tidal energy demonstration project.

DOE initiated informal consultation with the National Marine Fisheries Service (NMFS). The NMFS responded in a letter dated July 14, 2011, and found the proposed action "may affect, but is not likely to adversely affect" (NLAA) for SR killer whales, humpback whales, PS Chinook, PS steelhead, HCSR chum, SDPS green sturgeon, and SDPS for Pacific eulachon. Further NMFSA concludes that the proposed action is NLAA designated critical habitat for PS Chinook and SR killer whales.

The U.S. Fish and Wildlife Service (USFWS) Endangered Species Program website identifies 11 candidate, threatened or endangered species that are known to or are believed to occur in Island County, Washington. However, due to the lack of critical habitat in the vicinity of the site and the nature of the project only requiring observers to stand on the shoreline; DOE has determined the proposed project would not adversely affect threatened and endangered species in the area.

The National Register of Historic Places identifies Admiralty Head as part of the Central Whidbey Island Historic District. Based on the type of project activities, DOE has determined the proposed project has no potential to cause effects to this historic district.

Based on review of the project information and the above analysis, DOE has determined the proposed project activities would not have a significant individual or cumulative impact to human health and/or environment. DOE has determined the proposed project is 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 final NEPA determination for this award

Insert the following language in the award:

If you intend to make changes to the scope or objective of your project you are required to contact the Project Officer identified in Block 11 of the Notice of Financial Assistance Award before proceeding. You must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved.

Note to Specialist :

This NEPA Determination does not require a tailored NEPA provision.

Diana Heyder 11/22/2013

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 12/5/2013

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