

PMC-ND

(1.08.09.13)

# U.S. DEPARTMENT OF ENERGY

## OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY

### NEPA DETERMINATION



RECIPIENT: HRF - Oregon State University

STATE: OR

PROJECT TITLE : Hydro Research Foundation University Research Awards

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	EE0002668/EE0006506	GFO-0006506-016	GO6506

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:

**B3.6 Small-scale research and development, laboratory operations, and pilot projects** Siting, construction, modification, operation, and decommissioning of facilities for smallscale research and development projects; conventional laboratory operations (such as preparation of chemical standards and sample analysis); and small-scale pilot projects (generally less than 2 years) frequently conducted to verify a concept before demonstration actions, provided that construction or modification would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Not included in this category are demonstration actions, meaning actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial deployment.

## Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to the Hydro Research Foundation (HRF) to award grants to individual research projects through its University Research Awards Program. The intent of the grants is to support innovative research related to conventional or pumped-storage hydropower, stimulate interest among students and universities in this research arena, and provide students with a foundation for productive careers related to the hydropower industry.

DOE completed a previous NEPA review (GFO-0002668-002 CX A9, A11 3/23/2015) that included development of a Hydro Fellowship Program that would competitively award hydropower-related, graduate-level research projects for one- to two-year periods of study. This NEPA determination applies to activities associated with one of the projects which has been selected to receive a grant award from the HRF.

The awardee at Oregon State University would use HRF grant funding provided by DOE to develop a hardware test bed for validation and optimization of variable-speed hydropower systems. The proposed project would essentially build controllers for two components that would mimic hydropower systems. The proposed project activities would include: developing and implementing the controller for an existing dynamometer; benchmark testing of the dynamometer; developing and implementing a flexible controller for an existing variable-speed machine; and study the impact of stator voltage disturbances to the generator. Proposed activities consist of lab-scale research and would occur at the Wallace Energy Systems & Renewables Facility (WESRF) at Oregon State University (OSU). The facility is currently used for work that is similar to the proposed activities; therefore, no new construction or building modifications or new or modified permits would be required.

Based on review of the project information and the above analysis, DOE has determined the activities associated with the proposed project 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 exclusion B3.6 "small-scale research and development, laboratory operations and pilot projects 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 :

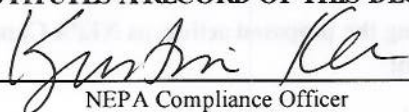
Water Power Program

This NEPA Determination does NOT require a tailored NEPA provision.

NEPA review completed by Logan Sholar, 5/7/15

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

NEPA Compliance Officer Signature:

  
NEPA Compliance Officer

Date:

6/4/2015

**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: