

PMC-ND  
(1.08.09.13)

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



**RECIPIENT:** Ricardo, Inc.

**STATE:** MI

**PROJECT TITLE :** Administration of the Wave Energy Converter (WEC) Prize

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
DE-FOA-0000979 WEC PRIZE	DE-EE0006738	GFO-0006738-002	GO6738

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>A9 Information gathering, analysis, and dissemination</b>	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.)
<b>B3.6 Small-scale research and development, laboratory operations, and pilot projects</b>	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 Ricardo, Inc. for the administration of the Wave Energy Converter (WEC) Prize Challenge in order to attract innovative ideas from developers new to the industry and next generation ideas from existing developers by offering a monetary prize purse and providing an opportunity for tank testing and evaluation of scaled WEC prototypes.

The project plan has been broken down into five (5) phases:

Phase 1: Competition Planning Stage  
Phase 2: Competition Design Stage  
Phase 3: Competition Build Stage  
Phase 4: Competition Test and Evaluation Stage  
Phase 5: Post-Competition Publicity & Wrap-up

This award previously received a NEPA determination (GFO-0006738-001; CX-A9, CX-B3.6; 9/05/2014) for activities associated with Phases 1, 2 and 5 which included prize development (rules and process), prize promotion and communication, competition publicity and evaluation, implementation of the competition stages (design, build, test & evaluation), and management of the "seed" funding and monetary prize awards to be undertaken throughout all phases until project completion. The purpose of this NEPA determination is to facilitate a review of four additional potential wave tank testing facilities and associated activities to allow for the establishment and administration of test facilities subcontracts, as described in Task 27.0 (found in Phase 2 of the SOPO).

The proposed project activities relevant to this review would be conducted over a span of two months and would include the design and fabrication of a modular mooring system to be used in testing the response of wave energy conversion models; testing of those models in an indoor, physical model basin; collection and analysis of data; and reporting of results. These activities would take place at one or more of the following four dedicated lab facilities: Marine Hydrodynamics lab at the University of Michigan in Ann Arbor, MI; Davidson Laboratory at the Stevens Institute of Technology in Hoboken, NJ; Advanced Structures and Composites Center at the University of Maine in Orono, ME; or Hinsdale Research Laboratory at Oregon State University in Corvallis, OR. All proposed activities would take place in existing facilities designed for this type of activity; therefore, no new construction, modifications or

new permits, additional licenses and/or authorizations would be necessary.

Plate steel would be used in the fabrication of the mooring systems and would likely result in scrap steel which would be recycled appropriately. The use of chemicals and other hazardous materials would not be required and no waste would be created at decommissioning; therefore, no siting, construction or major expansion of waste storage, disposal, recovery, or treatment actions/facilities would be required. Existing lab health and safety policies and procedures would be followed at all times.

Based on the information above, DOE has determined that this project is consistent with actions outlined in DOE categorical exclusions A9 "Information gathering, data analysis, and information dissemination" and B3.6 "small-scale research and conventional laboratory operations" and is therefore 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:

All activities associated with Phases 3 and 4 as described in the Statement of Project Objectives (SOP).

This restriction does not preclude you from:

Phase 1, 2 and 5 activities including the establishment and administration of test facilities subcontracts, and necessary design and fabrication of modular mooring systems by those facilities.

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 requires a tailored NEPA provision.

Review completed by Rebecca McCord, 05/26/2015

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

NEPA Compliance Officer Signature:  Kristin Kerwin Date: 6/3/2015  
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