PMC-ND
(1.08.09.13)

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

RECIPIENT: Dresser-Rand Company **STATE:** NY

PROJECT TITLE : HydroAir Power Take Off System

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000848	DE-EE0006609	GFO-0006609-001	

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.)

Rationale for determination:

Dresser Rand Co. is proposing to use DOE funding to further design, build, test, and demonstrate a full-scale (500kW), a novel radial airflow HydroAir turbine for use in oscillating water column marine hydrokinetic energy conversion devices. This is a Dresser Rand design that has been tested previously at a 10kW level. The objective of this project is to demonstrate the effectiveness of the HydroAir radial turbine, increase the turbine's Power-to-Weight ratio, improve design life, and improve overall system performance, manufacturing and Operations and Maintenance costs and Operating Expenses.

Project Tasks include:

Budget Period 1

Task 1.0: Detailed Implementation Planning
Task 2.0: Conceptual Turbine Design
Task 3.0: Detailed Turbine Design
Task 4.0: Electrical Design
Task 5.0: Structural Design
Task 6.0: Design Shut Off Valve (SOV)
Task 7.0: Value Analysis / Value Engineering (VA/VE) – Supply Chain Optimization

Budget Period 2

Task 8.0: Construction
Task 9.0: Installation and Commissioning
Task 10.0: Testing
Task 11.0: System Integration Plan
Task 12.0: Impact Analysis
Task 13.0. Project Management

Tasks 1-7 would involve system and component design and project planning. This would include desktop and data analysis only.

Tasks 8-12 would involve the system construction and testing at either the PICO Plant, a land-based site in Azores, Portugal or installation onto the OE wave energy devise that is scheduled to be tested at the U.S Navy's deepwater WETS site in Oahu, Hawaii. Project details for these tasks and site locations have not been determined; therefore a

NEPA analysis on these tasks cannot be completed at this time.

Based on the above information and analysis DOE has determined Tasks 1-7 are consistent with actions covered under DOE CX A9 (information gathering, data analysis, preliminary design); and therefore 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:
Budget period 2 tasks and activities:

Task 8.0: Construction
Task 9.0: Installation and Commissioning
Task 10.0: Testing
Task 11.0: System Integration Plan
Task 12.0: Impact Analysis

This restriction does not preclude you from:
Budget Period 1 tasks and activities, including project management:

Task 1.0: Detailed Implementation Planning
Task 2.0: Conceptual Turbine Design
Task 3.0: Detailed Turbine Design
Task 4.0: Electrical Design
Task 5.0: Structural Design
Task 6.0: Design Shut Off Valve (SOV)
Task 7.0: Value Analysis / Value Engineering (VA/VE) – Supply Chain
Task 13.0. Project Management

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.

Insert the following language in the award:

You are required to:
Submit an additional EQ1 and documentation to support DOE's NEPA review for BP2 (Tasks 8-12). The additional EQ-1 should provide information on BP2 activities including, but not limited to, details on the proposed testing and construction sites, applicable permits, and deployment plans. The EQ-1 should also provide environmental impact analyses including, but not limited to, potential impacts to resources protected under the Endangered Species Act, Marine Mammal Protection Act, Magnuson-Stevens Fishery Conservation and Management Act, and National Historic Preservation Act.

Note to Specialist :

NEPA review completed by Laura Margason on August 26, 2014.
This NEPA Determination requires a tailored NEPA provision.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Electronically Signed By: Kristin Kerwin Date: 8/27/2014

NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION