

PMC-ND
(1.08.09.13)

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



RECIPIENT: Dresser-Rand, Siemens Government Technologies

STATE: NY

PROJECT TITLE : Commercial Scale 1MW Power Take-Off (PTO) Unit Utilized for Ocean Wave Energy Converters (WEC)

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE_FOA-0001418	EE-EE0007821	GFO-0007821-001	

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.)
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Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide funding to Dresser-Rand Siemens Government Technologies (Dresser-Rand), to design and construct a grid valve, and optimize the control strategy and aerodynamic characteristics of their wave energy conversion turbine.

The proposed project would be divided into three Budget Periods, with a Go/No Go decision point between each Budget Period. This NEPA review is for Budget Period 1 (BP1) only. A meaningful NEPA review cannot be conducted for BP2 and 3 activities at this time as detailed plans and potential biological impacts for the associated activities are not yet known.

BP1 would include seven tasks:

- Task 1 Detailed Implementation Planning
- Task 2 Preparation for operations at EMEC
- Task 3 Pneumatic to Wire Numerical Model with EMEC operating conditions
- Task 4 Conceptual Turbine Design
- Task 5 Detailed system design and Turbine optimization
- Task 6 Grid Valve Design including CFD Analysis
- Task 7 Acoustic Data collection and reporting

Tasks 1-6 involve only project management, information gathering, analysis, design, and planning activities. These tasks would be completed at Dresser Rand facilities. 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.

Task 7, Acoustic Data Collection and Reporting, is divided into milestones, activities, and a deliverable, and would include the following:

- Milestone 7.1: Identification of System
- Activity 7.2: Perform necessary modifications or enhancements
- Milestone 7.3: Testing of system
- Activity 7.4: Collection of data at device deployment
- Deliverable 7.5: Dissemination report of analysis.

Milestone 7.1 would involve only information gathering to identify an appropriate acoustic monitoring system.

Activity 7.2, milestone 7.3, activity 7.4 and deliverable 7.5 would include modifications, fabrication, testing, and deployment. There is not enough information available to analyze these requests at this time.

Based on the review of the proposal, DOE has determined that Tasks 1-6 and Milestone 7.1 in Budget Period 1 of the proposal fit within the class of action(s) selected above. DOE has also determined that: (1) there are no extraordinary circumstances (as defined by 10 CFR 1021.410(2)) related to the proposal that may affect the significance of the environmental effects of the proposal; (2) the proposal has not been segmented to meet the definition of a categorical exclusion; and (3) the proposal is not connected to other actions with potentially significant impacts, related to other proposals with cumulatively significant actions, or an improper interim action. Tasks 1-6 and Milestone 7.1 of this proposal are 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:

Activity 7.2: Perform necessary modifications or enhancements

Milestone 7.3: Testing of system

Activity 7.4: Collection of data at device deployment

Deliverable 7.5: Dissemination report of analysis.

All BP2 and BP3 Tasks

This restriction does not preclude you from:

Task 1 Detailed Implementation Planning

Task 2 Preparation for operations at EMEC

Task 3 Pneumatic to Wire Numerical Model with EMEC operating conditions

Task 4 Conceptual Turbine Design

Task 5 Detailed system design and Turbine optimization

Task 6 Grid Valve Design including CFD Analysis

Milestone 7.1: Identification of System

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.

NEPA review completed by Roak Parker, December 6, 2017

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:



Casey Strickland

Date:

12/7/2017

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: _____