PMC-EF2a
(20.02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: Scientific Solutions, Inc. **STATE:** NH

PROJECT TITLE: Underwater Active Acoustic Monitoring Support for Marine Hydrokinetic Energy Projects

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-000293	DE-EE0003639	GFO-0003639-001	EE3639

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 (including, but not limited to, literature surveys, inventories, audits), data analysis (including computer modeling), document preparation (such as conceptual design or feasibility studies, analytical energy supply and demand studies), and dissemination (including, but not limited to, document mailings, publication, and distribution; and classroom training and informational programs), but not including site characterization or environmental monitoring.

B3.6 Siting, construction (or modification), operation, and decommissioning of facilities for indoor bench-scale research projects and conventional laboratory operations (for example, preparation of chemical standards and sample analysis); small-scale research and development projects; and small-scale pilot projects (generally less than two years) conducted to verify a concept before demonstration actions. Construction (or modification) will be within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible).

Rational for determination:

Scientific Solutions, Inc (SSI) is proposing to use DOE and cost-share funding to further advance its existing Swimmer Detection Sonar Network (SDSN) system in a joint effort with Ocean Renewable Power Company (ORPC) to fully develop, integrate, test, and operate a full-scale active acoustic monitoring system for Marine Hydrokinetic (MHK) and other offshore renewable energy projects; specifically for monitoring the region surrounding a tidal turbine. The monitoring system would be designed to detect, track and identify fish, marine mammals and debris.

Proposed project tasks include:

Task 1 – Preliminary System Design
Task 2 – Node Design and First Article Fabrication
Task 3 – Preliminary System Testing (6 node in-ocean deployment and testing)
Task 4 – Detailed System Design
Task 5 – Software and Signal Processing Development
Task 6 - System Build and Installation (20 node in-ocean deployment and testing)
Task 7 - Software and Signal Processing Development, Testing, and Reporting
Task 8 - Project Management and Reporting

In water testing would take place in the tidal waters of Cobscook Bay off Eastport, Maine at the entrance of the Bay of Fundy. Eastport is a coastal municipality located in eastern Washington County in the State of Maine. ORPC has received a letter from NOAA/NMFS stating that the active sonar system is "not likely to result in the taking of marine mammals, including the potential for disturbance or injury, provided that ORPC implements all the mitigation and monitoring measures identified in the request for the LOC (Letter of Concurrence)". The Maine Department of Environmental Protection has also stated that this project does not require a Maine Waterway Development and Conservation Act permit and that no State Coastal Zone Management Act consistency designation is necessary

However, SSI's project involves deploying their monitoring system concurrently with ORPC's two DOE funded projects: DE-EE0003647, TidGen™ Power System project and DE-EE0002650, OCGen™ Module Mooring Project. The ORPC projects involve in-ocean testing of two tidal energy technologies. The deployment of ORPC technology will require additional permits and consultations with the US Army Corps, FERC and NMFS, amongst others. The NEPA review and permitting process for these activities is not complete. All SSI project activities connected to the ORPC projects (capital equipment purchase and field testing - as listed below by task and activity) are prohibited pending the completion of the NEPA and permitting process by all involved federal and State agencies.

Allowable tasks include preliminary hardware design and development; laboratory testing and evaluation; software

development; and project management and reporting (portions, or all of, Tasks1-2, 4-5, and 7-8 as listed below).

Laboratory work being conducted in task 2 will take place at SSI's New Hampshire facility. The facility is equipped with principal lab and personal safety protective equipment, which includes, but not limited to first aid kits, fire extinguishers, lab protective gear such as eye protection, protective aprons, hand protection gloves. ORPC has an established Safety Manual which details safety procedures specific to the project activities that will be employed and monitored internally, including General Rules, Specific Facility Rules, Industrial Hygiene and Personal Safety, Generating Facility Maintenance and Operation, and Electrical Maintenance and Operations. Safety procedures and practices are drawn from current, accepted industry standards including, but not limited to OSHA standards.

Tasks 1, 2, 4, 5, 7, and 8 consist of research, preliminary design and information gathering activities.

Based on the above discussion DOE has determined that the impacts related to tasks 1, 2, 4, 5, 7, and 8 as conditioned, are anticipated to have negligible or no affects on the human and natural environment. The proposed project is consistent with actions outlined in A9 (information gathering) and B3.6 (indoor bench-scale research projects 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:
Task 2 – purchase of surface hardware and cabling for deployment off the project partner's barge only (as described in the current SOPO).
Task 3 - all activities including deployment of all instrumentation into ocean waters, including the capital equipment purchase and fabrication of additional monitoring nodes (the 20 discussed in the SOPO)
Task 4 – final design elements
Task 5 – final design elements and additional node equipment purchase and fabrication
Task 6 - all activities prohibited

Capital equipment purchase and field (ocean) deployment and testing are prohibited pending a final NEPA determination by DOE for the two ORPC and SSI projects.

This restriction does not preclude you from:
Task 1 - (all activities allowable)
Task 2 – all activates allowable EXCEPT for the "purchase of the surface hardware and cabling", as described in the SOPO, for deployment activities associated with node deployment related to ORPC's project
Task 4 – preliminary design elements allowable (final design unallowable)
Task 5 – software development activities only
Task 7 - Software and Signal Processing Development, Testing, and Reporting
Task 8 - Project Management and Reporting

Fabrication and indoor laboratory testing six prototype acoustic monitoring nodes is allowable. The deployment of this instrumentation into ocean waters is unallowable prior to the completion of the ORPC FERC permit and/or the DOE NEPA EA process. Additional purchase and fabrication of monitoring nodes is unallowable.

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 :

This project involves tasks that are conditional pending a final NEPA determination – please place this project on ASAP approval.

Review completed by Laura Margason - April 4, 2011

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 4/6/2011
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