



**MARINE AND HYDROKINETIC (MHK)  
DEMONSTRATIONS AT THE NAVY'S  
WAVE ENERGY TEST SITE (WETS) FOA**

**FOA Webinar  
DE-FOA-0001081  
May 7, 2014**

## MARINE AND HYDROKINETIC (MHK) DEMONSTRATIONS AT THE NAVY'S WAVE ENERGY TEST SITE (WETS)

### Anticipated Schedule:

<b>FOA Issue Date:</b>	<b>April 25, 2014</b>
<b>FOA Informational Webinar:</b>	<b>May 7, 2014 3:00pm ET</b>
<b>Submission Deadline for Full Applications:</b>	<b>June 11, 2014 5:00pm ET</b>
<b>Submission Deadline for Replies to Reviewer Comments:</b>	<b>July 8, 2014 5:00pm ET</b>
<b>Expected Date for EERE Selection Notifications:</b>	<b>August 15, 2014</b>
<b>Expected Timeframe for Award Negotiations:</b>	<b>Aug 15, 2014 – Sept 30, 2014</b>

# Notice

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- All Applicants are strongly encouraged to carefully read the Funding Opportunity Announcement **DE-FOA-0001081 (“FOA”)** and adhere to the stated submission requirements. The content included in this presentation is intended to summarize the contents of FOA. If there are any inconsistencies between the content of this presentation and the information presented in the FOA please contact [MHKWETSFOA1081@go.doe.gov](mailto:MHKWETSFOA1081@go.doe.gov). In the event there is an inconsistency, the Funding Opportunity Announcement is the controlling document and applicants should rely on the FOA language.

# Agenda

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- 1) FOA Description
- 2) Award Information
- 3) FOA Information and Timeline
- 4) Eligibility Review
- 5) Full Application Review
- 6) Registration Requirements
- 7) Where to Submit Questions

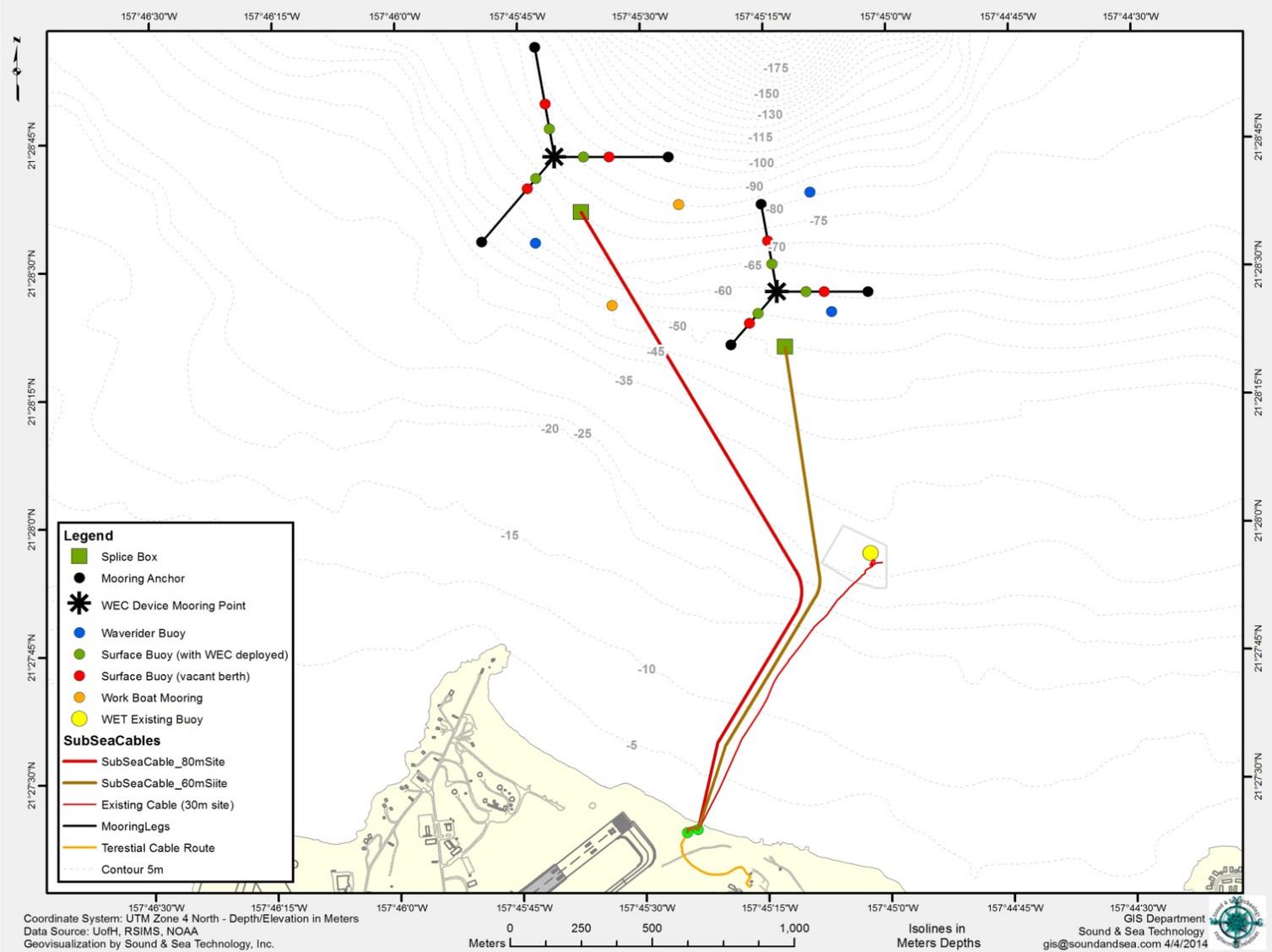
# FOA Description

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This FOA will support the deployment and testing of two (2) wave energy conversion (WEC) devices for a period of approximately one (1) year at a depth of approximately 60 and 80 meters at the Navy's Wave Energy Test Site (WETS) located at Marine Corps Base Hawaii (MCBH), Kaneohe Bay, Hawaii for comparison of performance, reliability, and levelized cost of energy (LCOE) as described in the FOA.

EERE anticipates a period of performance of approximately **42 months**. The period of performance will include pre-deployment activities, operations and maintenance (O&M) of the one year deployment, and post-deployment activities as described in this FOA. The funding opportunity will be conducted in **two budget periods with a Go/No-Go stage gate review**.

# FOA Description - continued



Coordinate System: UTM Zone 4 North - Depth/Elevation in Meters  
 Data Source: UoH, RSIMS, NOAA  
 Geovisualization by Sound & Sea Technology, Inc.

157°44'30"W GIS Department  
 Sound & Sea Technology  
 gis@soundandsea.com 4/4/2014

# FOA Description - continued

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Testing will be conducted through an interagency partnership with the U.S. Navy Facilities Engineering Command which builds on a history of collaborative wave energy research, development, and testing between the two groups. The EERE recipients selected under this FOA must enter into a Cooperative Research and Development Agreement (CRADA) with the Navy in order to gain access to the test site. An overview of the CRADA process, including handbook, templates, and example statements of work, can be found at:

<http://www.onr.navy.mil/en/Science-Technology/Directorates/Transition/Technology-Transfer-T2/Partnership-Options/CRADA-handbook.aspx>

# FOA Objectives / Goals

This FOA seeks WEC technology developers that are in advanced stages of technology development and are prepared to design, fabricate, deploy and test technology at close to full scale in the ocean environment.

The applicants must be prepared to design, fabricate, deploy and test technology in an open-ocean environment within the time frame specified in the FOA. The goal for EERE and the Navy is to collect a comprehensive set of measurements over the duration of approximately one year to enable quantitative comparisons of WEC system cost, performance and reliability. It is intended that the data would ultimately be released to the public, as it will be useful to the industry to make quantitative comparisons of WEC systems for reliability and techno-economic evaluation. Project results will also be used to inform the program's research and development portfolio planning, provide data for validating design models and tools, and identify deployment issues that can be addressed through government action.

# Metrics

Readiness of the device for design, deployment and testing and the ability and willingness of the recipient to deliver useful data for better understanding and evaluation of all WEC technologies is **key to selection** under this FOA. The following considerations must be discussed in the application:

- Present Technology Readiness Level (TRL) of the WEC system;
- Previous system testing in wave basins and open water;
- Design innovations or modifications being proposed and their impact on performance and cost;
- Suitability of the WEC device with a nameplate capacity of 100kW to 1000kW for testing at a depth of approximately 60 and 80 meters at Navy's WETS including interfacing with Navy provided test infrastructure;
- Ability to design the WEC device for demonstration at close to full-scale testing in open water at Navy's WETS;

# Metrics

- Ability to fabricate and deploy the system for approximately one year within the time frame of the FOA (Note that the berths are expected to be available by the middle of FY-2016 for testing of the devices. The timeliness of the proposed deployment will be taken into consideration during the merit review of applications submitted in response to this FOA.);
- Device survivability in expected extreme events;
- Future commercial deployment potential;
- Ability to instrument, collect and report the relevant data for performance and reliability of the WEC device;
- Ability to use the permits available for testing at WETS and obtain device-specific permits and approvals required to deploy their technology at WETS; and
- Estimated annual energy production supported by assumptions and calculations for the wave conditions at WETS. For guidance use information in the file - `doe_lcoe_reporting_guidance_2013_04_26.docx` available at:  
<http://en.openei.org/community/document/mhk-lcoe-reporting-guidance-draft>

# Applications Specifically Not of Interest

Per section III.D of the FOA, EERE performs a preliminary technical review as part of the initial eligibility review of Full Applications. Any “Applications Specifically Not of Interest,” as described in Section I.C of the FOA, are deemed nonresponsive and are not reviewed or considered.

The following types of applications will be deemed nonresponsive and will not be reviewed or considered:

- Applications that fall outside the technical parameters specified in Section I.B of the FOA;
- Applications for proposed technologies that are not based on sound scientific principles (e.g., violates the laws of motion and conservation of energy);
- Ocean-based energy technologies that are not wave energy converters; and
- Applications for extended testing of devices that have been or are currently being tested and have no significant design improvements or innovations proposed.

# Award Information

<b>Total Amount to be Awarded*</b>	\$10,000,000*
<b>Average Award Amount*</b>	EERE anticipates making up to two (2) awards in the amount of approximately \$5,000,000 per award.
<b>Types of Funding Agreements</b>	Cooperative Agreements for Prime Recipients; and Funding Agreements with FFRDCs <sup>+</sup> , GOGOs <sup>++</sup> and other federal instruments for Federal Agencies
<b>Period of Performance</b>	42 months

\*Subject to the availability of appropriated funds

+Federally Funded Research and Development Centers

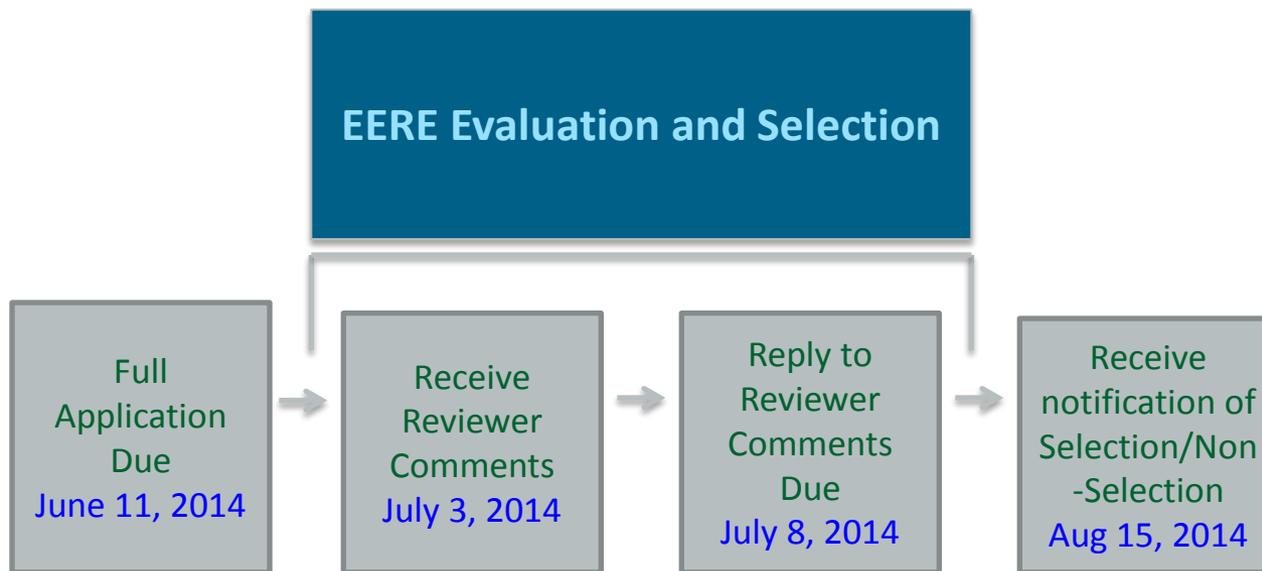
++Government-owned, Government-operated laboratories

# Statement of Substantial Involvement

EERE has substantial involvement in work performed under Awards made following this FOA. EERE does not limit its involvement to the administrative requirements of the Award. Instead, EERE has substantial involvement in the direction and redirection of the technical aspects of the project as a whole. Substantial involvement includes, but is not limited to, the following:

- EERE shares responsibility with the Recipient for the management, control, direction, and performance of the Project.
- EERE may intervene in the conduct or performance of work under this Award for programmatic reasons. Intervention includes the interruption or modification of the conduct or performance of project activities.
- EERE may redirect or discontinue funding the Project based on the outcome of EERE's evaluation of the Project at that the Go/No Go decision point.
- EERE participates in major project decision-making processes.

# Anticipated FOA Review Timeline



EERE anticipates making awards by end of September, 2014

# Pre-Selection Interviews

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- EERE may invite one or more applicants to participate in Pre-Selection Interviews

# Full Application Eligibility Requirements

- Applicants must submit a Full Application by June 11, 2014
- Full Applications are deemed eligible if:
  - The Applicant is an eligible entity, Section III.A of FOA;
  - The Cost Share requirement is satisfied, Section III.B of FOA;
  - The Full Application is compliant, Section III.C of FOA;
  - The proposed project is responsive to the FOA, Section III.D of FOA; and

# Who's Eligible to Apply?

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Eligible applicants for this FOA include:

1. Individuals
2. Domestic Entities
3. Foreign Entities
4. Incorporated Consortia
5. Unincorporated Consortia

For more detail about each eligible applicant, please see Section III.A of the FOA for eligibility requirements

# Cost Sharing Requirements

- Applicants must propose to contribute a minimum of 20% of the total project costs for Budget Period I and 50% of the total project costs for Budget Period II.
- Contributions must be:
  - Specified in the project budget
  - Verifiable from the Prime Recipient's records
  - Necessary and reasonable for proper and efficient accomplishment of the project
- Every cost share contribution must be reviewed and approved in advance by the Contracting Officer and incorporated into the project budget before the expenditures are incurred.

# Allowable Cost Share

- Cost Share must be allowable and must be verifiable upon submission of the Full Application
- Refer to the following applicable Federal cost principles:

Entity	Cost Principles
Educational Institutions	2CFR220
State, Local, and Indian Tribal Governments	2CFR225
Non-profit Organizations	2CFR230
For-profit Organizations	FAR Part 31

# Multiple Applications

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Applicants may submit more than one application to this FOA, provided that each application describes a unique, scientifically distinct project. See Section III.F of FOA

# Merit Review and Selection Process - Overview

- The Merit Review process consists of multiple phases that each include an initial eligibility review and a thorough technical review
- Rigorous technical reviews are conducted by reviewers that are experts in the subject matter of the FOA
- Ultimately, the Selection Official considers the recommendations of the reviewers, along with other considerations such as Program Policy Factors, in determining which applications to select
- See Section V.A.1 of the FOA for information on the review criteria for Full Applications

# Merit Review and Selection Process - Overview

The Merit Review process consists of an initial eligibility review and a thorough technical review. Technical reviews are conducted by reviewers that are experts in the subject matter of the FOA.

Applications will be evaluated against the merit review criteria (*See Section V.A.1*) :

- **Criterion 1: Technical Merit, Innovation, and Impact (50%)**
- **Criterion 2: Project Research and Commercialization Plan (30%)**
- **Criterion 3: Team and Resources (20%)**

The Selection Official may consider the additional program policy factors in determining which Full Applications to select for award negotiations. See Section V.C.1. in the FOA for complete list.

# Replies to Reviewer Comments

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- EERE will provide Applicants with reviewer comments in EERE Exchange following evaluation of all eligible Full Applications
- Applicants will have approximately three business days to prepare a short Reply to Reviewer Comments responding to comments however they desire
- Please see Sections IV.E. and V.A.2 for additional information regarding replies to reviewer comments

# Registration Requirements

- To apply to this FOA, Applicants must register with and submit application materials through EERE Exchange: <https://eere-Exchange.energy.gov>
- Obtain a “control number” at least 24 hours before the first submission deadline
- Although not required in order to submit an Application, the following registrations must be complete to received an award under this FOA:

Registration Requirement	Website
DUNS Number	<a href="http://fedgov.dnb.com/webform">http://fedgov.dnb.com/webform</a>
SAM	<a href="https://www.sam.gov">https://www.sam.gov</a>
FedConnect	<a href="https://www.fedconnect.net">https://www.fedconnect.net</a>
Grants.gov	<a href="http://www.grants.gov">http://www.grants.gov</a>

# Means of Submission

- Full Applications and Replies to Reviewer Comments must be submitted through EERE Exchange at <https://eere-Exchange.energy.gov>
  - EERE will not review or consider applications submitted through other means
- The Users' Guide for Applying to the Department of Energy EERE Funding Opportunity Announcements can be found at <https://eere-Exchange.energy.gov/Manuals.aspx>

# Key Submission Points

- Check entries in EERE Exchange
  - Submissions could be deemed ineligible due to an incorrect entry
- EERE strongly encourages Applicants to submit 1-2 days prior to the deadline to allow for full upload of application documents and to avoid any potential technical glitches with EERE Exchange
- Make sure you hit the submit button
  - Any changes made after you hit submit will un-submit your application and you will need to hit the submit button again
- For your records, print out the EERE Exchange Confirmation page at each step, which contains the application's Control Number

# Applicant Points-of-Contact

- Applicants must designate primary and backup points-of-contact in EERE Exchange with whom EERE will communicate to conduct award negotiations
- It is imperative that the Applicant/Selectee be responsive during award negotiations and meet negotiation deadlines
  - Failure to do so may result in cancelation of further award negotiations and rescission of the Selection
  - Please refer to the gray boxes on Slide 14 which represent the actions that apply to applicants throughout the FOA process.

# Questions

- Questions about this FOA? Email [MHKWETSFOA1081@go.doe.gov](mailto:MHKWETSFOA1081@go.doe.gov)  
All Q&As related to this FOA will be posted on EERE Exchange
  - You must first select this specific FOA Number in order to view the Q&As
  - EERE will attempt to respond to a question within 3 business days, unless a similar Q&A has already been posted on the website
- Problems logging into EERE Exchange or uploading and submitting application documents with EERE Exchange? Email [EERE-ExchangeSupport@hq.doe.gov](mailto:EERE-ExchangeSupport@hq.doe.gov).
  - Include FOA name and number in subject line
- All questions asked during this presentation will be posted on EERE Exchange