

**Request for Information (DE-FOA-0001048) regarding
a proposed Funding Opportunity Announcement:
Administration of the Wave Energy Converter Prize**

DATE: December 2, 2013

SUBJECT: Request for Information (RFI)

DESCRIPTION: This announcement is intended to serve as a Notice of Intent of the upcoming Funding Opportunity Announcement (FOA) regarding Administration of the Wave Energy Converter (WEC) Prize and Request for Information to solicit information regarding potential response rate given the current design of the FOA. DOE may issue a FOA as described herein, may issue a FOA that is significantly different than the FOA described herein, or may not issue a FOA at all.

RFI Description:

The U.S. Department of Energy (DOE) Wind and Water Power Technologies Office (WWPTO) Water Power Program, herein referred to as the “Program,” hosted a webinar on July 18, 2013 to introduce the WEC Prize concept and allow participants to provide non-binding input to DOE regarding the potential development and implementation of a prize challenge for WECs. As the potential FOA release date approaches, the Program wants to understand how recent FOA design decisions may affect the application response rate. Since the webinar (available for download at http://www1.eere.energy.gov/water//news_detail.html?news_id=19443), the following aspects have been implemented in the FOA:

- The FOA will be open to the following entities: Individuals, Domestic Entities, Foreign Entities, Academic Institutions, Incorporated Consortia, Unincorporated Consortia, and both for-profit and non-profit entities; However, under a cooperative agreement, the FOA award may not provide for the payment of fee or profit to recipients or subrecipients;
- If the FOA Awardee, herein referred to as the “Prize Administrator,” determines that seed funding will be provided to competitors during the WEC Prize, the Prize Administrator is required to ensure that competitors use the seed money in a manner consistent with the goals of the WEC Prize; and
- The Program is arranging an agreement with the Naval Surface Warfare Center, Carderock Division, Maneuvering and Seakeeping (MASK) Basin in West Bethesda, Maryland as the tank testing facility in the final testing and evaluation stage (note that Carderock facility staff will not be able to engage in discussions with applicants).

FOA Objective

The objective of the FOA, Administration of the WEC Prize, is to select a single entity to develop and implement the WEC Prize, a design, build, and test challenge. The broad goal of the WEC Prize is to spur innovations for new and next generation WEC technologies to be cost-competitive at a levelized cost of energy (LCOE) of 15 cents per kilowatt hour (¢/kWh)

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compared to the current range of 61-77 ¢/kWh¹. WEC Prize competition participants will develop game-changing solutions to increase the performance of WEC devices in order to demonstrate that drastic LCOE improvements can be met with novel technologies.

DOE envisions making a single financial assistance award in the form of a cooperative agreement. The estimated period of performance for this FOA award will be approximately 24-30 months. The Prize Administrator is tasked with development and implementation of the WEC Prize including, but not limited to:

- Formulation of a concrete set of prize-specific objectives;
- Design and implementation of all competition phases to meet objectives;
- Administration of monetary awards including seed funding and the final prize; and
- A post-competition period to evaluate whether the competition achieved its intended objectives and to convert the competition's result into longer-term industry impact (i.e. publicizing winning technologies and achieved WEC performance).

The Prize Administrator will have expertise in developing and implementing challenges, and will collaborate with the Program, technical expert(s), and the testing facility to develop and implement the WEC Prize to ensure that the objectives, based on the LCOE goal, will be met.

FOA Logistics:

DOE intends to issue the FOA (DE-FOA-0000979) early in calendar year 2014, pending appropriations. The Funding Opportunity Announcement will be available for viewing at the EERE Exchange website <https://eere-exchange.energy.gov/>. If applicants wish to receive official notifications and information from EERE regarding this FOA they should register in EERE Exchange. When the Funding Opportunity Announcement is released, applications will only be received through Exchange.

No applications for the FOA are currently being accepted, but prospective applicants should begin developing partnerships, formulating ideas, and gathering data in anticipation of the issuance of this FOA.

BACKGROUND: The mission of the DOE WWPTO's Water Power Program is to research, develop, and test innovative technologies capable of generating renewable, environmentally responsible, and cost-effective electricity from U.S. water resources. These include marine and hydrokinetic (MHK) technologies that harness the energy from waves and from tidal, river, and ocean currents. The Program's investments in MHK technologies aim to advance the technical readiness and performance of MHK systems and support the development of a robust and competitive MHK industry in the United States. The statutory authority for the Program is the Energy Independence and Security Act of 2007 (EISA) § 633(a)-(2).

The wave energy industry is young and experiencing many new innovations as evidenced by a sustained growth in patent activity, with the numbers of patent application files doubling each year since 2008. While the private industry can develop these early conception wave energy

¹ Converted from 38-48p/kWh, Carbon Trust, "Accelerating Marine Energy," Carbon Trust, July, 2011

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converter (WEC) devices through design and benchtop prototype testing, funding is hard to secure for performance testing and evaluation of WEC devices in wave tanks at a meaningful scale. This is a problem for the industry since scaled WEC prototype tank testing, validation, and evaluation is a key step in the advancement of WEC technologies through higher technical readiness levels to reach commercialization.

In principle, challenges set a high technical bar for competition participants to be eligible for a prize, and they offer an attractive prize purse to the winner(s), thus facilitating rapid advancements through technical innovation at a relatively low cost to the sponsoring agency. A prize competition will rapidly advance WEC technology by not only incentivizing development with a prize, but also by providing an opportunity for tank testing and evaluation for scaled WEC prototypes to attract new ideas from new developers and next generation ideas from existing developers. The statutory authority for this WEC Prize derives from the America COMPETES Reauthorization Act of 2010 (codified at 15 U.S.C. § 3719) and the Department of Energy Organization Act (codified at 42 USC § 7101).

In the context of the WEC Prize, a successful challenge is one that a) quickly yields a number of viable solutions that increase the performance of WEC technologies by exceeding the aggressive but achievable performance metric(s), b) increases the visibility of these renewable energy technologies, and c) successfully enables the prize winner(s) to become viable or more competitive industry members, jump-starting private sector innovation critical to the country's long-term economic growth, energy security, and international competitiveness.

PURPOSE: The purpose of this RFI is to solicit feedback from industry, academia, research laboratories, government agencies, and other stakeholders on issues related to the use of a prize competition for advancing the development of new and next generation wave energy converter devices. EERE is specifically interested in information on any obstacles or challenges that could limit stakeholder interest in applying to the proposed FOA for the administration of this prize competition. In addition, EERE is interested in gaining an understanding of the number of potential candidates who would likely have the qualifications, expertise, and experience to successfully administer a WEC Prize competition. This is solely a request for information and not a Funding Opportunity Announcement (FOA). EERE is not accepting applications.

DISCLAIMER AND IMPORTANT NOTES: This RFI is not a Funding Opportunity Announcement (FOA); therefore, EERE is not accepting applications at this time. EERE may issue a FOA in the future based on or related to the content and responses to this RFI; however, EERE may also elect not to issue a FOA. There is no guarantee that a FOA will be issued as a result of this RFI. Responding to this RFI does not provide any advantage or disadvantage to potential applicants if EERE chooses to issue a FOA regarding the subject matter. Final details, including the anticipated award size, quantity, and timing of EERE funded awards, will be subject to Congressional appropriations and direction.

Any information obtained as a result of this RFI is intended to be used by the Government on a non-attribution basis for planning and strategy development; this RFI does not constitute a formal solicitation for proposals or abstracts. Your response to this notice will be treated as

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information only. EERE will review and consider all responses in its formulation of program strategies for the identified materials of interest that are the subject of this request. In accordance with the Federal Acquisition Regulations, 48 C.F.R. 15.201(e), responses to this notice are not offers and cannot be accepted by the Government to form a binding contract. EERE will not provide reimbursement for costs incurred in responding to this RFI. Respondents are advised that DOE is under no obligation to acknowledge receipt of the information received or provide feedback to respondents with respect to any information submitted under this RFI. Responses to this RFI do not bind EERE to any further actions related to this topic.

PROPRIETARY INFORMATION: Because information received in response to this RFI may be used to structure future programs and FOAs and/or otherwise be made available to the public, **respondents are strongly advised to NOT include any information in their responses that might be considered business sensitive, proprietary, or otherwise confidential.** If, however, a respondent chooses to submit business sensitive, proprietary, or otherwise confidential information, it must be clearly and conspicuously marked as such in the response.

Responses containing confidential, proprietary, or privileged information must be conspicuously marked as described below. Failure to comply with these marking requirements may result in the disclosure of the unmarked information under the Freedom of Information Act or otherwise. The U.S. Federal Government is not liable for the disclosure or use of unmarked information, and may use or disclose such information for any purpose.

If your response contains confidential, proprietary, or privileged information, you must include a cover sheet marked as follows identifying the specific pages containing confidential, proprietary, or privileged information:

Notice of Restriction on Disclosure and Use of Data:

Pages [list applicable pages] of this response may contain confidential, proprietary, or privileged information that is exempt from public disclosure. Such information shall be used or disclosed only for the purposes described in this RFI (DE-FOA-0001048). The Government may use or disclose any information that is not appropriately marked or otherwise restricted, regardless of source.

In addition, (1) the header and footer of every page that contains confidential, proprietary, or privileged information must be marked as follows: “Contains Confidential, Proprietary, or Privileged Information Exempt from Public Disclosure” and (2) every line and paragraph containing proprietary, privileged, or trade secret information must be clearly marked with double brackets or highlighting.

EVALUATION AND ADMINISTRATION BY FEDERAL AND NON-FEDERAL

PERSONNEL: Federal employees are subject to the non-disclosure requirements of a criminal statute, the Trade Secrets Act, 18 USC 1905. The Government may seek the advice of qualified non-Federal personnel. The Government may also use non-Federal personnel to conduct routine, nondiscretionary administrative activities. The respondents, by submitting their response,

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consent to DOE providing their response to non-Federal parties. Non-Federal parties given access to responses must be subject to an appropriate obligation of confidentiality prior to being given the access. Submissions may be reviewed by support contractors and private consultants.

REQUEST FOR INFORMATION CATEGORIES AND QUESTIONS:

CATEGORY 1: Applicant Qualifications and Expertise

Please identify potential candidates (the entity you represent and/or others) who would likely have the qualifications, expertise, and experience to successfully administer a WEC Prize competition.

CATEGORY 2: Challenges or Obstacles for Applicants

Please succinctly describe any challenges or obstacles that could be a deterrent to potential applicants for the WEC Prize administration FOA, based on:

- Aspects of the FOA implemented since the July 18 webinar (see “RFI Description”) and
- The broad LCOE-based goal (see “FOA Objective”).

REQUEST FOR INFORMATION RESPONSE GUIDELINES: Responses to this RFI must be submitted electronically to WECPrizeRFI@go.doe.gov no later than 5:00pm (ET) on December 29, 2013. Only electronic responses will be accepted. Responses must be provided as a Microsoft Word (.docx) attachment to the email, of no more than 1 page in length per category, 12 point font, 1 inch margins. It is recommended that attachments not be compressed (i.e., not be zipped) nor exceed 65MB in size to ensure message delivery.

Respondents may answer as many or as few questions as they wish. Please clearly indicate on each response to which category you are responding (Applicant Qualifications and Expertise and/or Challenges or Obstacles for Applicants). Only responses answering one or both of the posed questions will be considered.

EERE will not respond to individual submissions or publish publicly a compendium of responses. A response to this RFI will not be viewed as a binding commitment to develop or pursue the project or ideas discussed.

Respondents are requested to provide the following information at the start of their response to this RFI:

- Company / institution name;
- Company / institution contact;
- Contact's address, phone number, and e-mail address.

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