

## **ADMINISTRATION OF THE WAVE ENERGY CONVERTER PRIZE**

**Funding Opportunity Announcement (FOA) Number: DE-FOA-0000979**

**FOA Type: Initial**

**CFDA Number: 81.087**

<b>FOA Issue Date:</b>	3/10/2014
<b>Informational Webinar</b>	03/24/2014 1:00pm ET
<b>Submission Deadline for Concept Papers:</b>	04/07/2014 5:00pm ET
<b>Submission Deadline for Full Applications:</b>	05/14/2014 5:00pm ET
<b>Submission Deadline for Replies to Reviewer Comments:</b>	06/10/2014 5:00pm ET
<b>Expected Date for EERE Selection Notifications:</b>	07/28/2014
<b>Expected Timeframe for Award Negotiations</b>	07/29/2014 – 09/30/2014

- Applicants must submit a Concept Paper by the due date listed above to be eligible to submit a Full Application.
- To apply to this FOA, Applicants must register with and submit application materials through Office of Energy Efficiency and Renewable Energy (EERE) Exchange at <https://eere-Exchange.energy.gov>, EERE's online application portal. Frequently asked questions for this FOA and the EERE Application process can be found at <https://eere-exchange.energy.gov/FAQ.aspx>.
- Applicants must designate primary and backup points-of-contact in EERE Exchange with whom EERE will communicate to conduct award negotiations. If an application is selected for award negotiations, it is not a commitment to issue an award. 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.

# TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY .....</b>	<b>1</b>
<b>I. FUNDING OPPORTUNITY DESCRIPTION .....</b>	<b>2</b>
A. DESCRIPTION/BACKGROUND .....	2
B. AREA OF INTEREST.....	3
1. <i>Program-Envisioned Development of the WEC Prize</i> .....	4
2. <i>Anticipated Scope of Work</i> .....	6
3. <i>Program-Identified Partners</i> .....	9
4. <i>Administration of Monetary Awards</i> .....	10
C. APPLICATIONS SPECIFICALLY NOT OF INTEREST.....	10
<b>II. AWARD INFORMATION .....</b>	<b>11</b>
A. AWARD OVERVIEW .....	11
1. <i>Estimated Funding</i> .....	11
2. <i>Period of Performance</i> .....	11
3. <i>New Applications Only</i> .....	11
B. EERE FUNDING AGREEMENTS.....	11
1. <i>Cooperative Agreements</i> .....	11
2. <i>Funding Agreements with FFRDCs, GOGOs, Federal Agencies and Federal Instrumentalities</i> .....	12
<b>III. ELIGIBILITY INFORMATION.....</b>	<b>12</b>
A. ELIGIBLE APPLICANTS.....	12
1. <i>Individuals</i> .....	12
2. <i>Domestic Entities</i> .....	12
3. <i>Foreign Entities</i> .....	13
4. <i>Incorporated Consortia</i> .....	14
5. <i>Unincorporated Consortia</i> .....	14
B. COST SHARING .....	14
C. COMPLIANCE CRITERIA .....	14
1. <i>Compliance Criteria</i> .....	15
D. RESPONSIVENESS CRITERIA.....	15
E. OTHER ELIGIBILITY REQUIREMENTS .....	15
1. <i>Requirements for DOE/NNSA Federally Funded Research and Development Centers (FFRDC) Listed as the Applicant</i> .....	15
2. <i>Requirements for DOE/NNSA and non-DOE/NNSA Federally Funded Research and Development Centers Included as a Subrecipient</i> .....	16
F. LIMITATION ON NUMBER OF CONCEPT PAPERS AND FULL APPLICATIONS ELIGIBLE FOR REVIEW.....	17
G. QUESTIONS REGARDING ELIGIBILITY .....	17
<b>IV. APPLICATION AND SUBMISSION INFORMATION.....</b>	<b>17</b>
A. APPLICATION PROCESS.....	17
B. APPLICATION FORMS.....	19
C. CONTENT AND FORM OF THE CONCEPT PAPER.....	19
1. <i>Concept Paper Content Requirements</i> .....	19
D. CONTENT AND FORM OF THE FULL APPLICATION .....	20
1. <i>Full Application Content Requirements</i> .....	21
2. <i>Technical Volume</i> .....	21
3. <i>SF-424: Application for Federal Assistance</i> .....	27
4. <i>Budget Justification (EERE 159)</i> .....	27

5.	<i>Summary for Public Release</i> .....	27
6.	<i>Summary Slide</i> .....	28
7.	<i>Subaward Budget Justification (EERE159)</i> .....	28
8.	<i>Budget for DOE/NNSA FFRDC (if applicable)</i> .....	28
9.	<i>Authorization for non-DOE/NNSA or DOE/NNSA FFRDCs</i> .....	28
10.	<i>SF-LLL: Disclosure of Lobbying Activities</i> .....	29
11.	<i>Waiver Requests: Foreign Entities and Performance of Work in the United States</i> .....	29
E.	POST-SELECTION INFORMATION REQUESTS .....	29
F.	CONTENT AND FORM OF REPLIES TO REVIEWER COMMENTS .....	30
G.	SUBMISSION DATES AND TIMES .....	30
H.	INTERGOVERNMENTAL REVIEW .....	30
I.	FUNDING RESTRICTIONS.....	31
1.	<i>Allowable Costs</i> .....	31
2.	<i>Pre-Award Costs</i> .....	31
3.	<i>Performance of Work in the United States</i> .....	32
4.	<i>Construction</i> .....	32
5.	<i>Foreign Travel</i> .....	32
6.	<i>Equipment and Supplies</i> .....	33
7.	<i>Lobbying</i> .....	33
<b>V.</b>	<b>APPLICATION REVIEW INFORMATION .....</b>	<b>33</b>
A.	TECHNICAL REVIEW CRITERIA.....	33
1.	<i>Concept Papers</i> .....	33
2.	<i>Full Applications</i> .....	34
3.	<i>Criteria for Replies to Reviewer Comments</i> .....	36
B.	STANDARDS FOR APPLICATION EVALUATION.....	36
C.	OTHER SELECTION FACTORS .....	36
1.	<i>Program Policy Factors</i> .....	36
D.	MERIT REVIEW AND SELECTION PROCESS.....	37
1.	<i>Overview</i> .....	37
2.	<i>Pre-Selection Interviews</i> .....	37
3.	<i>Pre-Selection Clarification</i> .....	37
4.	<i>Selection</i> .....	38
<b>VI.</b>	<b>AWARD ADMINISTRATION INFORMATION .....</b>	<b>38</b>
A.	ANTICIPATED NOTICE OF SELECTION AND AWARD DATES .....	38
B.	AWARD NOTICES .....	38
1.	<i>Rejected Submissions</i> .....	38
2.	<i>Concept Paper Notifications</i> .....	38
3.	<i>Full Application Notifications</i> .....	39
4.	<i>Successful Applicants</i> .....	39
5.	<i>Postponed Selection Determinations</i> .....	39
6.	<i>Unsuccessful Applicants</i> .....	40
C.	ADMINISTRATIVE AND NATIONAL POLICY REQUIREMENTS .....	40
1.	<i>Registration Requirements</i> .....	40
2.	<i>Award Administrative Requirements</i> .....	41
3.	<i>Limitations on Compensation Costs</i> .....	41
4.	<i>Subaward and Executive Reporting</i> .....	41
5.	<i>National Policy Requirements</i> .....	42
6.	<i>Environmental Review in Accordance with National Environmental Policy Act (NEPA)</i> .....	42
7.	<i>Applicant Representations and Certifications</i> .....	42
8.	<i>Statement of Substantial Involvement</i> .....	43
9.	<i>Intellectual Property and Intellectual Property Provisions</i> .....	44

10.	Reporting.....	44
11.	Go/No-Go Review and Stage-Gate Review .....	44
<b>VII.</b>	<b>QUESTIONS/AGENCY CONTACTS .....</b>	<b>45</b>
<b>VIII.</b>	<b>OTHER INFORMATION.....</b>	<b>46</b>
A.	FOA MODIFICATIONS.....	46
B.	INFORMATIONAL WEBINAR .....	46
C.	GOVERNMENT RIGHT TO REJECT OR NEGOTIATE .....	46
D.	COMMITMENT OF PUBLIC FUNDS.....	46
E.	TREATMENT OF APPLICATION INFORMATION .....	47
F.	EVALUATION AND ADMINISTRATION BY NON-FEDERAL PERSONNEL.....	48
G.	NOTICE REGARDING ELIGIBLE/INELIGIBLE ACTIVITIES .....	48
H.	NOTICE OF RIGHT TO CONDUCT A REVIEW OF FINANCIAL CAPABILITY.....	48
I.	NOTICE OF POTENTIAL DISCLOSURE UNDER FREEDOM OF INFORMATION ACT.....	48
J.	REQUIREMENT FOR FULL AND COMPLETE DISCLOSURE.....	49
K.	RETENTION OF SUBMISSIONS.....	49
L.	TITLE TO SUBJECT INVENTIONS.....	49
M.	RIGHTS IN TECHNICAL DATA .....	49
N.	COPYRIGHT .....	50
O.	PROTECTED PERSONALLY IDENTIFIABLE INFORMATION .....	50
P.	ANNUAL COMPLIANCE AUDITS.....	52
Q.	COLLABORATION BETWEEN APPLICANTS .....	52
	<b>APPENDIX A – DEFINITIONS .....</b>	<b>53</b>
	<b>APPENDIX B –DEFINITIONS SPECIFIC TO WEC PRIZE FOA.....</b>	<b>57</b>

## EXECUTIVE SUMMARY

<b>Means of Submission</b>	Concept Papers, Full Applications, and Replies to Reviewer Comments must be submitted through EERE Exchange at <a href="https://eere-Exchange.energy.gov">https://eere-Exchange.energy.gov</a> , EERE's online application portal. 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 is found at <a href="https://eere-Exchange.energy.gov/Manuals.aspx">https://eere-Exchange.energy.gov/Manuals.aspx</a> .
<b>Total Amount to be Awarded</b>	Up to \$6.5 million
<b>Average Award Amount</b>	EERE anticipates making one award that ranges up to \$6.5 million.
<b>Types of Funding Agreements</b>	Cooperative Agreement
<b>Period of Performance</b>	24 Months
<b>Eligible Applicants</b>	Individuals, Domestic Entities, Foreign Entities, Incorporated Consortia, Unincorporated Consortia, for-profit entities, education institutions, and non-profits subject to the definitions in Section III.A.
<b>Cost Share Requirement</b>	0% of Total Project Costs
<b>Submission of Multiple Applications</b>	Applicants may only submit one Concept Paper for consideration under this FOA. If an Applicant submits more than one Concept Paper, EERE will only consider the last timely submission for evaluation. Any other submissions received listing the same Applicant will be considered non-compliant and not eligible for further consideration. This limitation does not prohibit an Applicant from collaborating on other applications (e.g., as a potential Subrecipient or partner) so long as the entity is only listed as the Prime Applicant on one Concept Paper and Full Application submitted under this FOA.
<b>Application Forms</b>	Required forms and templates for Full Applications are available on EERE Exchange at <a href="https://eere-Exchange.energy.gov">https://eere-Exchange.energy.gov</a> .
<b>FOA Summary</b>	The Water Power Program is seeking a Prize Administrator with expertise in prize competitions to collaborate with DOE, technical experts, and a wave tank testing facility in developing and implementing the Wave Energy Converter (WEC) Prize. The WEC Prize competition aims to attract innovative ideas from developers new to the industry and next generation ideas from existing developers by offering a monetary prize purse and providing an opportunity for tank testing and evaluation of scaled WEC prototypes. The Program envisions that this competition will achieve game-changing performance enhancements to WEC devices, establishing a pathway to sweeping cost reductions at a commercial scale. Administration of the WEC Prize will include: prize development, implementation of the WEC Prize competition stages (e.g. design, build, and test and evaluation), and post-competition publicity and evaluation of impact of the WEC Prize.

Questions about this FOA? Email [WECFOA979@go.doe.gov](mailto:WECFOA979@go.doe.gov). Problems with EERE Exchange? Email [EERE-ExchangeSupport@hq.doe.gov](mailto:EERE-ExchangeSupport@hq.doe.gov). Include FOA name and number in subject line.

# I. FUNDING OPPORTUNITY DESCRIPTION

## A. DESCRIPTION/BACKGROUND

The mission of the U.S. Department of Energy (DOE) Wind and Water Power Technologies Office's (WWPTO) Water Power Program (Program)<sup>1</sup>, 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. While the private industry is developing these early conception wave energy 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 are key steps in the advancement of WEC technologies through the technical readiness levels to reach commercialization.

The Program seeks to use a prize competition to dramatically improve the performance of WEC devices, providing a pathway to game-changing reductions in the cost of wave-based energy. In principle, prize competitions set a high technical bar for participants to be eligible for a prize, thus facilitating rapid advancements through technical innovation at a relatively low cost to the sponsoring agency. The Program supports the current U.S. Administration's views that prizes can be tools to advance innovation<sup>2</sup> and believes that the Wave Energy Converter Prize (WEC Prize) competition described in this FOA will rapidly advance WEC technology. This competition will attract innovative ideas from developers new to the industry and next generation ideas from existing developers by offering a monetary prize purse and providing an opportunity for tank testing and evaluation of scaled WEC prototypes. The statutory authority for this specific WEC Prize Competition derives from the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science (COMPETES) Reauthorization Act of 2010 (codified at 15 U.S.C. §3719) and the Department of Energy Organization Act (codified at 42 USC §7101).

---

<sup>1</sup> Definitions of key WEC Prize phrases and concepts are provided in Appendix B.

<sup>2</sup> As documented in the Office of Management and Budget's Memorandum for the Heads of Executive Departments and Agencies on "Guidance on the Use of Challenges and Prizes to Promote Open Government" from Jeffrey Zients, March 8, 2010 ([http://www.whitehouse.gov/sites/default/files/omb/assets/memoranda\\_2010/m10-11.pdf](http://www.whitehouse.gov/sites/default/files/omb/assets/memoranda_2010/m10-11.pdf))

The Program views a successful WEC Prize competition as one that: a) quickly yields a number of game-changing solutions which exceed aggressive but achievable Performance Metrics and provide a pathway to dramatic cost reductions; b) mobilizes new and existing talent; c) increases the visibility of these wave energy devices as renewable energy technologies; and d) successfully enables the top performers to become viable and competitive industry members. Further, if competition results are converted to ensure broader impact, a successful competition can jump-start private sector innovation critical to the country's long-term economic growth, energy security, and international competitiveness in the wave energy conversion sector.

## **B. AREA OF INTEREST**

The broad Program Goal for 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), down from the current range of 61-77 ¢/kWh<sup>3</sup>. The Program envisions that a competition will achieve game-changing performance enhancements to WEC devices, establishing a pathway to sweeping cost reductions at a commercial scale. The objective of this FOA, Administration of the WEC Prize, is to select a single entity to administer the WEC Prize which is comprised of phases including: prize development based on achieving this broad Program Goal, implementation of the WEC Prize competition stages (e.g. design, build, and test and evaluation), and post-competition publicity and wrap-up.

The single awardee of this WEC Prize Administration FOA (the Prize Administrator) should have expertise in developing and implementing prize competitions. Prize Administrator tasks include:

- Formulation of a concrete set of Prize-Specific Objectives that once met, provide the pathway to achieving the LCOE goal;
- Design of the competition, including the competition structure, schedule, rules, monetary award distribution, and participant rights;
- Implementation of the competition, including outreach and execution of the design, build, and test and evaluation stages;
- Disbursement of monetary awards, including any seed funding and the final prize; and
- Conversion of the competition's result into longer-term industry impact (i.e. publicizing winning technologies and achieved WEC performance, disseminating prize impact to stakeholders and the general public, etc.) and evaluation of whether the competition achieved its intended objectives.

Given the broad anticipated scope of work, WWPTO is offering to help foster collaboration between applicants (Section VIII.Q).

---

<sup>3</sup> Converted from 38-48p/kWh, Carbon Trust, "Accelerating Marine Energy," Carbon Trust, July, 2011

Under this Cooperative Agreement, the Program will have substantial involvement in the Prize Administrator's execution of development and implementation of the WEC Prize (refer to Section VI.C.8). In addition, the Prize Administrator will collaborate with the Program-identified technical experts and tank test facility (Program-Identified Partners) to develop and implement the WEC Prize.

The Prize Administrator is responsible for ensuring that the WEC Prize competition is conducted in accordance with the prize authority established in the America COMPETES Reauthorization Act of 2010 (codified at 15 U.S.C. §3719). Accordingly, the competition will be open to all U.S.-incorporated innovators, including existing and new developers from private industry and universities, but not government entities. Rights in subject inventions will be retained by competition participants. All data associated with evaluation of participants' submissions in the competition, and the final testing and evaluation stage of the competition will be obtained by the Prize Administrator. The Prize Administrator is responsible for obtaining written consent from competition participants to release to the public those data specified in the competition rules for public release. The public nature of these data will enable the transparent evaluation of the top performers.

The performance period for execution of work under an award made through this FOA is 24 months. The Program anticipates that a) costs to the Prize Administrator for the administration activities (not including monetary awards for disbursement) could range up to \$2 million and b) the monetary awards for disbursement to competition participants, including any seed funding and the final prize purse, could range up to the remainder of the \$6.5 million.

### ***1. PROGRAM-ENVISIONED DEVELOPMENT OF THE WEC PRIZE***

The Prize Administrator's WEC Prize responsibilities can generally be divided into prize development and prize implementation. This section provides the Program's preliminary vision of the prize development phase. It is understood that the FOA Awardee is expected to be an expert on prize development, and the Program is open to deviations to the noted preliminary suggestions in this section, if accompanied by adequate support for any changes.

The Program has established a broad Program Goal of WEC device LCOE of 15¢/kWh. Based on industry research during the WEC Prize development phase, the Prize Administrator will have the ability to refine this goal. The Prize Administrator will then formulate a concrete set of self-imposed Prize-Specific Objectives that, once met through achieved Competition Criteria and Performance Metric(s), will provide the pathway to achieving the refined LCOE goal.

The Competition Criteria and Performance Metric(s) will be developed during the prize design phase of the selected Prize Administrator's scope of work. The Competition Criteria are the criteria against which the competition participants will be evaluated at various stages during the competition. The Competition Criteria will be developed to ensure that the prize winner(s) can demonstrate that the Prize-Specific Objectives have been met and the innovations will lead to economic viability of the technology at commercial scale in the open-ocean wave energy



harvesting environment. The following criteria or a subset of these criteria are possible Competition Criteria: a proxy for device cost (size, weight, displaced volume); annual energy production and LCOE calculations at a reference resource; reliability and survivability of the concept; an operations and maintenance strategy; degree of environmental impacts and potential for mitigation; and potential for scaling the concept to commercialization scale. The Performance Metric(s) are a subset of the Competition Criteria and are technical, quantitative metrics (e.g. device energy capture efficiency) that will be developed specifically to evaluate competition participants during the tank testing and evaluation stage.

The Program anticipates that the WEC Prize competition will encompass stages including the designing, building, and testing and evaluation of a variety of competing WEC devices. The Program expects that the number of competition participants at the final stage will represent a sufficient sample size of the WEC industry. There are multiple ways to structure the competition for the WEC Prize; however, the Program anticipates a Point Solution Prize with a structure requiring competition participants to successfully pass through multiple competition stage gates based on various Competition Criteria. A preliminary conception of the potential competition stages is shown in Table 1 for illustrative purposes only. It is the Program's intent to rely on the Prize Administrator's expertise to partly or completely revise this preliminary prize competition structure to ensure a successful outcome from the competition.

Table 1: Preliminary Prize Competition Structure

Stage	Scope
Full Proposal	WEC Prize competition participants would initially submit a full proposal with their proposed concept design. The applications could include numerical simulation performance calculations, levelized cost of energy calculations demonstrating techno-economic viability of the concept at a commercial stage, and engineering justification to support concept design reliability and survivability at commercial scale.
Design	Participants selected according to Competition Criteria to advance to the design stage would develop a detailed design demonstrating proof-of-concept via prototype benchtop testing, verified/validated WEC performance numerical simulations, and/or any design stage wave tank testing results.
Build	Participants selected according to Competition Criteria to proceed to the build stage would be responsible for the procurement for and construction of a scaled prototype WEC device ready for tank testing. Seed funding is an option at this stage.

Test and Evaluation	The selected participants would test their scaled prototype in a wave tank at the Program-identified test facility to measure performance of the WEC device against quantitative Performance Metric(s) and to evaluate the WEC device technology according to any final Competition Criteria.
---------------------	---

The competition will culminate in tank testing and evaluation to provide an “apples-to-apples” comparison via back-to-back testing of each participant’s prototype device. For a competition participant to win the monetary prize purse, the Program envisions they would need to:

- 1) Pass one or more stage gates to advance to the final test and evaluation stage, a tank test;
- 2) Exceed quantitative Performance Metric threshold(s) in the tank test; and
- 3) Receive the highest score(s) from a judging panel according to Competition Criteria.

## **2. ANTICIPATED SCOPE OF WORK**

The Program uses the terminology of McKinsey & Company’s report<sup>4</sup> on philanthropic prizes to illustrate the anticipated scope of work for the Prize Administrator. At a minimum, the following tasks will be required:

1. Throughout the entire performance period, increase the awareness of MHK technology with outreach and public relations to educate and engage the general public and stakeholders
2. Coordinate work agreements and any necessary non-disclosure, confidentiality agreements with Program-Identified Partners (see Section I.B.3)
3. WEC Prize Development
  - a. Reach out to industry stakeholders and other sources to refine the broad Program Goal, if necessary, and to provide background for the prize development process
  - b. Formulate a concrete set of Prize-Specific Objectives
  - c. Pursue additional partners to provide supplementary financial/resource support to the WEC Prize and any non-monetary incentives to attract competition participants
  - d. Design the prize process based on the Point Solution Prize archetype
    - i. Determine participants (devise qualifications, set framework for teams, determine number of competitors, etc.)
    - ii. Define participant rights (intellectual property, data – see Section VIII.M, sponsorship, media, etc.)
    - iii. Based on the Prize-Specific Objectives and broad Program Goal or refined goal, a) determine competition structure and number of stage gates, if

<sup>4</sup> McKinsey & Company, “And the winner is ... : Capturing the promise of philanthropic prizes,” 2009.

- any; b) determine Competition Criteria and Performance Metric(s) the participants will be evaluated against throughout the various stages of the competition
- iv. Determine the competition schedule, including the number of days for testing each device in the tank facility during the test and evaluation stage of the competition
- v. Determine the distribution between the final prize purse and any seed funding awards (number and size) based on industry research
- vi. Finalize the Data Plan in accordance with Section VIII.M and the America COMPETES Reauthorization Act of 2010 (codified at 15 U.S.C. §3719). At a minimum, the finalized Data Plan must include: (1) a plan for an agreement with competition participants regarding data rights and intellectual property consistent with the objectives of this Funding Opportunity Announcement; (2) specification of which data and whose data will be released in the public domain to enable transparent evaluation of top performers' test results (e.g. participants that advance to final test and evaluation stage and exceed threshold performance); (3) a plan to obtain written consent from the participants to release to the public these specified data; (4) a plan for publically disseminating these data; (5) an agreement with the Program-Identified Partners regarding data sharing and data management resources (e.g. test and evaluation software) rights; and (6) an agreement to enable Program access to all Prize Administrator information from WEC Prize development and implementation, and all information and data obtained by the Prize Administrator from competition participants and Program-Identified Partners
- vii. Clearly define the arbitration process to handle any disputes regarding the judging and selection of participants
- viii. Write prize rules (competition participant eligibility, timing and stages, Competition Criteria and Performance Metric(s), number of prize purse winners, annual reporting for subject inventions, etc.)
- e. Secure interest from potential investors and stakeholders such that all competition participants advancing to the tank test stage, not just the prize winner(s), attract notice and potential future opportunities and/or funding
- f. Regularly collaborate with the Program-identified technical experts throughout the prize development phase on matters such as stakeholder identification, development of Competition Criteria, Performance Metric(s), rule development, test plans, and the Data Plan
- g. Regularly collaborate with the Program-identified testing facility as needed on matters such as development of Competition Criteria, quantifying device performance, scheduling, test plans, security, installation and rigging plans, and the Data Plan
- 4. Competition Implementation
  - a. Use marketing and public relations to attract competition participants

- b. Publish rules
- c. Establish the agreement(s) with competition participants entering the competition with respect to data rights and arbitration process as set forth in Anticipated Scope of Work steps 3.d.vi. and 3.d.vii.
- d. Secure, coordinate, and compensate (as applicable) judging panel(s) for evaluation(s)
- e. Execute the design, build, and test and evaluation stages of the competition in accordance with the rules and in collaboration with Program-Identified Partners
  - i. Serve as project coordinator of the competition participants, technical experts, testing facility staff, and judging panels (see Section III.E.2.vi.); and serve as liaison to the Program on all Prize related efforts
  - ii. Select competition participants that will advance to next stage(s) and final prize winner(s) based on the judging panel's evaluation
  - iii. Provide the necessary qualified personnel, facilities planning, on-site coordination and logistics, supplementary equipment and supplies, services, subcontractors, and related administrative and information technology to support the implementation of the competition stages, including the tank test and evaluation stage. For example:
    - 1. Provide oversight of participants during test stage (e.g. their adherence to the rules and the test plan, verification of their device specifications and any participant-obtained measurements used in evaluation, etc.)
    - 2. Manage and pay for shipping/receiving of competition participants' equipment
  - iv. Administer seed funding, if applicable. Includes establishing agreement(s) with competition participants to ensure that any seed funding is used only for their participation in the competition;
  - v. Provide the Program with access to the observation of all judging, testing, and evaluation activities
- 5. Post-Competition Publicity and Wrap-Up
  - a. Announce winner(s)
  - b. Disburse final prize purse to winner(s)
  - c. Implement strategy to convert WEC Prize competition results into broader impact (e.g. publicize winning technologies and achieved WEC performance, disseminate prize impact to stakeholders and general public, etc.)
  - d. Evaluate the competition and process to determine if intended objectives were met, and calculate the return on investment of using a prize incentive to advance WEC technology compared to traditional mechanisms for driving innovation
  - e. Package and deliver to the Program records, data, and other information derived from this work
- 6. Collaborate regularly with the Program throughout the entire development and implementation of the WEC Prize (see Section VI.C.8)

### **3. PROGRAM-IDENTIFIED PARTNERS**

In addition to selecting a Prize Administrator via this FOA, the Program intends to fund a) technical experts from DOE FFRDC(s), the National Renewable Energy Laboratory and/or Sandia National Laboratories, to assist the selected Prize Administrator with the development of the competition design, criteria and technical Performance Metric(s) and b) staff of the non-DOE FFRDC, the Naval Surface Warfare Center, Carderock Division, for use of the Maneuvering and SeaKeeping (MASK) Basin wave tank testing facility for the final testing and evaluation stage. These Program-Identified Partners will be funded directly from DOE. Up to \$1.5M of Program funds are budgeted in total to the Program-Identified Partners, beyond the \$6.5M ceiling award to the Prize Administrator, to execute the tasks described below. Upon selection, the Prize Administrator will coordinate a work agreement (see Section III.E.2.vi.) with each of the Program-Identified Partners regarding the project management authority, structure for information flow between the entities, and the scope and distribution of tasks to the Program-Identified Partners within the \$1.5M budgeted Program funds.

The Program-Identified technical experts are anticipated to provide technical support to the Prize Administrator during the design and implementation of the competition on matters such as:

- Stakeholder identification;
- Determining Competition Criteria and Performance Metric(s) the participants will be evaluated against throughout the various stages of the competition;
- Collaboration with the tank testing facility staff to determine tank test plans for the test and evaluation stage;
- Providing direction in the selection of experts for judging panel(s) and/or potentially serving as judges themselves;
- Aiding with processing/evaluation of competition participants' submissions to determine the extent to which Competition Criteria are met; and
- Developing any tank test instrumentation and data acquisition interface (in conjunction with the tank testing facility staff) for quantifying device performance.

The Program-identified facility, the MASK Basin at the Naval Surface Warfare Center, is an indoor freshwater basin equipped with 216 independently-controlled wave paddles, capable of producing model sea state spectra with various distributions. The basin overall length is 110 m (360 ft), overall width is 73 m (240 ft), and depth is 6.1 m (20 ft). The basin includes a 10.7 m (35 ft) deep by 15.2 m (50 ft) wide trench parallel to one of the long sides of the basin. In addition to providing access to the test facility, the test facility staff are anticipated to provide support on matters such as:

- Scheduling the test and evaluation stage and developing test plans;
- Determining Competition Criteria;
- Developing any tank test instrumentation and data acquisition interface (in conjunction with the technical experts); and
- Any site logistics that require test facility staff involvement.

Applicants should not contact the Program-Identified Partners. An informational webinar hosted by DOE is anticipated to take place shortly after FOA release and prior to Concept Paper submission deadline to enable Applicants to gain a clearer understanding of the capabilities and anticipated tasks of the Program-Identified Partners.

#### **4. ADMINISTRATION OF MONETARY AWARDS**

The Prize Administrator is responsible for administering monetary awards to competition participants. The Program anticipates that monetary awards to competition participants will be administered in stages: seed money to competition participants according to the prize rules and the final prize purse to the competition winner(s). If any budgeted seed money is not needed or used, or no competition participant is eligible for the final prize purse (i.e. no one exceeds minimum Performance Metric threshold(s) during the final test and evaluation stage), the superfluous seed money or final prize purse funds, respectively, will not be considered reimbursable costs and will be deobligated from the WEC Prize Administration award and the funds returned to DOE.

The Program requires that costs to the Prize Administrator for the administration activities (not including disbursement of monetary awards) do not exceed \$2 million. Monetary awards to competition participants, including any seed funding and the final prize purse, may range up to the remainder of the \$6.5 million.

If seed money is provided to competition participants, it must be for the sole use of the competition. Accordingly, in the agreement between the Prize Administrator and competition participants selected for seed funding, the Program requires that the Prize Administrator include language it deems necessary to ensure the competition participants use any seed money consistent with the goals of the WEC Prize. The final Terms and Conditions between the Program and the Prize Administrator will contain the necessary flow-down provisions for the competition participants regarding the use of seed funding.

#### **C. APPLICATIONS SPECIFICALLY NOT OF INTEREST**

The following types of applications will be deemed nonresponsive and will not be reviewed or considered (See Section III.D of the FOA): applications that fall outside the parameters of prize administration specified in Section I.B of the FOA, including but not limited to applications relating to MHK device design, building, and testing.

## **II. AWARD INFORMATION**

### **A. AWARD OVERVIEW**

#### **1. *ESTIMATED FUNDING***

EERE expects to make up to \$6.5 million of Federal funding available for one new award under this FOA, subject to the availability of appropriated funds. EERE may choose not to issue an award.

EERE may establish more than one budget period for the award and fund only the initial budget period(s). Funding for all budget periods, including the initial budget period, is not guaranteed.

#### **2. *PERIOD OF PERFORMANCE***

EERE anticipates making an award that will run up to 24 months in length. Project continuation will be contingent upon satisfactory performance and go/no-go decision reviews. At the go/no-go decision points, EERE will evaluate project performance, project schedule adherence, progress in meeting milestone objectives, compliance with reporting requirements, and overall contribution to the broad Program Goal and Prize-Specific Objectives. As a result of this evaluation, EERE will make a determination to continue the project, re-direct the project, or discontinue funding the project.

#### **3. *NEW APPLICATIONS ONLY***

EERE will accept only new applications under this FOA. EERE will not consider applications for renewals of existing EERE-funded awards through this FOA.

### **B. EERE FUNDING AGREEMENTS**

Through Cooperative Agreements and other similar agreements, EERE provides financial and other support to projects that have the potential to realize the FOA objectives. EERE does not use such agreements to acquire property or services for the direct benefit or use of the United States Government. Costs incurred to Financial Assistance Agreements must be allowable under the applicable Federal cost principles, as described in Section IV.I.1 of the FOA. Note that in general, Financial Assistance Agreements may not provide for the payment of fee or profit to recipients or subrecipients.

#### **1. *COOPERATIVE AGREEMENTS***

EERE generally uses Cooperative Agreements to provide financial and other support to Prime Recipients.



Through Cooperative Agreements, EERE provides financial or other support to accomplish a public purpose of support or stimulation authorized by Federal statute. Under Cooperative Agreements, the Government and Prime Recipients share responsibility for the direction of projects.

EERE has substantial involvement in all projects funded via Cooperative Agreements. See Section VI.C.8 of the FOA for more information on what substantial involvement may involve.

## ***2. FUNDING AGREEMENTS WITH FFRDCs, GOGOs, FEDERAL AGENCIES AND FEDERAL INSTRUMENTALITIES***

In most cases, Federally Funded Research and Development Centers (FFRDC) or Government-owned, Government-operated laboratories (GOGO) are funded independently of the remainder of the Project Team. The FFRDC or GOGO then executes an agreement with any non-FFRDC/GOGO Project Team members to arrange work structure, project execution, and any other matters. Regardless of these arrangements, the entity that applied as the Prime Recipient for the project has overall responsibility for executing the Scope of Project Objectives and achieving project milestones.

# **III. ELIGIBILITY INFORMATION**

## **A. ELIGIBLE APPLICANTS**

### ***1. INDIVIDUALS***

U.S. citizens and lawful permanent residents are eligible to apply for funding as a Prime Recipient or Subrecipient.

### ***2. DOMESTIC ENTITIES***

For-profit entities, educational institutions, and nonprofits<sup>5</sup> that are incorporated (or otherwise formed) under the laws of a particular State or territory of the United States are eligible to apply for funding as a Prime Recipient or Subrecipient.

State, local, and tribal government entities are eligible to apply for funding as a Prime Recipient or Subrecipient.

DOE/NNSA<sup>6</sup> Federally Funded Research and Development Centers (FFRDCs) and DOE Government-Owned, Government-Operated laboratories (GOGOs) are eligible to apply for funding as a Prime Recipient or Subrecipient.

---

<sup>5</sup> Nonprofit organizations described in section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995, are not eligible to apply for funding.



Non-DOE/NNSA FFRDCs and non-DOE GOGOs are eligible to apply for funding as a Subrecipient, but are not eligible to apply as a Prime Recipient.

Federal agencies and instrumentalities (other than DOE) are eligible to apply for funding as a Subrecipient, but are not eligible to apply as a Prime Recipient.

Program-Identified Partners are not eligible to apply for funding as a Prime Recipient or Subrecipient, as this may create a conflict of interest and/or an unfair advantage.

### **3. FOREIGN ENTITIES**

Foreign entities, whether for-profit or otherwise, are eligible to apply for funding under this FOA.

Other than as provided in the “Individuals” or “Domestic Entities” sections above, all Prime Recipients receiving funding under this FOA must be incorporated (or otherwise formed) under the laws of a State or territory of the United States. If a foreign entity applies for funding as a Prime Recipient, it must designate in the Full Application a subsidiary or affiliate incorporated (or otherwise formed) under the laws of a State or territory of the United States to be the Prime Recipient. The Full Application must state the nature of the corporate relationship between the foreign entity and domestic subsidiary or affiliate.

Foreign entities may request a waiver of the requirement to designate a subsidiary in the United States as the Prime Recipient in the Full Application (i.e., a foreign entity may request that it remains the Prime Recipient on the award). To do so, the Applicant must submit an explicit waiver request in the Full Application, which includes the following information:

- Entity name;
- Country of incorporation;
- Description of the work to be performed by the entity for whom the waiver is being requested; and
- Countries where the work will be performed.

In the waiver request, the Applicant must demonstrate to the satisfaction of EERE that it would further the purposes of this FOA and that it is otherwise in the interests of EERE to have a foreign entity serve as the Prime Recipient. The Contracting Officer may require additional information before considering the waiver request. Save the waiver request(s) in a single PDF file using the following convention for the title: “ControlNumber\_LeadOrganization\_Waiver”.

A foreign entity may receive funding as a Subrecipient.

---

<sup>6</sup> National Nuclear Security Administration

#### **4. INCORPORATED CONSORTIA**

Incorporated consortia, which may include domestic and/or foreign entities, are eligible to apply for funding as a Prime Recipient or Subrecipient. For consortia incorporated (or otherwise formed) under the laws of a State or territory of the United States, please refer to “Domestic Entities” above. For consortia incorporated in foreign countries, please refer to the requirements in “Foreign Entities” above.

Each incorporated consortium must have an internal governance structure and a written set of internal rules. Upon request, the consortium must provide a written description of its internal governance structure and its internal rules to the EERE Contracting Officer.

#### **5. UNINCORPORATED CONSORTIA**

Unincorporated consortia must designate one member of the consortium to serve as the Prime Recipient/consortium representative. The Prime Recipient/consortium representative must be incorporated (or otherwise formed) under the laws of a State or territory of the United States. The eligibility of the consortium will be determined by the eligibility of the Prime Recipient/consortium representative under Section III.A of the FOA.

Upon request, unincorporated consortia must provide the EERE Contracting Officer with a collaboration agreement, commonly referred to as the articles of collaboration, which sets out the rights and responsibilities of each consortium member. This agreement binds the individual consortium members together and should discuss, among other things, the consortium’s:

- Management structure;
- Method of making payments to consortium members;
- Means of ensuring and overseeing members’ efforts on the project;
- Provisions for members’ cost sharing contributions; and
- Provisions for ownership and rights in intellectual property developed previously or under the agreement.

#### **B. COST SHARING**

Cost sharing is not required under this FOA.

#### **C. COMPLIANCE CRITERIA**

**Concept Papers and Full Applications must meet all Compliance criteria listed below or they will be considered noncompliant and won’t be considered for substantive evaluation. EERE will not review or consider noncompliant submissions,** including Concept Papers, Full Applications, and Replies to Reviewer Comments that were: submitted through means other than EERE Exchange; submitted after the applicable deadline; and/or submitted incomplete. EERE will not extend the submission deadline for Applicants that fail to submit required information due to server/connection congestion.

## **1. COMPLIANCE CRITERIA**

### *i. Concept Papers*

Concept Papers are deemed compliant if:

- The Applicant successfully uploaded and submitted all required documents and information via EERE Exchange by the deadline stated in this FOA.

### *ii. Full Applications*

Full Applications are deemed compliant if:

- The Applicant submitted a compliant and responsive Concept Paper;
- The Full Application complies with the content and form requirements in Section IV.D of the FOA; and
- The Applicant successfully uploaded and submitted all required documents and information via EERE Exchange by the deadline stated in this FOA.

### *iii. Replies to Reviewer Comments*

Replies to Reviewer Comments are deemed compliant if:

- The Reply to Reviewer Comments complies with the content and form requirements in Section IV.F of the FOA; and
- The Applicant successfully uploaded and submitted all required documents and information via EERE Exchange by the deadline stated in this FOA.

## **D. RESPONSIVENESS CRITERIA**

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.

## **E. OTHER ELIGIBILITY REQUIREMENTS**

### **1. REQUIREMENTS FOR DOE/NNSA FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTERS (FFRDC) LISTED AS THE APPLICANT**

A DOE/NNSA FFRDC is eligible to apply for funding under this FOA if its cognizant Contracting Officer provides written authorization and this authorization is submitted with the application. If a DOE/NNSA FFRDC is selected for award, the proposed work will be authorized under the DOE work authorization process and performed under the laboratory’s Management and Operating (M&O) contract.

The following wording is acceptable for the authorization:

Authorization is granted for the \_\_\_\_\_ Laboratory to participate in the proposed project. The work proposed for the laboratory is consistent with or complementary to the missions of the laboratory, and will not adversely impact execution of the DOE assigned programs at the laboratory.

**2. REQUIREMENTS FOR DOE/NNSA AND NON-DOE/NNSA FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTERS INCLUDED AS A SUBRECIPIENT**

DOE/NNSA and non-DOE/NNSA FFRDCs may be proposed as a Subrecipient on another entity's application subject to the following guidelines:

*i. Authorization for non-DOE/NNSA FFRDCs*

The Federal agency sponsoring the FFRDC must authorize in writing the use of the FFRDC on the proposed project and this authorization must be submitted with the application. The use of a FFRDC must be consistent with its authority under its award.

*ii. Authorization for DOE/NNSA FFRDCs*

The cognizant Contracting Officer for the FFRDC must authorize in writing the use of the FFRDC on the proposed project and this authorization must be submitted with the application. The following wording is acceptable for this authorization:

Authorization is granted for the \_\_\_\_\_ Laboratory to participate in the proposed project. The work proposed for the laboratory is consistent with or complementary to the missions of the laboratory, and will not adversely impact execution of the DOE assigned programs at the laboratory.

*iii. Value/Funding*

The value of and funding for the FFRDC portion of the work will not normally be included in the award to a successful Applicant. Usually, DOE will fund a DOE/NNSA FFRDC contractor through the DOE field work proposal system and any other FFRDC through an interagency agreement with the sponsoring agency.

*iv. Limit on FFRDC Effort in Administration of the WEC Prize*

The FFRDC effort shall not exceed 15% of the total estimated FOA cost, and funds must be deducted from the "administration" activities portion of the total award and not the monetary award portion set aside for competition participants (see Section I.B.4.). For example, if the total award cost is the ceiling FOA amount of \$6.5M, the FFRDC effort shall not exceed \$975K, and any seed funding and the final prize purse will sum to at least \$4.5M. In the context of this FFRDC effort limitation, funding provided directly by the Program to the Program-Identified

Partners (see Section I.B.3.) does not count toward the effort of any FFRDC specified by the FOA Awardee as a Subrecipient.

*v. Limit on FFRDC Activities as, and in Association with, Competition Participants*

The following is true for both Program-Identified Partners (see Section I.B.3) and any FFRDC Recipient or Subrecipient of this FOA: FFRDCs or FFRDC employees acting within the scope of their employment will be ineligible to compete in the prize competition, as this may create a conflict of interest and/or an unfair advantage.

*vi. Responsibility*

The Prime Recipient will be the responsible authority regarding the settlement and satisfaction of all contractual and administrative issues including, but not limited to, disputes and claims arising out of any agreement between the Prime Recipient, the Program-Identified Partners, and any additional FFRDC contractor.

**F. LIMITATION ON NUMBER OF CONCEPT PAPERS AND FULL APPLICATIONS ELIGIBLE FOR REVIEW**

Applicants may only submit one Concept Paper for consideration under this FOA. If an Applicant submits more than one Concept Paper, EERE will only consider the last timely submission for evaluation. Any other submissions received listing the same Applicant will be considered noncompliant and not eligible for further consideration. This limitation does not prohibit an Applicant from collaborating on other applications (e.g., as a potential Subrecipient or partner) so long as the entity is only listed as the Prime Applicant on one Concept Paper and Full Application submitted under this FOA.

**G. QUESTIONS REGARDING ELIGIBILITY**

EERE will not make eligibility determinations for potential Applicants prior to the date on which applications to this FOA must be submitted. The decision whether to submit an application in response to this FOA lies solely with the Applicant.

**IV. APPLICATION AND SUBMISSION INFORMATION**

**A. APPLICATION PROCESS**

The application process will include two phases: a Concept Paper phase and a Full Application phase. **Only Applicants who have submitted a compliant Concept Paper will be eligible to submit a Full Application.** At each phase, EERE performs an initial eligibility review of the Applicant submissions to determine whether they meet the eligibility requirements of Section

III of the FOA. EERE will not review or consider submissions from non-eligible Applicants, noncompliant and/or nonresponsive submissions. Unless specifically stated otherwise, all submissions must conform to the following form and content requirements, including maximum page lengths, described below, and must be submitted via EERE Exchange at <https://eere-exchange.energy.gov/>. **EERE will not review or consider submissions submitted through means other than EERE Exchange, submissions submitted after the applicable deadline, or incomplete submissions.** EERE will not extend deadlines for Applicants who fail to submit required information and documents due to server/connection congestion. A control number will be issued when an Applicant begins the Exchange application process. This control number must be included with all Application documents, as described below.

The Concept Paper, Full Application, and Reply to Reviewer Comments must conform to the following requirements, unless stated otherwise:

- Each must be submitted in Adobe PDF format.
- Each must be written in English.
- All pages must be formatted to fit on 8.5 x 11 inch paper with margins not less than one inch on every side. Use Times New Roman typeface, a black font color, and a font size of 12 point or larger (except in figures or tables, which may be 10 point font). A symbol font may be used to insert Greek letters or special characters, but the font size requirement still applies. References must be included as footnotes or endnotes in a font size of 10 or larger. Footnotes and endnotes are counted toward the maximum page requirement.
- The Control Number must be prominently displayed on the upper right corner of the header of every page. Page numbers must be included in the footer of every page.
- Each must not exceed the specified maximum page limit, including cover page, charts, graphs, maps, and photographs when printed using the formatting requirements set forth above and single spaced. If Applicants exceed the maximum page lengths indicated below, EERE will review only the authorized number of pages and disregard any additional pages.

Applicants are responsible for meeting each submission deadline. **Applicants are strongly encouraged to submit their Concept Papers and Full Applications at least 48 hours in advance of the submission deadline.** Under normal conditions (i.e., at least 48 hours in advance of the submission deadline), Applicants should allow at least 1 hour to submit a Concept Paper, Full Application, or Reply to Reviewer Comments. Once the Application is submitted in EERE Exchange, Applicants may revise or update their application until the expiration of the applicable deadline.

EERE urges Applicants to carefully review their Concept Papers and Full Applications and to allow sufficient time for the submission of required information and documents. All Full Applications that pass eligibility review will undergo comprehensive technical merit review according to the criteria identified in Section V.A.2 of the FOA.

## B. APPLICATION FORMS

The application forms and instructions are available on EERE Exchange. To access these materials, go to <https://eere-Exchange.energy.gov> and select the appropriate funding opportunity number.

Note: The maximum file size that can be uploaded to the EERE Exchange website is 10MB. Files in excess of 10MB cannot be uploaded, and hence cannot be submitted for review. If a file exceeds 10MB but is still within the maximum page limit specified in the FOA it must be broken into parts and denoted to that effect. For example:

**ControlNumber\_LeadOrganization\_Project\_Part\_1**

**ControlNumber\_LeadOrganization\_Project\_Part\_2**, etc.

**EERE will not accept late submissions that resulted from technical difficulties due to uploading files that exceed 10MB.**

## C. CONTENT AND FORM OF THE CONCEPT PAPER

To be eligible to submit a Full Application, Applicants must submit a Concept Paper by the specified due date.

The Concept Paper must be limited to the FOA request.

### 1. CONCEPT PAPER CONTENT REQUIREMENTS

The Concept Paper must be submitted as a single document and conform to the following content requirements:

SECTION	PAGE LIMIT	DESCRIPTION
<b>Prize Administration Description</b>	3 pages maximum	Applicants are required to describe succinctly: <ul style="list-style-type: none"> <li>• The proposed approach to developing and implementing the WEC Prize to meet the broad Program Goal;</li> <li>• The best practices in prize administration;</li> <li>• The key shortcomings, limitations, and challenges associated with the proposed approach;</li> <li>• How the proposed approach will overcome the shortcomings, limitations, and challenges in prize administration; and</li> <li>• The potential impact that the proposed project would have on wave energy converter technology and market interest.</li> </ul>
<b>Addendum</b>	1 pages maximum	Applicants may provide graphs, charts, or other data to supplement their Description.

Questions about this FOA? Email [WECFOA979@go.doe.gov](mailto:WECFOA979@go.doe.gov). Problems with EERE Exchange? Email [EERE-ExchangeSupport@hq.doe.gov](mailto:EERE-ExchangeSupport@hq.doe.gov). Include FOA name and number in subject line.

		<p>Applicants are required to describe succinctly the following qualifications, experience, and capabilities of the proposed Project Team (not including the Program-Identified Partners):</p> <ul style="list-style-type: none"> <li>• Skill and expertise of the Principal Investigator (PI), Project Team, and any Subrecipients needed to successfully execute the project plan;</li> <li>• The Applicant's prior experience which demonstrates an ability to perform tasks of similar risk and complexity, and with prizes in particular; and</li> <li>• Whether the Applicant has worked together with its partners (if applicable) on prior projects or programs.</li> </ul>
--	--	---

EERE will not review or consider ineligible Concept Papers (see Section III of the FOA).

EERE makes an independent assessment of each Concept Paper based on the criteria in Section V.A.1 of the FOA. EERE will encourage a subset of Applicants to submit Full Applications. Other Applicants will be discouraged from submitting a Full Application. An Applicant who receives a "discouraged" notification may still submit a Full Application. EERE will review all eligible Full Applications (i.e. compliant and responsive Full Applications from eligible Applicants). However, by discouraging the submission of a Full Application, EERE intends to convey its lack of programmatic interest in the proposed project in an effort to save the Applicant the time and expense of preparing an application that is unlikely to be selected for award negotiations.

In order to provide Applicants with feedback on their Concept Papers, EERE will include general comments provided from EERE reviewers on an Applicant's Concept Paper in the encourage/discourage notification sent to Applicants at the close of that phase.

#### **D. CONTENT AND FORM OF THE FULL APPLICATION**

Applicants must submit a Full Application by the specified due date to be considered for funding under this FOA. Applicants must complete the following application forms found on the EERE Exchange website at <https://eere-Exchange.energy.gov/>, in accordance with the instructions.

Applicants will have approximately 30 days from receipt of the Concept Paper Encourage/Discourage notification to prepare and submit a Full Application. Regardless of the date the Applicant receives the Encourage/Discourage notification, the submission deadline for the Full Application remains the date stated on the FOA cover page.

All Full Application documents must be marked with the Control Number issued to the Applicant. Applicants will receive a control number upon submission of their Concept Paper, and should include that control number in the file name of their Full Application submission (i.e., "ControlNumber\_Applicant Name\_Full Application").



## 1. FULL APPLICATION CONTENT REQUIREMENTS

EERE will not review or consider ineligible Full Applications (see Section III of the FOA). Each Full Application should be limited to the FOA request.

Full Applications must conform to the following requirements:

SUBMISSION	COMPONENTS	FILE NAME
<b>Full Application (PDF, unless stated otherwise)</b>	Technical Volume (20 page limit, see Chart in Section IV.D.2)	ControlNumber_LeadOrganization_TechnicalVolume
	SF-424 (no page limit)	ControlNumber_LeadOrganization_App424
	Budget Justification (EERE 159) (no page limit. Applicants must use the template available in EERE Exchange)	ControlNumber_LeadOrganization_Budget_Justification
	Summary/Abstract for Public Release (1 page max)	ControlNumber_LeadOrganization_Summary
	Summary Slide (1 page max, Microsoft PowerPoint format)	ControlNumber_LeadOrganization_Slide
	Subaward Budget Justification (EERE 159);	ControlNumber_LeadOrganization_Subawardee_Budget_Justification
	Budget for Federally Funded Research and Development Center Contractor File, (if applicable)	ControlNumber_LeadOrganization_FWP
	Authorization from cognizant Contracting Officer for FFRDC (if applicable)	ControlNumber_LeadOrganization_FFRDC Auth
	SF-LLL Disclosure of Lobbying Activities	ControlNumber_LeadOrganization_SF-LLL
	Foreign Entity and Performance of Work in the United States waiver requests (if applicable)	ControlNumber_LeadOrganization_Waiver

EERE provides detailed guidance on the content and form of each component below.

## 2. TECHNICAL VOLUME

The Technical Volume must conform to the following content and form requirements, including maximum page lengths. This volume must address the Merit Review Criteria as discussed in Section V.A.2 of the FOA. Save the Technical Volume in a single PDF file.

Applicants must provide sufficient citations and references to the primary research literature to justify the claims and approaches made in the Technical Volume. EERE and reviewers may review primary research literature in order to evaluate applications. However, EERE and reviewers are under no obligation to review cited sources (e.g., internet websites).

The Technical Volume to the Full Application may not be more than 20 pages, including the cover page, table of contents, Milestone Summary Table, Work Breakdown Structure and Task Descriptions, Schedule, and all citations, charts, graphs, maps, photos, or other graphics, and must include all of the information in the table below. The Applicant should consider the

Questions about this FOA? Email [WECFOA979@go.doe.gov](mailto:WECFOA979@go.doe.gov). Problems with EERE Exchange? Email [EERE-ExchangeSupport@hq.doe.gov](mailto:EERE-ExchangeSupport@hq.doe.gov). Include FOA name and number in subject line.

weighting of each of the evaluation criteria (see Section V.A.2 of the FOA) when preparing the Technical Volume.

SECTION	DESCRIPTION
<b>Cover Page</b>	The cover page should include the project title, both the prize administration PI and business points of contact, names of all team member organizations (aside from Program-Identified Partners), and any statements regarding confidentiality (see Section VIII.E).
<b>Project Overview</b> (This section should constitute approximately 10% of the Technical Volume)	<p>The Project Overview should contain the following information:</p> <ul style="list-style-type: none"> <li>• <b>Background:</b> The Applicant should discuss the background of their organization, including the history, successes, and any previous or current prize administration involvement relevant to the topic being addressed in the Full Application.</li> <li>• <b>Impact:</b> The Applicant should discuss the impact that funding of a successful WEC Prize process would have on the MHK industry. Applicants should specifically explain the benefit of prize incentives compared to traditional mechanisms for driving technology innovation, using relevant examples and calculations from Applicant's prior prize administration activities.</li> </ul>
<b>Prize Administration Description</b> (This section should constitute approximately 25% of the Technical Volume)	<p>The Prize Administration Description should contain the following information:</p> <ul style="list-style-type: none"> <li>• <b>Approach and Outcomes:</b> The Applicant should provide a <u>detailed</u> description of the approach for development and implementation of the WEC Prize. The Applicant should clearly specify the expected outcomes of the project.</li> <li>• <b>Feasibility:</b> The Applicant should demonstrate both a) the capability of the proposed approach for development and implementation of the WEC Prize, including a description of previous work done and prior results, and b) the feasibility of achieving expected outcomes of the project such that the Prize will result in a clear pathway to achieving the broad Program Goal.</li> <li>• <b>Best Practices:</b> The Applicant should describe the current best practices in the field of prize administration, and the advantages of the proposed prize administration approach over others.</li> <li>• <b>Prize Design Principles:</b> The Applicant should explain a) the rationale of the distribution of project funds among administration and monetary awards (includes seed funding to competition participants and the final prize purse) in the submitted budget, and b) principles that will be used when determining distribution of award funds between any seed funding and final prize(s) in the prize design phase.</li> </ul>
<b>Work Plan</b> (This section should constitute approximately 50% of the Technical Volume)	<p>The Work Plan should contain the following information:</p> <ul style="list-style-type: none"> <li>• <b>Project Objectives:</b> The Applicant should provide a clear and concise (<u>high-level</u>) statement of the objectives of the project.</li> <li>• <b>Scope Summary:</b> The Applicant should provide a <u>summary</u> description</li> </ul>

	<p>of the overall work scope and approach to achieve the objective(s). The overall work scope is to be divided by performance periods that are separated by discrete, approximately annual decision points (see below for more information on go/no-go decision points). The Applicant should describe the specific expected end result of each performance period.</p> <ul style="list-style-type: none"> <li> <p>• <b>Work Breakdown Structure (WBS) with Task Descriptions and Deliverables:</b> This section of the Work Plan should fully describe the work to be accomplished and how the Applicant will achieve the milestones (see below), accomplish the Prize-Specific Objectives based on the broad Program Goal, and produce all deliverables (see below). The Work Breakdown Structure is to be structured with a hierarchy of performance period (approximately annual), task and subtasks, which is typical of a standard work breakdown structure (WBS) for any project. This section of the Work Plan shall contain a concise detailed description of the specific activities to be conducted over the life of the project. “Detailed” is defined as a full explanation and disclosure of the project being proposed (i.e., a statement such as “we will then complete a proprietary process” is unacceptable). It is the Applicant’s responsibility to prepare an adequately detailed WBS with task descriptions to describe the proposed project and the plan for addressing the successful development and implementation of the WEC Prize to meet Prize-Specific Objectives based on the broad Program Goal. To this end, each task and subtask is to have a unique number and title and an indication of the duration of the task or subtask in months. Each task and subtask is to have a task summary that describes the work to be accomplished, the project objectives/outcomes being addressed, the task objectives, and the relationship to project deliverables or expected results. Appropriate milestones should be incorporated into the task and subtask structure. Each task and subtask is to have a details section, as appropriate, to discuss how the work will be done, anticipated barriers, risks or uncertainties, approaches for overcoming these barriers and risks, and any further clarification, such as why a specific approach is being taken. Any deliverables should also be described in this section.</p> </li> <li> <p>• <b>Milestone Summary Table:</b> The Applicant should provide appropriate milestones throughout the project to demonstrate success, where success is defined as achievement rather than simply completing a task. To ensure that milestones are relevant, Applicants should follow the SMART rule of thumb, which is that all milestones should be <b>S</b>pecific, <b>M</b>easurable, <b>A</b>chievable, <b>R</b>elevant, and <b>T</b>imely. Unless otherwise specified in the FOA, the minimum requirement is that each project must have at least one milestone per quarter for the duration of the project (depending on the project, more milestones may be necessary to comprehensively demonstrate progress). The Applicant should also provide the means by which the milestone will be verified. In addition to describing milestones in the WBS section of the Work Plan text and including them in the Schedule, the Applicant is required to complete the Milestone Summary Table shown below. Please refer to Section</p> </li> </ul>
--	--

	<p>VI.C.8 for examples of possible milestones based on the Program's Substantial Involvement.</p> <ul style="list-style-type: none"> <li>• <b>Go/No-Go Decision Points:</b> The Applicant should provide project-wide go/no-go decision points at appropriate points in the Work Plan. A go/no-go decision point is a risk management tool and a project management best practice to ensure that, for the current stage or period of performance, success is definitively achieved and potential for success in future stages or periods of performance is evaluated, prior to actually beginning the execution of future stages. The minimum requirement is at least one project-wide go/no-go decision point for each year (12-month period) of the project. The Applicant should also provide the specific criteria to be used to make the go/no-go decision. In addition to describing the go/no-go decision points in the WBS section of the Work Plan text and including them in the Schedule (see below), the Applicant is required to complete the Milestone Summary Table shown below, which must also include go/no-go decision points and their method of verification. Please refer to Section VI.C.8 for examples of possible go/no-go decision points based on the Program's Substantial Involvement.</li> <li>• <b>Project Schedule (Gantt Chart or similar):</b> The Applicant should provide a detailed schedule for the entire project, including task and subtask durations, milestones, and go/no-go decision points.</li> <li>• <b>Project Management:</b> The Applicant should discuss the team's proposed management plan, including the following: <ul style="list-style-type: none"> <li>○ The overall approach to and organization for managing the work</li> <li>○ The roles and responsibilities of each Project Team member</li> <li>○ Any critical handoffs/interdependencies among Project Team members</li> <li>○ The technical and management aspects of the management plan, including systems and practices, such as financial and project management practices</li> <li>○ The approach to project risk management</li> <li>○ A description of how project changes will be handled</li> <li>○ If applicable, the approach to Quality Assurance/Control</li> <li>○ How communications will be maintained among Project Team members</li> <li>○ Integration of Program-Identified Partners into the management plan and tasks</li> </ul> </li> <li>• <b>Data Plan:</b> The Applicant must provide a Data Plan in accordance with Section VIII.M and the America COMPETES Reauthorization Act of 2010 (codified at 15 U.S.C. §3719). At a minimum, the finalized Data Plan must include: (1) a plan for an agreement with competition participants regarding data rights and intellectual property consistent with the objectives of this Funding Opportunity Announcement; (2) specification of which data and whose data will be released in the public domain to enable transparent evaluation of top performers' test results (e.g.</li> </ul>
--	--

	<p>participants that advance to final test and evaluation stage and exceed threshold performance); (3) a plan to obtain written consent from the participants to release to the public these specified data; (4) a plan for publically disseminating these data; (5) an agreement with the Program-Identified Partners regarding data sharing and data management resources (e.g. test and evaluation software) rights; and (6) an agreement to enable Program access to all Prize Administrator information from WEC Prize development and implementation, and all information and data obtained by the Prize Administrator from competition participants and Program-Identified Partners.</p> <ul style="list-style-type: none"> <li>• Outreach and Publicity Plan: The Applicant should provide a plan to a) attract competition participants, b) engage stakeholders and the general public to increase the awareness of MHK technology, c) pursue additional partners to provide supplementary incentives and/or financial/resource support (to include a list of potential technical, market, and organizational stakeholders who will be contacted to provide support to the project), d) secure an audience of potential investors and stakeholders such that top performers in the tank test stage attract notice and potential future funding, and e) convert WEC Prize results into longer-term industry impact (e.g. publicize winning technologies and achieved WEC performance, disseminate prize impact to stakeholders and general public, etc.)</li> </ul>
<p><b>Qualifications and Resources</b> (Approximately 15% of the Technical Volume)</p>	<p>The Qualifications and Resources should contain the following information:</p> <ul style="list-style-type: none"> <li>• Describe the Project Team’s unique qualifications and expertise, including those of key Subrecipients.</li> <li>• Describe the Project Team’s existing resources (equipment, facilities, supplies, tools and services, qualified personnel and subcontractors, administrative and information technology, etc.) that will facilitate the successful completion of the proposed project; include a justification of any new equipment or facilities requested as part of the project.</li> <li>• Describe relevant, previous work efforts, demonstrated innovations, and how these enable the Applicant to achieve the project objectives.</li> <li>• Describe the time commitment of the key team members to support the project.</li> <li>• Attach one-page resumes for key participating team members as an appendix. Resumes do not count towards the page limit. Multi-page resumes are not allowed.</li> <li>• Describe the technical services to be provided by DOE/NNSA FFRDCs and GOGOs (not including the Program-Identified Partners), if applicable.</li> <li>• Attach letters of support from any partners/end users as an appendix (1 page maximum per letter). Letters of support do not count towards the page limit.</li> <li>• For multi-organizational or multi-investigator projects, describe succinctly: <ul style="list-style-type: none"> <li>○ The roles and the work to be performed by each PI and Key Team Member;</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>○ Business agreements between the Applicant and each PI and Key Team Member;</li> <li>○ How the various efforts will be integrated and managed;</li> <li>○ Process for making decisions on prize administration direction;</li> <li>○ Publication arrangements;</li> <li>○ Intellectual Property issues; and</li> <li>○ Communication plans</li> </ul>
--	---

Milestone Summary Table							
Recipient Name:							
Project Title:							
Task Number	Task Title or Subtask Title (If Applicable)	Type (Milestone or Go/No-Go Decision Point)	Milestone Number* (Go/No-Go Decision Point Number)	Milestone Description (Go/No-Go Decision Criteria)	Milestone Verification Process (What, How, Who, Where)	Anticipated Date (Months from Start of the Project)	Anticipated Quarter (Quarters from Start of the Project)

\*Milestone numbering convention should align with Task and Subtask numbers, as appropriate. For example, MS1.1, MS3.2, etc.

Note 1: It is required that each project have at least one milestone per quarter for the entire project duration. It is not necessary that each task have one milestone per quarter.

Note 2: It is required that each project have at least one project-wide go/no-go decision point each year. If a decision point is not specific to a particular task, then you may leave the task information blank for those decision points.

### **3. SF-424: APPLICATION FOR FEDERAL ASSISTANCE**

Complete all required fields in accordance with the instructions on the form. The list of certifications and assurances in Field 21 can be found at <http://energy.gov/management/office-management/operational-management/financial-assistance/financial-assistance-forms>, under Certifications and Assurances. Note: The dates and dollar amounts on the SF-424 are for the complete project period and not just the first project year, first phase or other subset of the project period. Save the SF-424 in a single PDF file using the following convention for the title "ControlNumber\_LeadOrganization\_App424".

### **4. BUDGET JUSTIFICATION (EERE 159)**

Applicants are required to complete the Budget Justification Workbook. This form is available on EERE Exchange at <https://eere-Exchange.energy.gov/>. Prime Recipients must complete each tab of the Budget Justification Workbook for the project as a whole, including all work to be performed by the Prime Recipient and its Subrecipients and Contractors, and provide all requested documentation (e.g., a Federally-approved forward pricing rate agreement, Defense Contract Audit Agency or Government Audits and Reports, if available). Applicants should include costs associated with required annual audits and incurred costs proposals in their proposed budget documents. The "Instructions and Summary" included with the Budget Justification Workbook will "auto-populate" as the Applicant enters information into the Workbook. Applicants must carefully read the "Instructions and Summary" tab provided within the Budget Justification Workbook. Save the Budget Justification Workbook in a single PDF file using the following convention for the title "ControlNumber\_LeadOrganization\_Budget\_Justification".

### **5. SUMMARY FOR PUBLIC RELEASE**

Applicants are required to submit a one-page summary/abstract of their project. The project summary/abstract must contain a summary of the proposed activity suitable for dissemination to the public. It should be a self-contained document that identifies the name of the Applicant, the project director/principal investigator(s), the project title, the objectives of the project, a description of the project, including methods to be employed, the potential impact of the project (i.e., benefits, outcomes), and major team members (for collaborative projects). This document must not include any proprietary or sensitive business information as EERE may make it available to the public after selections are made. The project summary must not exceed 1 page when printed using standard 8.5 x 11 inch paper with 1 inch margins (top, bottom, left, and right) with font not smaller than 11 point. Save the Summary for Public Release in a single PDF file using the following convention for the title "ControlNumber\_LeadOrganization\_Summary".



## **6. SUMMARY SLIDE**

Applicants are required to provide a single PowerPoint slide summarizing the proposed project. The slide must be submitted in Microsoft PowerPoint format. This slide is used during the evaluation process. Save the Summary Slide in a single PDF file using the following convention for the title “ControlNumber\_LeadOrganization\_Slide”.

The Summary Slide template requires the following information:

- A description of the anticipated competition impact;
- A description of the proposed prize administration objectives;
- A summary of the proposed approach for the development and implementation of the WEC Prize;
- Any key graphics (illustrations, charts and/or tables);
- The project’s key idea/takeaway;
- Project title, Prime Recipient, Principal Investigator, and Key Team Member information; and
- Requested EERE funds.

## **7. SUBAWARD BUDGET JUSTIFICATION (EERE159)**

Applicants must provide a separate budget justification, EERE 159 (i.e., budget justification for each budget year and a cumulative budget) for each subawardee that is expected to perform work estimated to be more than \$250,000 or 25 percent of the total work effort (whichever is less). The budget justification must include the same justification information described in the “Budget Justification” section, above. Save each subaward budget justification in a single PDF file using the following convention for the title “ControlNumber\_LeadOrganization\_Subawardee\_Budget\_Justification”.

## **8. BUDGET FOR DOE/NNSA FFRDC (IF APPLICABLE)**

If a DOE/NNSA FFRDC contractor is to perform a portion of the work, the Applicant must provide a DOE Field Work Proposal (FWP) in accordance with the requirements in DOE Order 412.1, Work Authorization System. DOE Order 412.1 and DOE O 412.1 (Field Work Proposal form) are available at the following link, under “DOE Budget Forms”: <https://www.directives.doe.gov/directives/current-directives/412.1-BOrder-a/view>. Save the FWP in a single PDF file using the following convention for the title “ControlNumber\_LeadOrganization\_FWP”. Requirements of this section do not apply to Program-Identified Partners.

## **9. AUTHORIZATION FOR NON-DOE/NNSA OR DOE/NNSA FFRDCs**

The Federal agency sponsoring the FFRDC contractor must authorize in writing the use of the FFRDC contractor on the proposed project, and this authorization must be submitted with the application. The use of a FFRDC contractor must be consistent with the contractor’s authority



under its award. Save the Authorization in a single PDF file using the following convention for the title “ControlNumber\_LeadOrganization\_FFRDCAuth”. Requirements of this section do not apply to Program-Identified Partners.

#### **10. SF-LLL: DISCLOSURE OF LOBBYING ACTIVITIES**

Prime Recipients and Subrecipients may not use any Federal funds to influence or attempt to influence, directly or indirectly, congressional action on any legislative or appropriation matters.

Prime Recipients and Subrecipients are required to complete and submit SF-LLL, “Disclosure of Lobbying Activities” (<http://www.whitehouse.gov/sites/default/files/omb/grants/sflllin.pdf>) if any non-Federal funds have been paid or will be paid to any person for influencing or attempting to influence any of the following in connection with the application:

- An officer or employee of any Federal agency;
- A Member of Congress;
- An officer or employee of Congress; or
- An employee of a Member of Congress.

Save the SF-LLL in a single PDF file using the following convention for the title “ControlNumber\_LeadOrganization\_SF-LLL”.

#### **11. WAIVER REQUESTS: FOREIGN ENTITIES AND PERFORMANCE OF WORK IN THE UNITED STATES**

##### *i. Foreign Entity Participation:*

As set forth in Section III.A.3, all Prime Recipients receiving funding under this FOA must be incorporated (or otherwise formed) under the laws of a State or territory of the United States. To request a waiver of this requirement, the Applicant must submit an explicit waiver request in the Full Application. Waiver information is provided in Section III.A.3 of the FOA.

##### *ii. Performance of Work in the United States*

All work under EERE funding agreements must be performed in the United States. Section IV.I.3 lists the necessary information that must be included in a request to waive this requirement. This requirement does not apply to the purchase of supplies and equipment, so a waiver is not required for foreign purchases of these items. However, the Prime Recipient should make every effort to purchase supplies and equipment within the United States.

#### **E. POST-SELECTION INFORMATION REQUESTS**

If an Applicant is selected for award, EERE reserves the right to request of that Applicant additional or clarifying information for any reason deemed necessary, including but not limited to:

- Indirect cost information;
- Other budget information;
- Name and phone number of the Designated Responsible Employee for compliance with national policies prohibiting discrimination (See 10 CFR 1040.5); and
- Representation of Limited Rights Data and Restricted Software, if applicable.

## **F. CONTENT AND FORM OF REPLIES TO REVIEWER COMMENTS**

EERE will provide Applicants with reviewer comments following evaluation of all eligible Full Applications (i.e. compliant and responsive Full Applications from eligible Applicants). Applicants will have approximately two business days to prepare a short Reply to Reviewer Comments responding to comments however they desire or supplementing their Full Application.

EERE will not review or consider ineligible Replies to Reviewer Comments (see Section III of the FOA). EERE will review and consider each compliant and responsive Full Application, even if no Reply is submitted or if the Reply is found to be noncompliant.

Replies to Reviewer Comments must conform to the following content and form requirements, including maximum page lengths, described below. If a Reply to Reviewer Comments is more than three pages in length, EERE will review only the first three pages and disregard any additional pages.

<b>SECTION</b>	<b>PAGE LIMIT</b>	<b>DESCRIPTION</b>
<b>Text</b>	2 pages max	Applicants may respond to one or more reviewer comments or supplement their Full Application.
<b>Optional</b>	1 page max	Applicants may use this page however they wish; text, graphs, charts, or other data to respond to reviewer comments or supplement their Full Application are acceptable.

## **G. SUBMISSION DATES AND TIMES**

Concept Papers, Full Applications, and Replies to Reviewer Comments must be submitted no later than 5p.m. ET on the dates provided on the cover page of this FOA.

## **H. INTERGOVERNMENTAL REVIEW**

The Wind and Water Power Technologies Office is not subject to Executive Order 12372 – Intergovernmental Review of Federal Technology Offices.

## I. FUNDING RESTRICTIONS

### 1. ALLOWABLE COSTS

All expenditures must be allowable, allocable, and reasonable in accordance with the applicable Federal cost principles.

Refer to the following applicable Federal cost principles for more information:

- 2 CFR 220 for Educational Institutions;
- 2 CFR 225 for State, Local, and Indian Tribal Governments;
- 2 CFR 230 for Non Profit Organizations; and
- FAR Part 31 for For-Profit entities.

### 2. PRE-AWARD COSTS

Recipients must obtain written Contracting Officer approval prior to incurring pre-award costs. Upon approval, Recipients may charge to an award resulting from this FOA pre-award costs that were incurred within the 90 calendar day period immediately preceding the effective date of the award and no earlier than the selection date, if the costs are allowable in accordance with the applicable Federal cost principles referenced in 10 CFR Part 600. Recipients must obtain the prior approval of the Contracting Office for any pre-award costs that are for periods greater than this 90 day calendar period.

#### *i. Pre-Award Costs Related to National Environmental Policy Act (NEPA) Requirements*

EERE's decision whether and how to distribute federal funds under this FOA is subject to NEPA (see Section VI.C.6). Applicants should carefully consider and should seek legal counsel or other expert advice before taking any action related to the proposed project that would have an adverse effect on the environment or limit the choice of reasonable alternatives prior to EERE completing the NEPA review process.

EERE does not guarantee or assume any obligation to reimburse costs where the Prime Recipient incurred the costs prior to receiving written authorization from the Contracting Officer. If the Applicant elects to undertake activities that may have an adverse effect on the environment or limit the choice of reasonable alternatives prior to receiving such written authorization from the Contracting Officer, the Applicant is doing so at risk of not receiving Federal funding and such costs may not be recognized as allowable cost share. Likewise, if a project is selected for negotiation of award, and the Prime Recipient elects to undertake activities that are not authorized for Federal funding by the Contracting Officer in advance of EERE completing a NEPA review, the Prime Recipient is doing so at risk of not receiving Federal Funding and such costs may not be recognized as allowable cost share. Nothing contained in the pre-award cost reimbursement regulations or any pre-award costs approval letter from the Contracting Officer overrides these NEPA requirements to obtain the written authorization

from the Contracting Officer prior to taking any action that may have an adverse effect on the environment or limit the choice of reasonable alternatives.

### **3. PERFORMANCE OF WORK IN THE UNITED STATES**

EERE requires all work under EERE financial assistance agreements to be performed in the United States. This requirement does not apply to the purchase of supplies and equipment; however, the Prime Recipient should make every effort to purchase domestically-produced supplies and equipment. If a recipient fails to comply with the Performance of Work in the United States requirement, the EERE Contracting Officer may deny reimbursement for the work conducted outside the United States and such costs may not be recognized as allowable cost share.

There may be limited circumstances where it is in the interest of the project to perform a portion of the work outside the United States. To seek a waiver of the Performance of Work in the United States requirement, the Applicant must submit an explicit waiver request in the Full Application, which includes the following information:

- The countries in which the work will be performed;
- A description of the work to be performed outside the U.S.; and
- The rationale for performing the work outside the U.S.

For the rationale, the Applicant must demonstrate to the satisfaction of the EERE Contracting Officer that a waiver would further the purposes of this FOA and is otherwise in the interests of EERE and the United States. For example, an Applicant may seek to demonstrate the United States economic interest will be better served by having certain work performed outside the United States (e.g., demonstrate the expertise to develop the technology exists only outside the United States, but the technology's ultimate commercialization will result in substantial benefits to the United States such as improved electricity reliability or creating domestic jobs). The Contracting Officer may require additional information before considering the waiver request. Save the waiver request(s) in a single PDF file titled "ControlNumber\_PerformanceofWork\_Waiver".

### **4. CONSTRUCTION**

EERE generally does not fund projects that involve major construction (i.e., construction of new buildings, major renovations, or additions to existing buildings). Recipients are required to obtain written authorization from the Contracting Officer before incurring any major construction costs.

### **5. FOREIGN TRAVEL**

Foreign travel is not allowed under this FOA.

## **6. EQUIPMENT AND SUPPLIES**

To the greatest extent practicable, all equipment and products purchased with funds made available under this award should be made or manufactured in the United States. This requirement does not apply to used or leased equipment.

Property disposition will be required at the end of a project if the property is no longer used by the Prime Recipient for the objectives of the project and the fair market value of property exceeds \$5,000. The rules for property disposition are set forth in the following sections of 10 CFR Part 600:

- 10 CFR 600.130 to 600.137 for Universities, Hospitals, or other Nonprofit Institutions;
- 10 CFR 600.231 to 600.233 for State and Local Governments; and
- 10 CFR 600.320 to 600.325 for For-Profit organizations.

## **7. LOBBYING**

Prime Recipients and Subrecipients may not use any Federal funds to influence or attempt to influence, directly or indirectly, congressional action on any legislative or appropriation matters.

Prime Recipients and Subrecipients are required to complete and submit SF-LLL, “Disclosure of Lobbying Activities” (<http://www.whitehouse.gov/sites/default/files/omb/grants/sflllin.pdf>) if any non-Federal funds have been paid or will be paid to any person for influencing or attempting to influence any of the following in connection with the application:

- An officer or employee of any Federal agency;
- A Member of Congress;
- An officer or employee of Congress; or
- An employee of a Member of Congress.

# **V. APPLICATION REVIEW INFORMATION**

## **A. TECHNICAL REVIEW CRITERIA**

### **1. CONCEPT PAPERS**

Concept Papers are evaluated based on the following criteria:

#### **Criterion 1: Overall Prize Administration Merit (100%)**

This criterion involves consideration of the following factors:

- The Applicant clearly displays functional experience and knowledge of best practices in prize administration (including complex, multistage, technical design and build competitions);

- The likelihood that the proposed prize administration approach will result in significant technical and economic improvement in WEC devices in order to drive down the cost of energy to 15 ¢/kWh; and
- The proposed approach is without major flaws.

## **2. FULL APPLICATIONS**

Applications will be evaluated against the merit review criteria shown below.

### **Criterion 1: Prize Administration Merit and Impact (40%)**

#### Prize Administration Merit

- Extent to which the application specifically and convincingly demonstrates how the Applicant's approach will ensure that the WEC Prize will result in a pathway to achieving the broad Program Goal (driving down the cost of energy of WEC device technologies to 15 ¢/kWh) or the refined LCOE goal;
- Sufficiency of a) the rationale of the distribution of funds between the prize administration and monetary awards, and b) principles to be used in determining the distribution of award funds between any seed funding and final prize(s) in the prize design phase; and
- Assessment of whether the proposed approach is effective, based on sufficient detail in the application, including relevant statistics and discussion of prior experience that supports the viability of the proposed work.

#### Impact

- The level of impact that the proposed approach will have on the advancement of WEC technologies, technology development companies, and establishing a market interest for WECs in the U.S.

### **Criterion 2: Project Plan (40%)**

#### Approach, Work Plan, and Schedule

- Degree to which the approach and Work Breakdown Structure have been clearly described and thoughtfully considered;
- Degree to which the tasks are clearly described, detailed, reasonable, timely, and can be completed within the allotted time span, resulting in a high likelihood that the implementation of the proposed Work Plan will result in a successful WEC Prize;
- Sufficiency of the identification, discussion, and demonstrated understanding of the key risk areas involved in the proposed work and the quality of the mitigation strategies to address them; and
- Degree to which the approach and Work Plan are in accordance with the America COMPETES Reauthorization Act of 2010 (codified at 15 U.S.C. §3719).

#### Milestones and Deliverables

- Level of clarity in the definition of the milestones, decision points, and deliverables; and

- Strength of the milestones, decision points, and mid-point deliverables defined in the application, such that meaningful interim progress will be made.

#### Project Management

- Level of clarity of the roles and responsibilities of the Principal Investigator(s) and the proposed team; and
- Degree to which the Work Plan considers the Program-Identified Partners in the development and implementation of the WEC Prize.

#### Data Plan

- Degree to which the Data Plan addresses (1) a plan for an agreement with competition participants regarding data rights and intellectual property consistent with the objectives of this Funding Opportunity Announcement; (2) specification of which data and whose data will be released in the public domain to enable transparent evaluation of top performers' test results (e.g. participants that advance to final test and evaluation stage and exceed threshold performance); (3) a plan to obtain written consent from the participants to release to the public these specified data; (4) a plan for publically disseminating these data; (5) an agreement with the Program-Identified Partners regarding data sharing and data management resources (e.g. test and evaluation software) rights; and (6) an agreement to enable Program access to all Prize Administrator information from WEC Prize development and implementation, and all information and data obtained by the Prize Administrator from competition participants and Program-Identified Partners.

#### Outreach and Publicity Plan

- Degree to which the plan is sufficient in order to a) attract competition participants, b) engage stakeholders and the general public to increase the awareness of MHK technology, c) pursue additional partners to provide supplementary incentives and/or financial/resource support (to include a list of potential technical, market, and organizational stakeholders who will be contacted to provide support to the project), d) secure an audience of potential investors and stakeholders such that top performers in the tank test stage attract notice and potential future funding, and e) convert WEC Prize results into longer-term industry impact (e.g. publicize winning technologies and achieved WEC performance, disseminate prize impact to stakeholders and general public, etc.)

#### **Criterion 3: Team and Resources (20%)**

- Degree to which the proposed Principal Investigator(s) and associated team members demonstrate the ability to develop and implement the WEC Prize to meet Prize-Specific Objectives that align with the broad Program Goal or refined goal. Consideration will be given to the qualifications, relevant expertise, and time commitment of the individuals on the team;

- The sufficiency of the Applicant's facilities, equipment and supplies, services, subcontractors, and related administrative and information technology (excluding, but complementing those of the Program-Identified Partners) to support the WEC Prize;
- Level of participation by project team members as evidenced by their integration in the Work Plan and letter(s) of support;
- Degree to which the project team can develop and implement the WEC Prize in cooperation with the Program-Identified Partners; and
- Reasonableness of budget and spend plan for accomplishing the proposed project, objectives, reaching the milestones, and providing deliverables within the timeline.

### **3. CRITERIA FOR REPLIES TO REVIEWER COMMENTS**

EERE has not established separate criteria to evaluate "Replies to Reviewer Comments". Instead, "Replies to Reviewer Comments" are attached to the original applications and evaluated as an extension of the Full Application.

## **B. STANDARDS FOR APPLICATION EVALUATION**

Applications that are determined to be compliant will be evaluated in accordance with this FOA, by the standards set forth in EERE's Notice of Objective Merit Review Procedure (76 Fed. Reg. 17846, March 31, 2011) and the guidance provided in the "Department of Energy Merit Review Guide for Financial Assistance," which is available at: <http://energy.gov/sites/prod/files/meritrev.pdf>.

## **C. OTHER SELECTION FACTORS**

### **1. PROGRAM POLICY FACTORS**

In addition to the above criteria, the Selection Official may consider the following program policy factors in determining which Full Applications to select for award negotiations:

- The degree to which the proposed project optimizes the use of available EERE funding to achieve WWPTO programmatic (Program) objectives;
- The degree to which the proposed project will maintain and build relationships with the Program-identified test facility for future Program engagement.
- Whether the proposed project will accelerate transformational technological advances in areas that industry by itself is not likely to undertake because of technical and financial uncertainty;
- The degree to which the proposed project directly addresses EERE's statutory mission and strategic goals.

Cost sharing will not be considered in the evaluation.



## **D. MERIT REVIEW AND SELECTION PROCESS**

### **1. 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 application to select.

### **2. PRE-SELECTION INTERVIEWS**

As part of the merit review process, EERE may invite one or more of the top ranked Applicants to participate in a final phase of the merit review evaluation process: Pre-Selection Interviews. Pre-Selection Interviews are distinct from and more formal than pre-selection clarifications (See Section V.D.2-3 of the FOA). The top ranked Applicant(s) will meet with the Merit Review Panel to allow the Merit Review Panel to seek clarification on the contents of the Full Applications and otherwise ask questions regarding the proposed project. The information provided by Applicants to EERE through Pre-Selection Interviews contributes to EERE's selection decisions.

EERE will arrange to meet with the invited Applicants in person at EERE's offices or a mutually agreed upon location. EERE may also arrange pre-selection site visits at certain Applicants' facilities. In the alternative, EERE may invite the top-ranked Applicants to participate in a one-on-one conference with EERE via webinar, videoconference, or conference call.

EERE will not reimburse Applicants for travel and other expenses relating to the Pre-Selection Interviews, nor will these costs be eligible for reimbursement as pre-award costs.

EERE may obtain additional information through Oral Presentations and site visits that will be used to make a final selection determination. EERE may select applications for funding and make awards without Oral Presentations and site visits. Participation in Oral Presentations or site visits with EERE does not signify that Applicants have been selected for award negotiations.

### **3. PRE-SELECTION CLARIFICATION**

EERE may determine that pre-selection clarifications are necessary from one or more Applicants. These pre-selection clarifications will solely be for the purposes of clarifying the application, and will be limited to information already provided in the application documentation. The pre-selection clarifications may occur before, during, or after the merit review evaluation process. Information provided by an Applicant that is not necessary to address the pre-selection clarification question will not be reviewed or considered. Typically, a pre-selection clarification will be carried out through either written responses to EERE's written clarification questions or video or conference calls with EERE representatives.

The information provided by Applicants to EERE through pre-selection clarifications is incorporated in their applications and contributes to the merit review evaluation and EERE's selection decisions. If EERE contacts an Applicant for pre-selection clarification purposes, it does not signify that the Applicant has been selected for negotiation of award or that the Applicant is among the top ranked applications.

EERE will not reimburse Applicants for expenses relating to the pre-selection clarifications, nor will these costs be eligible for reimbursement as pre-award costs.

#### **4. SELECTION**

The Selection Official may consider the merit review recommendation, program policy factors, and the amount of funds available in arriving at selections for this FOA.

## **VI. AWARD ADMINISTRATION INFORMATION**

### **A. ANTICIPATED NOTICE OF SELECTION AND AWARD DATES**

EERE anticipates notifying Applicants selected for negotiation of an award in July 2014 and making awards by the end of September 2014.

### **B. AWARD NOTICES**

#### **1. REJECTED SUBMISSIONS**

Noncompliant and nonresponsive Concept Papers and Full Applications are rejected by the Contracting Officer and are not reviewed or considered. The Contracting Officer sends a notification letter by email to the PI and business points of contact designated by the Applicant in EERE Exchange. The notification letter states the basis upon which the Concept Paper was rejected or the Full Application was rejected.

#### **2. CONCEPT PAPER NOTIFICATIONS**

EERE notifies Applicants of its determination to encourage or discourage the submission of a Full Application. EERE sends a notification letter by email to the points of contact designated by the Applicant in EERE Exchange.

Applicants may submit a Full Application even if they receive a notification discouraging them from doing so. By discouraging the submission of a Full Application, EERE intends to convey its lack of programmatic interest in the proposed project. Such assessments do not necessarily reflect judgments on the merits of the proposed project. The purpose of the Concept Paper phase is to save Applicants the considerable time and expense of preparing a Full Application that unlikely to be selected for award negotiations.

A notification letter encouraging the submission of a Full Application does not authorize the Applicant to commence performance of the project. Please refer to Section IV.I.2 of the FOA for guidance on pre-award costs.

### **3. FULL APPLICATION NOTIFICATIONS**

EERE notifies Applicants of its determination via a notification letter by email to the points of contact designated by the Applicant in EERE Exchange. The notification letter may inform the Applicant that its Full Application was selected for award negotiations, or not selected. Alternatively, EERE may notify one or more Applicants that a final selection determination on particular Full Applications will be made at a later date, subject to the availability of funds or other factors.

Written feedback on Full Applications is made available to Applicants before the submission deadline for Replies to Reviewer Comments. By providing feedback, EERE intends to guide the further development of the proposed technology and to provide a brief opportunity to respond to reviewer comments.

### **4. SUCCESSFUL APPLICANTS**

A notification letter selecting a Full Application for award negotiations does not authorize the Applicant to commence performance of the project. If an application is selected for award negotiations, it is not a commitment to issue an award. Applicants do not receive an award until award negotiations are complete and the Contracting Officer executes the funding agreement.

The award negotiation process will take approximately 60 days. Applicants must designate a primary and a backup point-of-contact in EERE Exchange with whom EERE will communicate to conduct award negotiations. The Applicant must be responsive during award negotiations (e.g., provide requested documentation) and meet the negotiation deadlines. If the Applicant fails to do so or negotiations are otherwise unsuccessful, EERE will cancel award negotiations and rescind the Selection. EERE reserves the right to terminate award negotiations at any time for any reason.

Please refer to Section IV.I.2 of the FOA for guidance on pre-award costs.

### **5. POSTPONED SELECTION DETERMINATIONS**

A notification letter postponing a final selection determination until a later date does not authorize the Applicant to commence performance of the project. EERE may ultimately determine to select or not select the Full Application for award negotiations.

## 6. UNSUCCESSFUL APPLICANTS

EERE shall promptly notify in writing each Applicant whose application has not been selected for award or whose application cannot be funded because of the unavailability of appropriated funds. If the application was not selected, the written notice shall explain why the application was not selected.

## C. ADMINISTRATIVE AND NATIONAL POLICY REQUIREMENTS

### 1. REGISTRATION REQUIREMENTS

There are several one-time actions before submitting an Application in response to this FOA, and it is vital that Applicants address these items as soon as possible. Some may take several weeks, and failure to complete them could interfere with an Applicant's ability to apply to this FOA or to meet the negotiation deadlines and receive an award if the application is selected. These requirements are as follows:

#### i. EERE Exchange

Register and create an account on EERE Exchange at <https://eere-Exchange.energy.gov>. This account will then allow the user to register for any open EERE FOAs that are currently in EERE Exchange. It is recommended that each organization or business unit, whether acting as a team or a single entity, use only one account as the contact point for each submission. Applicants should also designate backup points of contact so Applicants may be easily contacted if deemed necessary. **This step is required to apply to this FOA.**

The EERE Exchange registration does not have a delay; however, **the remaining registration requirements below could take several weeks to process and are necessary for a potential Applicant to receive an award under this FOA.** Therefore, although not required in order to submit an Application through the EERE Exchange site, all potential Applicants lacking a DUNS number, or not yet registered with SAM or FedConnect should complete those registrations as soon as possible.

#### ii. DUNS Number

Obtain a Dun and Bradstreet Data Universal Numbering System (DUNS) number (including the plus 4 extension, if applicable) at <http://fedgov.dnb.com/webform>.

#### iii. System for Award Management

Register with the System for Award Management (SAM) at <https://www.sam.gov>. Designating an Electronic Business Point of Contact (EBiz POC) and obtaining a special password called an MPIN are important steps in SAM registration. Please update your SAM registration annually.

*iv. Fedconnect*

Register in FedConnect at <https://www.fedconnect.net/>. To create an organization account, your organization's SAM MPIN is required. For more information about the SAM MPIN or other registration requirements, review the FedConnect Ready, Set, Go! Guide at [https://www.fedconnect.net/FedConnect/PublicPages/FedConnect\\_Ready\\_Set\\_Go.pdf](https://www.fedconnect.net/FedConnect/PublicPages/FedConnect_Ready_Set_Go.pdf).

*v. Grants.gov*

Register in Grants.gov (<http://www.grants.gov>) to receive automatic updates when Amendments to this FOA are posted. However, please note that Concept Papers and Full Applications will not be accepted through Grants.gov.

*vi. Electronic Authorization of Applications and Award Documents*

Submission of an application and supplemental information under this FOA through electronic systems used by the Department of Energy, including EERE Exchange and fedconnect.net, constitutes the authorized representative's approval and electronic signature.

**2. AWARD ADMINISTRATIVE REQUIREMENTS**

The administrative requirements for DOE grants and cooperative agreements are contained in 10 CFR 600. Grants and cooperative agreements made to universities, non-profits, and other entities subject to 10 CFR 600 are subject to the Research Terms and Conditions located on the National Science Foundation website at: <http://www.nsf.gov/bfa/dias/policy/rtc/index.jsp>.

**3. LIMITATIONS ON COMPENSATION COSTS**

The annual compensation costs (total amount of wages, salary, bonuses and deferred compensation) for an individual allowable for an award under this FOA are capped at \$250,000 (i.e. \$250,000 is the maximum amount that EERE will reimburse a Recipient for any one individual's annual compensation and EERE will not recognize such costs above \$250,000 as Recipient cost share).

This limitation does not restrict the Recipient or its subrecipients from providing annual compensation to an individual that exceeds \$250,000. However, any amount above \$250,000 cannot be included in the total project costs (i.e., Federal share or recipient cost share).

**4. SUBAWARD AND EXECUTIVE REPORTING**

Additional administrative requirements necessary for DOE grants and cooperative agreements to comply with the Federal Funding and Transparency Act of 2006 (FFATA) are contained in 2 CFR Part 170. Prime Recipients must register with the new FFATA Subaward Reporting System database and report the required data for their first tier Subrecipients. Prime Recipients must

report the executive compensation for their own executives as part of their registration profile in SAM.

## **5. NATIONAL POLICY REQUIREMENTS**

The National Policy Assurances that are incorporated as a term and condition of award are located at: <http://energy.gov/management/downloads/national-policy-assurances-be-incorporated-award-terms>.

## **6. ENVIRONMENTAL REVIEW IN ACCORDANCE WITH NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)**

EERE's decision on whether and how to distribute federal funds under this FOA is subject to the National Environmental Policy Act (42 USC 4321, *et seq.*). NEPA requires Federal agencies to integrate environmental values into their decision-making processes by considering the potential environmental impacts of their proposed actions. For additional background on NEPA, please see DOE's NEPA website, at <http://nepa.energy.gov/>.

While NEPA compliance is a Federal agency responsibility and the ultimate decisions remain with the federal agency, all Recipients selected for an award will be required to assist in the timely and effective completion of the NEPA process in the manner most pertinent to their proposed project.

## **7. APPLICANT REPRESENTATIONS AND CERTIFICATIONS**

### *i. Lobbying Restrictions*

By accepting funds under this award, the Recipient agrees that none of the funds obligated on the award shall be expended, directly or indirectly, to influence Congressional action on any legislation or appropriation matters pending before Congress, other than to communicate to Members of Congress as described in 18 U.S.C. §1913. This restriction is in addition to those prescribed elsewhere in statute and regulation.

### *ii. Corporate Felony Conviction and Federal Tax Liability Representations (March 2012)*

By submitting an application in response to this FOA, the Applicant represents that:

It is not a corporation that has been convicted (or had an officer or agent of such corporation acting on behalf of the corporation convicted) of a felony criminal violation under any Federal law within the preceding 24 months;

No officer or agent of the corporation have been convicted of a felony criminal violation for an offence arising out of actions for or on behalf of the corporation under Federal law in the past 24 months; or

It is not a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

For purposes of these representations, the following definitions apply:

A Corporation includes any entity that has filed articles of incorporation in any of the 50 states, the District of Columbia, or the various territories of the United States [but not foreign corporations]. It includes both for-profit and non-profit organizations.

#### **8. STATEMENT OF SUBSTANTIAL INVOLVEMENT**

There will be a substantial involvement between EERE (i.e. the Program) and the Prime Recipient during the performance of a resultant cooperative agreement. The broad Program Goal and prize objectives addressed by the project are of such importance that shared responsibility for the management, control, direction and performance of the project is needed to ensure the goal and objectives are met. EERE has the right to intervene in the conduct or performance of project activities for programmatic reasons. Intervention includes the interruption or modification of the conduct or performance of project activities. EERE does not limit its involvement to the administrative requirements of this Award. Instead, EERE has substantial involvement in the direction and redirection of any aspects of the project as a whole. Substantial involvement includes, but is not limited to the following:

1. EERE shares responsibility with the Prime Recipient for the management, control, direction, and performance of work under this award.
2. EERE reviews and approves in a timely manner project plans, including project management, testing and technology transfer plans, and recommending alternate approaches, if the plans do not address the critical programmatic issues.
3. EERE participates in project management planning activities, including risk analysis, to ensure EERE Technology Office requirements or limitations are considered in performance of the work elements.
4. 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.
5. EERE promotes and facilitates technology transfer activities, including disseminating Technology Office results through presentations and publications.
6. EERE may redirect or discontinue funding projects that fail to fully and satisfactorily complete the work described in the Statement of Project Objectives as evaluated at the Go/No-Go decision points.
7. EERE participates in project decision-making processes, such as approval of work agreements with Program-Identified Partners, decisions regarding refinement of the broad Program Goal, Performance Metric(s), the competition rules, establishing the minimum number of competition participants for WEC Prize continuation, distribution



between any seed funding and the final prize purse, number of prize purse winners, the Data Plan, selection of judges, and approval enabling the Prize Administrator to accept any external financial, resource, or incentive offers.

8. The Prime Recipient is expected to coordinate the publicity and announcement strategy with EERE.
9. EERE will have the option to be present and interactive at all judging sessions, the competition test and evaluation stage, etc.

The Program anticipates formalization of the substantial involvement between the Program and the Prize Administrator through milestones or go/no-go decision points, such as those based on a) competition rules to ensure a pathway to attaining the Prize-Specific Objectives and feasibility of project time and schedule, b) analysis of the WEC industry to establish the appropriate distribution between seed funding and the prize purse, and c) number of competition participants.

#### **9. INTELLECTUAL PROPERTY AND INTELLECTUAL PROPERTY PROVISIONS**

The prize competition will be conducted in accordance with the prize authority established in the America COMPETES Reauthorization Act of 2010 (15 U.S.C. §3719). Rights in subject inventions will be retained by competition participants.

All data associated with evaluation of participants' submissions in the competition, and the final testing and evaluation stage of the competition will be obtained by the Prize Administrator. The Prize Administrator is responsible for obtaining written consent from competition participants to release to the public those data specified in the competition rules for public release.

The standard DOE financial assistance intellectual property provisions applicable to the various types of recipients are located at <http://energy.gov/gc/standard-intellectual-property-ip-provisions-financial-assistance-awards>.

#### **10. REPORTING**

Reporting requirements are identified on the Federal Assistance Reporting Checklist, DOE F 4600.2, attached to the award agreement. The checklist can be accessed at [http://energy.gov/sites/prod/files/FA\\_RepReqChecklist\\_033011\\_final.pdf](http://energy.gov/sites/prod/files/FA_RepReqChecklist_033011_final.pdf).

#### **11. Go/No-Go REVIEW AND STAGE-GATE REVIEW**

Each project selected under this FOA will be subject to a period project evaluation: either a Go/No-Go or Stage Gate Review. Federal funding beyond the Go/No-Go or Stage Gate decision

point (continuation funding), is contingent, in part<sup>7</sup>, on the outcome of the Go/No-Go or Stage Gate Review.

As a result of the Go/No-Go or Stage Gate Reviews, DOE may, at its discretion, authorize the following actions: (1) continue to fund the project, contingent upon the availability of funds appropriated by Congress for the purpose of this program and the availability of future-year budget authority; (2) recommend redirection of work under the project; (3) place a hold on federal funding for the project, pending further supporting data or funding; or (4) discontinue funding the project because of insufficient progress, change in strategic direction, or lack of funding.

- **Go/No-Go Decision Points:** Go/No-Go decision points are similar to project milestones, in that EERE staff will review the project based on pre-established metrics defined in the award negotiations process following selection.
- **Stage-Gate Reviews:** Stage-Gate reviews are very similar to Go/No-Go decision points, except that EERE will bring in third parties to assist with validation of project progress. These third parties are typically specialized subject matter experts that will allow EERE to evaluate crucial aspects of project performance with a greater degree of specificity and scrutiny. Note that any Stage-Gate Review of the Administration of the WEC Prize is not to be confused with any review that occurs between WEC Prize Competition stages.

## VII. QUESTIONS/AGENCY CONTACTS

Upon the issuance of a FOA, EERE personnel are prohibited from communicating (in writing or otherwise) with Applicants regarding the FOA except through the established question and answer process as described below. Specifically, questions regarding the content of this FOA must be submitted to [WECFOA979@go.doe.gov](mailto:WECFOA979@go.doe.gov) not later than 3 business days prior to the application due date.

All questions and answers related to this FOA will be posted on EERE Exchange at: <https://eere-exchange.energy.gov>. **Please note that you must first select this specific FOA Number in order to view the questions and answers specific to this FOA.** EERE will attempt to respond to a question within 3 business days, unless a similar question and answer has already been posted on the website.

---

<sup>7</sup> Continuation funding is contingent on (1) the availability of funds appropriated by Congress for the purpose of this program and the availability of future-year budget authority; (2) meeting the objectives, milestones, deliverables, decision point criteria, and stage gates of Recipient's approved project and obtaining approval from EERE to continue work on the project; (3) submittal of required reports; and/or (4) compliance with the terms and conditions of the award.

Questions related to the registration process and use of the EERE Exchange website should be submitted to: [EERE-ExchangeSupport@hq.doe.gov](mailto:EERE-ExchangeSupport@hq.doe.gov).

## **VIII. OTHER INFORMATION**

### **A. FOA MODIFICATIONS**

Amendments to this FOA will be posted on the EERE Exchange website and the Grants.gov system. However, you will only receive an email when an amendment or a FOA is posted on these sites if you register for email notifications for this FOA in Grants.gov. EERE recommends that you register as soon after the release of the FOA as possible to ensure you receive timely notice of any amendments or other FOAs.

### **B. INFORMATIONAL WEBINAR**

EERE will conduct one informational webinar during the FOA process. It will be held on Monday, March 24, 2014 from 1:00 – 3:00 PM ET.

The purpose of the webinar will be to give Applicants a chance to ask questions about the FOA process generally. Attendance is not mandatory and will not positively or negatively impact the overall review of any Applicant submissions. As the webinar will be open to all Applicants who wish to participate, Applicants should refrain from asking questions or communicating information that would reveal confidential and/or proprietary information specific to their project.

Register for the webinar at this link: <https://www1.gotomeeting.com/register/416805624>

### **C. GOVERNMENT RIGHT TO REJECT OR NEGOTIATE**

EERE reserves the right, without qualification, to reject any or all applications received in response to this FOA and to select any application, in whole or in part, as a basis for negotiation and/or award.

### **D. COMMITMENT OF PUBLIC FUNDS**

The Contracting Officer is the only individual who can make awards or commit the Government to the expenditure of public funds. A commitment by anyone other than the Contracting Officer, either expressed or implied, is invalid.

## **E. TREATMENT OF APPLICATION INFORMATION**

In general, EERE will use data and other information contained in applications for evaluation purposes only unless such information is generally available to the public or is already the property of the Government.

Applicants should not include trade secrets or commercial or financial information that is privileged or confidential in their application unless such information is necessary to convey an understanding of the proposed project or to comply with a requirement in the FOA. Applications containing trade secrets or commercial or financial information that is privileged or confidential, which the Applicant does not want disclosed to the public or used by the Government for any purpose other than application evaluation, must be marked as described in this section.

The cover page of the application must be marked as follows and identify the specific application pages containing trade secrets or commercial or financial information that is privileged or confidential:

Notice of Restriction on Disclosure and Use of Data:

Pages [list applicable pages] of this document may contain trade secrets or commercial or financial information that is privileged or confidential, and is exempt from public disclosure. Such information shall be used or disclosed only for evaluation purposes or in accordance with a financial assistance or loan agreement between the submitter and the Government. The Government may use or disclose any information that is not appropriately marked or otherwise restricted, regardless of source.  
[End of Notice]

The header and footer of every page that contains trade secrets or commercial or financial information that is privileged or must be marked as follows: "May contain trade secrets or commercial or financial information that is privileged or confidential and exempt from public disclosure."

In addition, each line or paragraph containing trade secrets or commercial or financial information that is privileged or confidential must be enclosed in brackets.

The above markings enable EERE to follow the provisions of 10 CFR 1004.11(d) in the event a Freedom of Information Act (FOIA) request is received for information submitted with an application. Failure to comply with these marking requirements may result in the disclosure of the unmarked information under a FOIA request or otherwise. The U.S. Government is not liable for the disclosure or use of unmarked information, and may use or disclose such information for any purpose.

Subject to the specific FOIA exemptions identified in 5 U.S.C. 552(b), all information submitted to EERE by a FOA Applicant is subject to public release under the Freedom of Information Act, 5 U.S.C. §552, as amended by the OPEN Government Act of 2007, Pub. L. No. 110-175. It is the Applicant's responsibility to review FOIA and its exemptions to understand (1) what information may be subject to public disclosure and (2) what information Applicants submit to the Government that are protected by law. In some cases, DOE may be unable to make an independent determination regarding which information submitted by an Applicant is releasable and which is protected by an exemption. In such cases, DOE will consult with the Applicant, in accordance with 10 CFR §1004.11, to solicit the Applicant's views on how the information should be treated.

#### **F. EVALUATION AND ADMINISTRATION BY NON-FEDERAL PERSONNEL**

In conducting the merit review evaluation, the Government may seek the advice of qualified non Federal personnel as reviewers. The Government may also use non-Federal personnel to conduct routine, nondiscretionary administrative activities. The Applicant, by submitting its application, consents to the use of non-Federal reviewers/administrators. Non-Federal reviewers must sign conflict of interest and non-disclosure agreements prior to reviewing an application. Non-Federal personnel conducting administrative activities must sign a non-disclosure agreement.

#### **G. NOTICE REGARDING ELIGIBLE/INELIGIBLE ACTIVITIES**

Eligible activities under this Technology Office include those which describe and promote the understanding of scientific and technical aspects of specific energy technologies, but not those which encourage or support political activities such as the collection and dissemination of information related to potential, planned or pending legislation.

#### **H. NOTICE OF RIGHT TO CONDUCT A REVIEW OF FINANCIAL CAPABILITY**

EERE reserves the right to conduct an independent third party review of financial capability for Applicants that are selected for negotiation of award (including personal credit information of principal(s) of a small business if there is insufficient information to determine financial capability of the organization).

#### **I. NOTICE OF POTENTIAL DISCLOSURE UNDER FREEDOM OF INFORMATION ACT**

Applicants should be advised that identifying information regarding all Applicants, including Applicant names and/or points of contact, may be subject to public disclosure under the Freedom of Information Act, whether or not such Applicants are selected for negotiation of award.

## **J. REQUIREMENT FOR FULL AND COMPLETE DISCLOSURE**

Applicants are required to make a full and complete disclosure of all information requested. Any failure to make a full and complete disclosure of the requested information may result in:

- The rejection of a Concept Paper, Full Application, and/or Reply to Reviewer Comments;
- The termination of award negotiations;
- The modification, suspension, and/or termination of a funding agreement;
- The initiation of debarment proceedings, debarment, and/or a declaration of ineligibility for receipt of Federal contracts, subcontracts, and financial assistance and benefits; and
- Civil and/or criminal penalties.

## **K. RETENTION OF SUBMISSIONS**

EERE expects to retain copies of all Letters of Intent, Concept Papers, Full Applications, Replies to Reviewer Comments, and other submissions. No submissions will be returned. By applying to EERE for funding, Applicants consent to EERE's retention of their submissions.

## **L. TITLE TO SUBJECT INVENTIONS**

The prize competition will be conducted in accordance with the prize authority established in the America COMPETES Reauthorization Act of 2010 (15 U.S.C. §3719). Rights in subject inventions will be retained by competition participants.

## **M. RIGHTS IN TECHNICAL DATA**

Government Rights in Technical Data Produced Under Awards: The U.S. Government retains unlimited rights in technical data produced under Government financial assistance awards, including the right to distribute to the public.

The FOA Awardee will administer the WEC Prize competition in accordance with the prize authority established in the America COMPETES Reauthorization Act of 2010 (15 U.S.C. §3719). All data associated with evaluation of participants' submissions in the competition, and the final testing and evaluation stage of the competition will be obtained by the Prize Administrator. The Prize Administrator is responsible for obtaining written consent from competition participants to release to the public those data specified in the competition rules for public release. The public nature of these data will enable the transparent evaluation of the top performers.

The Prize Administrator is required to establish an agreement with competition participants regarding data rights and intellectual property. The final Terms and Conditions between DOE and the Prize Administrator will contain the necessary flow-down provisions for the participants regarding Government rights to data.

## N. COPYRIGHT

The Prime Recipient and Subrecipients may assert copyright in copyrightable data, such as software, first produced under the award without EERE approval. When copyright is asserted, the Government retains a paid-up nonexclusive, irrevocable worldwide license to reproduce, prepare derivative works, distribute copies to the public, and to perform publicly and display publicly the copyrighted work. This license extends to contractors and others doing work on behalf of the Government.

## O. PROTECTED PERSONALLY IDENTIFIABLE INFORMATION

In responding to this FOA, Applicants must ensure that Protected Personally Identifiable Information (PII) is not included in the following documents: Project Abstract, Project Narrative, Biographical Sketches, Budget, or Budget Justification. These documents will be used by the Merit Review Committee in the review process to evaluate each application. PII is defined by the Office of Management and Budget (OMB) and EERE as:

Any information about an individual maintained by an agency, including but not limited to, education, financial transactions, medical history, and criminal or employment history and information that can be used to distinguish or trace an individual's identity, such as their name, social security number, date and place of birth, mother's maiden name, biometric records, etc., including any other personal information that is linked or linkable to an individual.

This definition of PII can be further defined as: (1) Public PII and (2) Protected PII.

**Public PII:** PII found in public sources such as telephone books, public websites, business cards, university listing, etc. Public PII includes first and last name, address, work telephone number, email address, home telephone number, and general education credentials.

**Protected PII:** PII that requires enhanced protection. This information includes data that if compromised could cause harm to an individual (e.g., identity theft).

Listed below are examples of Protected PII that Applicants must not include in the files listed above to be evaluated by the Merit Review Committee.

- Social Security Numbers in any form
- Place of Birth associated with an individual
- Date of Birth associated with an individual
- Mother's maiden name associated with an individual
- Biometric record associated with an individual
- Fingerprint
- Iris scan
- DNA
- Medical history information associated with an individual



- Medical conditions, including history of disease
- Metric information (e.g., weight, height, blood pressure)
- Criminal history associated with an individual
- Employment history and other employment information associated with an individual
- Ratings
- Disciplinary actions
- Performance elements and standards (or work expectations) are PII when they are so intertwined with performance appraisals that their disclosure would reveal an individual's performance appraisal
- Financial information associated with an individual
- Credit card numbers
- Bank account numbers
- Security clearance history or related information (not including actual clearances held)

Listed below are examples of Public PII that Applicants may include in the files listed above to be evaluated by the Merit Review Committee:

- Phone numbers (work, home, cell)
- Street addresses (work and personal)
- Email addresses (work and personal)
- Digital pictures
- Medical information included in a health or safety report
- Employment information that is not PII even when associated with a name
- Resumes, unless they include a Social Security Number
- Present and past position titles and occupational series
- Present and past grades
- Present and past annual salary rates (including performance awards or bonuses, incentive awards, merit pay amount, Meritorious or Distinguished Executive Ranks, and allowances and differentials)
- Present and past duty stations and organization of assignment (includes room and phone numbers, organization designations, work email address, or other identifying information regarding buildings, room numbers, or places of employment)
- Position descriptions, identification of job elements, and those performance standards (but not actual performance appraisals) that the release of which would not interfere with law enforcement programs or severely inhibit agency effectiveness
- Security clearances held
- Written biographies (e.g., to be used in a Technology Office describing a speaker)
- Academic credentials
- Schools attended
- Major or area of study
- Personal information stored by individuals about themselves on their assigned workstation or laptop unless it contains a Social Security Number

## **P. ANNUAL COMPLIANCE AUDITS**

If a for-profit entity is a Prime Recipient and has expended greater than \$500K of Federal funds in a respective fiscal year, an annual compliance audit performed by an independent auditor may be required. For additional information, please refer to 10 CFR §600.316 and for-profit audit guidance documents posted under the “Coverage of Independent Audits” heading at <http://energy.gov/management/office-management/operational-management/financial-assistance/financial-assistance-forms>

If an educational institution, non-profit organization, or state/local government is a Prime Recipient or Subrecipient and has expended greater than \$500K of Federal funds in a respective fiscal year, then an A-133 audit is required. For additional information, please refer to OMB Circular A-133 through the link below.  
<http://www.whitehouse.gov/sites/default/files/omb/assets/omb/circulars/a133/a133.pdf>

Applicants and sub-recipients (if applicable) should propose sufficient costs in the project budget to cover the costs associated with the audit. EERE will share in the cost of the audit at its applicable cost share ratio.

## **Q. COLLABORATION BETWEEN APPLICANTS**

Given the broad anticipated scope of work, WWPTO is offering to help foster collaboration between applicants (several interested entities submitting a single application together, designating Prime Recipient and Subrecipient(s)). If you would like to be on the list of entities interested in collaboration, please email the following information to [WECFOA979@go.doe.gov](mailto:WECFOA979@go.doe.gov) by 8pm ET on March 17, 2014. A compiled list of entities interested in collaboration will be released by email on March 18, 2014 to everyone who has opted in.

- Name of organization
- Name of organization contact person
- Phone number of organization contact person
- Email address of organization contact person
- Prize Administration focus/specialty of the organization

## **APPENDIX A – DEFINITIONS**

**“Applicant”** means the legal entity or individual signing the Application. This entity or individual may be one organization or a single entity representing a group of organizations (such as a Consortium) that has chosen to submit a single Application in response to a FOA.

**“Application”** means the documentation submitted in response to a FOA. Also see Proposal.

**“Authorized Organization Representative (AOR)”** is the person with assigned privileges who is authorized to submit grant applications through Grants.gov on behalf of an organization. The privileges are assigned by the organization’s E-Business Point of Contact designated in the System for Award Management SAM database.

**“Award”** means the written documentation executed by a Contracting Officer, after an Applicant is selected, which contains the negotiated terms and conditions for providing Financial Assistance to the Applicant. A Financial Assistance Award may be a Grant, Cooperative Agreement, or Technology Investment Agreement (TIA).

**“Budget”** means the cost expenditure plan submitted in the Application, including both the EERE contribution and the Applicant Cost Share.

**“Compliance”** is an eligibility determination that refers to the non-technical requirements outlined in a FOA (e.g., formatting, timeliness of submission, or satisfaction of prerequisites).

**“Consortium (plural Consortia)”** means the group of organizations or individuals that have chosen to submit a single Application in response to a FOA.

**“Contracting Officer”** means the EERE official authorized to execute Awards on behalf of EERE and who is responsible for the business management and non-Technology Office aspects of the Financial Assistance process.

**“Cooperative Agreement”** means a Financial Assistance instrument used by EERE to transfer money or property when the principal purpose of the transaction is to accomplish a public purpose of support or stimulation authorized by Federal statute, and Substantial Involvement is anticipated between EERE and the Applicant during the performance of the contemplated activity. Refer to 10 CFR 600.5 for additional information regarding cooperative agreements.

**“Cost Share”** means that portion of the project costs not borne by the Federal Government. The percentage of Applicant Cost Share is to be applied to the Total Project Cost (i.e., the sum of Applicant plus EERE Cost Shares) rather than to the EERE contribution alone. Cost sharing information can be found in the Code of Federal Regulations at 10 CFR 600.123 (non-profit and university), 600.224 (State and Local Governments), and 600.313 (for profit entities).

**“Data Universal Numbering System (DUNS) Number”** is a unique nine-character identification number issued by Dun and Bradstreet (D&B). Organizations must have a DUNS number prior to registering in the SAM. Call 1-866-705-5711 to receive one free of charge.

**“E-Business Point of Contact (POC)”** is the individual who is designated as the Electronic Business Point of Contact in the SAM registration. This person is the sole authority of the organization with the capability of designating or revoking an individual’s ability to conduct SAM transactions.

**“EERE Exchange”** is the Department of Energy, Energy Efficiency and Renewable Energy’s web system for posting Federal FOAs and receiving applications. It can be found at <https://eere-Exchange.energy.gov>.

**“E-Find”** is a Grants.gov webpage where you can search for Federal Funding Opportunities in FedGrants. It can be found at <http://www.grants.gov/search>.

**“FedConnect”** is where federal agencies make awards via the web. It can be found at <https://www.fedconnect.net/FedConnect/>.

**“Federally Funded Research and Development Center (FFRDC)”** means a government-sponsored operation that exists for the purpose of carrying out various functions related to both basic and applied research and development on behalf of the Government. Typically, most or all of the facilities utilized in an FFRDC are owned by the Government, but the operations are not always managed by the Government; an FFRDC may be managed by a University or consortium of Universities, other not-for-profit or nonprofit organization, or a for-profit organization, with the Government performing an oversight function.

**“Financial Assistance”** means the transfer of money or property to an Applicant or Team Member to accomplish a public purpose of support authorized by Federal statute through Grants or Cooperative Agreements and sub-awards. For EERE, it does not include direct loans, loan guarantees, price guarantees, purchase agreements, Cooperative Research and Development Agreements (CRADAs), or any other type of financial incentive instrument.

**“Funding Opportunity Announcement (FOA)”** is a publicly available document by which a Federal agency makes known its intentions to award discretionary grants or cooperative agreements, usually as a result of competition for funds. FOAs may also be known as notices of funding availability, solicitations, or other names depending on the agency and type of program. See 10 CFR 600.8 for more information.

**“Grant”** means a Financial Assistance instrument used by EERE to transfer money or property when the principal purpose of the transaction is to accomplish a public purpose of support or stimulation authorized by Federal statute and no Substantial Involvement is anticipated between EERE and the Applicant during the performance of the contemplated activity.

**“Grants.gov”** is the “storefront” web portal which allows organizations to electronically find grant opportunities from all Federal grant-making agencies. Grants.gov is THE single access point for over 900 grant programs offered by the 26 Federal grant-making agencies. It can be accessed at <http://www.grants.gov>.

**“Indian Tribe”** means any Indian tribe, band, nation, or other organized group or community, including Alaska Native village or regional or village corporation, as defined in or established pursuant to the Alaska Native Claims Settlement Act (85 Stat. 688)[43 U.S.C. §1601 et seq.], which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.

**“Key Personnel”** mean the individuals who will have significant roles in planning and implementing the proposed Project on the part of the Applicant and Team Members, including FFRDCs.

**“Marketing Partner Identification Number (MPIN)”** is a very important password designated by your organization when registering in SAM. The E-Business Point of Contact will need the MPIN to assign privileges to the individual(s) authorized to perform SAM transactions on behalf of your organization. The MPIN must have 9 digits containing at least one alpha character (must be in capital letters) and one number (no spaces or special characters permitted).

**“Modification”** means a revision to a FOA.

**“Prime Recipient”** means the organization, individual, or other entity that receives a Financial Assistance Award from EERE (i.e., is the signatory on the award), is financially accountable for the use of any EERE funds or property provided for the performance of the Project, and is legally responsible for carrying out the terms and condition of the award.

**“Principal Investigator (PI)”** refers to the technical point of contact/Project Manager for a specific project award.

**“Project”** means the set of activities described in an Application, State plan, or other document that is approved by EERE for Financial Assistance (whether such Financial Assistance represents all or only a portion of the support necessary to carry out those activities).

**“Project Team”** means the team which consists of the Prime Recipient, Subrecipients, and others performing or otherwise supporting work under an EERE funding agreement.

**“Proposal”** is the term used to describe the documentation submitted in response to a FOA. Also see Application.

**“Responsiveness”** is an eligibility determination that refers to the objective technical requirements (not goals or targets) outlined in a FOA, such as a technology type or technical parameters. For example, submission of a photovoltaic solar panel design in response to a FOA

calling for innovative geothermal drilling technologies should be found nonresponsive. Likewise, an application with a design that incorporates rare earth materials to a FOA that prohibits the use of rare earth materials should be found nonresponsive. Conversely, the belief that a technology will not achieve the technical targets of the FOA will never be used as a proper basis for a rejection as nonresponsive.

**“System for Award Management (SAM)”** is the primary database that collects, validates, stores and disseminates data in support of agency missions. It can be accessed at <https://www.sam.gov>.

**“Selection”** means the determination by the EERE Selection Official that negotiations take place for a certain Project with the intent of awarding a Financial Assistance instrument.

**“Selection Official”** means the EERE official designated to select an Application for negotiation toward Award under a FOA.

**“Substantial Involvement”** means involvement on the part of the Government. EERE's involvement may include shared responsibility for the performance of the Project; providing technical assistance or guidance which the Applicant is to follow; and the right to intervene in the conduct or performance of the Project. Such involvement will be negotiated with each Applicant prior to signing any agreement.

**“Technology Investment Agreement (TIA)”** is a type of assistance instrument used to support or stimulate research projects involving for-profit firms, especially commercial firms that do business primarily in the commercial marketplace. TIAs are different from grants and cooperative agreements in that the award terms may vary from the Government-wide standard terms (See DOE TIA regulations at 10 CFR Part 603). The primary purposes for including a TIA in the type of available award instruments are to encourage non-traditional Government contractors to participate in an R&D program and to facilitate new relationships and business practices. A TIA can be particularly useful for awards to consortia (See 10 CFR 603.225(b) and 603.515, Qualification of a consortium).

**“Total Project Cost”** means all the funds to complete the effort proposed by the Applicant, including EERE funds (including direct funding of any FFRDC, but not including funding to Program-Identified Partners) plus all other funds that will be committed by the Applicant as Cost Sharing.

**“Tribal Energy Resource Development Organization or Group”** means an “organization” of two or more entities, at least one of which is an Indian Tribe that has the written consent of the governing bodies of all Indian Tribes participating in the organization to apply for a grant, loan, or other assistance under 25 U.S.C. §3503.

## **APPENDIX B –DEFINITIONS SPECIFIC TO WEC PRIZE FOA**

**“Competition Criteria”** are the criteria against which the competition participants will be evaluated at various stages during the challenge. The Competition Criteria will be developed to ensure that the prize winner(s) can demonstrate that the Prize-Specific Objectives have been met, and the innovations will lead to economic viability of the technology at commercial scale in the open-ocean wave energy harvesting environment. The following criteria or a subset of these criteria are possible Competition Criteria: a proxy for device cost (size, weight, displaced volume); annual energy production and LCOE calculations at a reference resource; reliability and survivability of the concept; an operations and maintenance strategy; degree of environmental impacts and potential for mitigation; and potential for scaling the concept to commercialization scale. The final Performance Metric(s) are a subset of the Competition Criteria.

**“Marine and Hydrokinetic (MHK) Technologies”** are devices that convert the energy of waves, tides, and river and ocean currents into electricity.

**“Participant”** refers to any entity entering the WEC Prize competition.

**“Performance Metric(s)”** is the technical, quantitative metric that is used to evaluate competition participants during the final testing and evaluation stage in the wave tank. Performance Metric(s) are a subset of the Competition Criteria.

**“Point Solution Prize”** refers to the type of prize that focuses on solving well-defined problems with no clear path to a solution.

**“Prize Administrator”** refers to the FOA Awardee, the single entity selected to administer the WEC Prize.

**“Prize-Specific Objectives”** refers to a set of measurable aims, conceived and to be achieved by the Prize Administrator. These objectives, once accomplished, will provide the pathway to achieving the broad Program Goal or the refined goal.

**“Program”** is the Department of Energy’s Wind and Water Power Technologies Office’s Water Power Program.

**“Program Goal”** means the broad goal for the WEC Prize: spurring 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).

**“Program-Identified Partners”** refer to the prescribed technical experts and the tank test facility (Section I.B.3) that will partner with the Prize Administrator to develop and implement the WEC Prize.



**“Wave Energy Converter (WEC) Prize”** is a Program initiative, to be administered by the FOA Awardee (Prize Administrator). The WEC Prize is comprised of phases including: prize development based on achieving the broad Program Goal, implementation of the WEC Prize Competition stages (e.g. design, build, and test and evaluation), and post-competition publicity and wrap-up.

**“WEC Prize Competition”** is a single phase of the WEC Prize encompassing a set of anticipated competition stages – design, build, and test and evaluation – during which the competition participants will develop game-changing performance enhancements to WEC devices, establishing a pathway to sweeping cost reductions at a commercial scale.