

Revised Notice of Intent No. DE-FOA-0002847

Notice of Intent to Issue Funding Opportunity Announcement No. DE-FOA-0002845

The Office of Energy Efficiency and Renewable Energy (EERE) intends to issue, on behalf of the Water Power Technologies Office (WPTO), a Funding Opportunity Announcement (FOA) entitled "Bipartisan Infrastructure Law (BIL), Section 41006(a)(2): U.S. Tidal Energy Advancement."

Background

On November 15, 2021, President Joseph R. Biden, Jr. signed the Infrastructure Investment and Jobs Act (Public Law 117-58), also known as the Bipartisan Infrastructure Law (BIL).¹ The BIL is a once-in-a-generation investment in infrastructure, designed to modernize and upgrade American infrastructure to enhance United States competitiveness, drive the creation of goodpaying union jobs, tackle the climate crisis, and ensure stronger access to economic, environmental, and other benefits for disadvantaged communities.² The BIL appropriates more than \$62 billion to the Department of Energy (DOE) to invest in American manufacturing and workers; expand access to energy efficiency and clean energy; deliver reliable, clean and affordable power to more Americans; and demonstrate and deploy the technologies of tomorrow through clean energy demonstrations.

To support the goal of building a clean and equitable energy economy, the BIL-funded projects are expected to (1) support meaningful community and labor engagement; (2) invest in America's workforce; (3) advance diversity, equity, inclusion, and accessibility; and (4) contribute to the President's goal that 40% of the overall benefits of certain federal investments flow to disadvantaged communities (the Justice40 Initiative³).

Technical Objectives

While marine energy is still at an early stage of development, there have been significant advances in the United States and abroad in the commercialization of tidal and current energy.

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¹ Infrastructure Investment and Jobs Act, Public Law 117-58 (November 15, 2021). https://www.congress.gov/bill/117th-congress/house-bill/3684. This FOA uses the more common name "Bipartisan Infrastructure Law".

² Pursuant to E.O. 14008 and the Office of Management and Budget's Interim Justice40 Implementation Guidance M-21-28, DOE has developed a definition and tools to locate and identify disadvantaged communities. These resources can be located at https://energyjustice.egs.anl.gov/. DOE will also recognize disadvantaged communities as defined and identified by the White House Council on Environmental Quality's Climate and Economic Justice Screening Tool (CEJST), which can be located at https://screeningtool.geoplatform.gov/.

³ The Justice40 initiative, created by E.O. 14008, establishes a goal that 40% of the overall benefits of certain federal investments flow to disadvantaged communities. The current Justice40 guidance provides a broad definition of disadvantaged communities (Pages 8-10): Final DOE Justice40 General Guidance 072522.pdf (energy.gov).

Domestically, the tidal industry is at a phase in development that requires moving from single device testing to full site development. The complexity of installing devices, navigating the permitting processes, and a lack of connection to states or local utilities have proven to – and will continue to – be a consistent barrier to advancing tidal and current energy. Significant opportunities remain for the United States to lead commercialization and testing of tidal energy, which could serve U.S. populations and lessons learned could be exported to international markets.

To support the development of tidal and current energy systems in the United States, and advance the state of these technologies, DOE will provide \$45 million in total funding under BIL Section 41006(a)(2) to fund the first large scale investment for the development of a tidal Research, Development and Demonstration (RD&D) site, as well as community-led tidal energy planning and project execution:

<u>Topic Area (TA) 1: Tidal or Current Site Development</u>, will provide \$35 million in total funding to support a tidal or current site development project led by a project/site developer in the U.S. which includes in-water testing and operations of at least one tidal energy system. The overall goals for Topic Area 1 are to:

- Build upon state clean energy strategies with local partners;
- Attract competitive tidal/current developers for technology site integration;
- Improve tidal/current R&D;
- Build site infrastructure and supply chains, with increased participation at the state level, including local agency, Tribal and university research participation; and
- Establish a working tidal and current energy business model.

Topic Area (TA) 2: Community-Led Tidal and Current Energy Planning and Project Execution, will provide up to \$10 million to support at least one tidal or current energy planning and execution project in the U.S., preferably led by a community-based organization or local/municipal government entity.

The overall goals for Topic Area 2 are to:

- Understand the design constraints and opportunities to be considered with community-led tidal and current energy installations;
- Identify and design a tidal or current energy project to minimize the cost drivers of a community-led installation, including supply chain, capacity to operate and maintain a tidal or current energy system, and integration with other renewables, storage, or a local grid;

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- Optimize the partnership and engagement model for community-driven tidal or current energy installation projects, which encompasses Tribal governments and multiple stakeholders including community representatives, project developers, technology developers, utility representatives, state, or local, government, and permitting bodies, among others;
- Design and develop at least one community-led tidal or current energy project in the US, which would create a template or replicable guide for other communities across the US and its territories; and
- Advance tidal and current energy R&D for community-led projects.

TA 1 is anticipated to be separated into five (5) programmatic phases as follows:

Budget Period #	Phase #: Name	Year #	Budget and Award
1	Phase 1: Preliminary Tidal/Current Site R&D Full characterization of the tidal site, physical and desk top data collection, planning for resource, location, and infrastructure requirements, and community engagement plans.	1	\$6M Total: Up to 2 Awards at up to \$3M each, two Budget Periods. Down-Select to one award at the end of first budget period.
2	Phase 2: Detailed Tidal/Current Site R&D Detailed site characterization with site licensing/permitting progression, environmental monitoring data collection, onshore infrastructure, and tidal technology selection.	2	\$4M
3	Phase 3: Infrastructure Development, Technology Selection Onshore infrastructure development, technology integration planning, supply chain engagement and development.	3 & 4	\$10M
4	Phase 4: Technology Fabrication, Installation Tidal technology fabrication, mobilization, installation, connection activities will commence. Phase 5: Test to Operations	5 & 6	\$15M

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monitoring, and sustainability planning.	Power performance testing, environmental monitoring, and sustainability planning.	

In TA1, EERE envisions awarding two financial assistance awards in the form of cooperative agreements in Phase 1 of the planned FOA. The estimated period of performance for both awards in Phase 1 will be one year, with a competitive down-selection to one award at the end of Phase 1. EERE envisions selecting a single financial assistance award in the form of a cooperative agreement for Phases 2-5.

TA2 will allot up to \$10 million to fund at least one community-led tidal and current energy planning and development project in the US. WPTO seeks to build upon the success of community-led technical assistance programs, like the Energy Transitions Initiative Partnership Project, and advance projects from energy resilience design to technology validation. It is anticipated that there will be up to two financial assistance awards in the form of cooperative agreements with an estimated period of performance for up to five years.

Tidal and current energy site development with strong community engagement will be central to this FOA. Teaming arrangements are strongly encouraged. This FOA will encourage potential Applicants to form partnerships with utilities, academia; state, regional, and Tribal governments; community-based organizations; and technology developers. DOE plans to engage the National Renewable Energy Laboratory (NREL), Pacific Northwest National Laboratory (PNNL), and Sandia National Laboratory (SNL) for technical support for future FOA Awardees. Accordingly, Applicants are not permitted to communicate with NREL, PNNL, and SNL for teaming arrangements at this time.

DOE is compiling a "Teaming Partner List" to facilitate the formation of new project teams for this FOA. The Teaming Partner List allows organizations who may wish to participate on an application to express their interest to other applicants and to explore potential partnerships.

Updates to the Teaming Partner List will be available in the EERE Exchange website. The Teaming Partner List will be regularly updated to reflect new teaming partners who provide their organization's information.

SUBMISSION INSTRUCTIONS: Users will see a new section, "Teaming Partners", within the left-hand navigation in eXCHANGE. This page allows users to view published Teaming Partner Lists and any interested party that would like to be included on this list should submit a request within eXCHANGE to join the teaming partner list. Select the appropriate Teaming Partner List from the dropdown and fill in the following information: Investigator Name, Organization

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Name, Organization Type, Topic Area, Background and Capabilities, Website, Contact Address, Contact Email, and Contact Phone.

DISCLAIMER: By submitting a request to be included on the Teaming Partner List, the requesting organization consents to the publication of the above-referenced information. By facilitating the Teaming Partner List, DOE is not endorsing, sponsoring, or otherwise evaluating the qualifications of the individuals and organizations that are self-identifying themselves for placement on this Teaming Partner List. DOE will not pay for the provision of any information, nor will it compensate any applicants or requesting organizations for the development of such information.

This Notice is issued so that interested parties are aware of the EERE's intention to issue this FOA in the near term. All the information contained in this Notice is subject to change. EERE will not respond to questions concerning this Notice. Once the FOA has been released, EERE will provide an avenue for potential Applicants to submit questions.

EERE plans to issue the FOA on or about March 2023 via the EERE eXCHANGE website https://eere-eXCHANGE.energy.gov/. If Applicants wish to receive official notifications and information from EERE regarding this FOA, they should register in EERE eXCHANGE. When the FOA is released, applications will be accepted only through EERE eXCHANGE.

In anticipation of the FOA being released, Applicants are advised to complete the following steps, which are <u>required</u> for application submission:

Register and create an account in EERE eXCHANGE at https://eere-eXCHANGE.energy.gov.
 This account will allow the user to apply to any open EERE FOAs that are currently in EERE eXCHANGE.

Beginning on July 29, 2022, eXCHANGE will be integrated with Login.gov. As of September 29, 2022, potential applicants will be required to have a Login.gov account to access EERE eXCHANGE. As part of the eXCHANGE registration process, new users will be directed to create an account in Login.gov. Please note that the email address associated with Login.gov must match the email address associated with the eXCHANGE account. For more information, refer to the Exchange Multi-Factor Authentication (MFA) Quick Guide in the Manuals section of eXCHANGE.

It is recommended that each organization or business unit, whether acting as a team or a single entity, <u>use only one</u> account as the contact point for each submission. Questions related to the registration process and use of the EERE Exchange website should be

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submitted to: EERE-eXCHANGESupport@hq.doe.gov.

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. Upon registration, SAM will automatically assign a Unique Entity ID (UEI).

NOTE: Due to the high demand of UEI requests and SAM registrations, entity legal business name and address validations are taking longer than expected to process. Entities should start the UEI and SAM registration process as soon as possible. If entities have technical difficulties with the UEI validation or SAM registration process they should utilize the HELP feature on SAM.gov. SAM.gov will work entity service tickets in the order in which they are received and asks that entities not create multiple service tickets for the same request or technical issue. Additional entity validation resources can be found here: GSAFSD Tier 0 Knowledge Base - Validating your Entity.

- 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/Marketing/Documents/FedConnect Ready SetGo.pdf
- Register in Grants.gov to receive automatic updates when Amendments to a FOA are
 posted. However, please note that applications <u>will not</u> be accepted through
 Grants.gov. http://www.grants.gov/. All applications must be submitted through EERE
 eXCHANGE.

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