Notice of Intent No. DE-FOA-0002872

Notice of Intent to Issue Funding Opportunity Announcement No. DE-FOA-0002855: Decarbonization of Water Resource Recovery Facilities (D-WRRF)

The Office of Energy Efficiency and Renewable Energy (EERE) intends to issue, on behalf of the Industrial Efficiency and Decarbonization Office, a Funding Opportunity Announcement (FOA) entitled "Decarbonization of Water Resource Recovery Facilities (D-WRRF)".

The Industrial Efficiency and Decarbonization Office (IEDO) supports innovation in technologies and the adoption of practices to enable the industrial sector to cost-effectively reduce greenhouse gas emissions. IEDO and its programs are critical to putting the Nation on a pathway to reduce CO_2 emissions by 50% by 2030 when compared to 2005 levels, and to achieve net-zero carbon emissions by 2050.

With 30% of primary energy-related emissions attributable to the industrial sector, IEDO builds upon and expands traditional focus on energy efficiency to include an emphasis on industrial emissions reduction technology such as electrification, low carbon fuels and feedstocks, and carbon capture. IEDO provides planning, management, and direction necessary for a balanced national program of research, development, demonstration, technical assistance, and workforce development related to technologies for energy efficiency and decarbonization of the industrial sector.

Within this mission, IEDO has a specific focus on the decarbonization of the water-energy nexus, which includes both "fit-for-purpose" water from all sources, as well as efficiency and resource recovery for organic wastewaters, particularly targeting municipal Water Resource Recovery Facilities (WRRFs) per Congressional direction.

It is anticipated that the FOA may include the following Areas of Interest:

Area of Interest 1: Decarbonization of WRRF Unit Processes

Research and Development projects to reduce greenhouse gas (GHG) emissions from various unit processes within WRRFs. Innovations to reduce N₂O and CH₄ emissions are among the most promising avenues for cutting direct emissions. Indirect emissions are centered around electricity use for aeration, so replacing aerobic processes with anaerobic operations is another area of high potential. Sludge reduction is another area with potential to reduce both GHG

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emissions and WRRF costs. Applications under this area of interest are expected to focus on emission and cost reductions from particular unit processes.

Area of Interest 2: Reducing overall greenhouse gas (GHG) emissions from WRRFs

Pilot and Demonstration projects to reduce GHG emissions and treatment costs for WRRFs. Proposals in this topic will address the GHG emissions profiles of a WRRF as a whole at larger scales and higher levels of technology readiness than area of interest one. Cost reductions are also desirable in order to increase the probability of technology adoption in the field.

For both areas of interest, EERE anticipates requiring that either a WRRF or a relevant non-profit, forprofit, or government entity be the prime applicant, and that a WRRF be a major participant even if they are not the lead organization. This constraint is intended to encourage applications with a high probability of actual adoption in the field, as contrasted with early-stage research efforts. EERE also visualizes setting forth both GHG and cost reduction targets for both topic areas. Additional details will be provided in the FOA document, if and when issued.

EERE envisions awarding multiple financial assistance awards in the form of cooperative agreements. The estimated period of performance for each award will be approximately 3-5 years.

This Notice is issued so that interested parties are aware of the EERE's intention to issue this FOA in the near term. All of the information contained in this Notice of Intent 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 mid-December via the EERE eXCHANGE website <u>https://eere-eXCHANGE.energy.gov/</u>. 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 **required** for application submission:

 Register and create an account in EERE eXCHANGE at <u>https://eere-eXCHANGE.energy.gov</u>. 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 updated to integrate with Login.gov. As of

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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</u> one account as the contact point for each submission. Questions related to the registration process and use of the EERE Exchange website should be submitted to: <u>EERE-eXCHANGESupport@hq.doe.gov</u>

- 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).
- Register in FedConnect at <u>https://www.fedconnect.net/</u>. 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 <u>https://www.fedconnect.net/FedConnect/Marketing/Documents/FedConnect_Ready_Set_Go.pdf</u>
- 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. <u>http://www.grants.gov/</u>. All applications must be submitted through EERE eXCHANGE.

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