PORT OF HOUSTON AUTHORITY Grants Management

2023-2024 EPA CLEAN PORTS GRANT APPLICATION CALL FOR PARTNERS

December 11, 2023

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Shore Power for Container Ships

INTRODUCTION

The Port of Houston Authority (the Port) is applying for grant funding to support the Port's 2050 Sustainability Roadmap to carbon neutrality and to further support clean air for the greater Port of Houston area (the Greater Port of Houston). Currently, there are unprecedented and substantial funding opportunities through the Inflation Reduction Act of 2022, in addition to other state and federal grant programs. These grant opportunities require industry participation in terms of expressed interest, and in some cases a commitment to local share of costs.

In fall 2023, the U.S. Environmental Protection Agency (EPA) announced intent to issue a funding opportunity under the Clean Ports Program (CPP) to distribute approximately \$3 billion to fund zero-emission port equipment and technology and to help ports develop climate action plans to reduce air pollutants at U.S. ports. The Port is preparing projects to compete for CPP funds in planning and zero-emission implementation projects. Successful projects are contingent on the development of partnerships with key collaborators. With this Call for Partners (CFP), the Port is seeking interest from qualified and eligible companies and/or entities to potentially participate as a subrecipient(s) (Partner) in grant opportunities as exemplified by the EPA's CPP.

PURPOSE AND NEED

The Greater Port of Houston is one of the busiest ports in the nation with more than 200 public and private terminals along the Houston Ship Channel. Known as the *Energy Capital of the World*, it is the nation's largest port for waterborne tonnage, with economic activity supporting 1.5 million jobs in Texas and generating hundreds of billions of dollars across the nation. An unintended consequence of this economic success includes emissions of more than 6.5 million tons of greenhouse gas (2020 Harris County) and has led to exceedances of national criteria pollutants. These exceedances contribute to the region's severe nonattainment status for ground-level ozone.

The Port is within the 8-county Houston-Galveston-Brazoria nonattainment area (the 8-County Area) classified by the EPA as exceeding the National Ambient Air Quality Standards (NAAQS) for ground-level ozone, a harmful air pollutant and the main ingredient in "smog." Ozone is created by chemical reactions between oxides of nitrogen (NO_X) and volatile organic compounds (VOC), which are the criteria pollutants for the formation of ground-level ozone. These pollutants, in addition to greenhouse gases, are emitted by cars, trucks, industrial equipment, trains, ships, power plants, industrial boilers, refineries, and chemical plants.

Harris County, where the Port operates, is one of the counties in the 8-County Area, which in addition to being nonattainment for ground-level ozone is also classified by EPA as a near-nonattainment area for exceeding the NAAQS for particulate matter ($PM_{2.5}$). Emissions from the movement of freight presents a barrier to the area complying with the National Ambient Air Quality Standards in addition to being a source of greenhouse gases, carbon dioxide equivalents (CO2e). A significant percent of the 8-County Area's NO_X , VOCs, and PM emissions are a consequence of freight movement operations within the Greater Port of Houston as well as the Port.

BACKGROUND

The Port is authorized by the State of Texas to be the local advocate and non-federal sponsor for the 52-mile Houston Ship Channel. The Port's responsibilities encompass, but are not limited to, channel development tasks to facilitate the free flow of commerce in and out of the Houston Ship Channel. Additional responsibilities include owning, managing, and operating eight public terminals along the Houston Ship Channel. These terminals include the area's largest breakbulk facility and two of the most efficient container terminals in the country. As the non-federal sponsor and strategic leader for the Houston Ship Channel complex, the Port is also recognized as its environmental leader.

Exemplifying the Port's environmental leadership, the Port's Commissioners adopted and committed to a Sustainability Roadmap (the Sustainability Roadmap) to reach carbon neutrality by 2050. This ambitious goal is essential to decarbonize the Port's owned and operated facilities, as well as influencing freight related operations within the Greater Port of Houston, which makes up the larger and more significant emissions.

Though less than the Greater Port of Houston, the Port's specific NO_X emissions contribute 6.3% to the 8-County Area's overall NO_X emissions, as based on the Port's Goods Movement Emissions Inventory report (2019). Emissions from Ocean Going Vessels (OGVs) account for 59% of Port Houston's NO_X emissions. OGVs include 43% of volatile organic compounds (VOC) emissions, 35% of PM emissions, 99% sulfur (SOX) emissions, and 39% of carbon dioxide equivalents (CO2e) emissions. These Port specified percentages are a significant percent of the overall emissions in the 8-County Area.

POTENTIAL PROJECTS

Projects the Port is considering for the CPP grant include, but are not limited to, shore power at the Port's Bayport Terminal. Shore power has the potential to significantly assist the Port's goal of carbon neutrality by 2050. In addition, it potentially will reduce emissions across all criteria pollutants, thereby helping the region meet the national air quality standards for ground-level ozone and improve the quality of life for communities surrounding the Port with reductions in particulate matter/soot and ship-generated noise pollution. Though ocean-going vessels (OGVs) are a Scope 3 source of emissions, i.e., the Port does not own or operate the ships, they are the single largest source of all emissions directly related to the movement of goods at the Port (PHA GMEI 2019).

Shore power is not mandated in Texas as at other U.S. ports and in other countries. However, dedicated fleets with shore power capabilities are growing worldwide due to existing and recent regulations in the U.S., Europe, and Asia. Without regulations, the impetuses for ships to use shore power include shippers' own sustainability goals and if the pass-thru electricity cost, compared to the cost of Marine Gas Oil (MGO), is cheaper. Given the Port's 100% renewable electricity contract, if the energy supplied to ships through shore power is from that contract, it will be net zero.

OGVs at Port Houston emit 259,134 tons of CO2e annually and include the following vessel types and percent of calls: 15% Bulk, 40% Container, 11% General Cargo, 5% Auto RoRo, and 29% Tankers. Shore power works best when ships operate in liner-type services that have the same vessels calling in a frequent rotation over a number of years to the same terminal(s). In 2022 there were a few dozen shore power capable ships making multiple trips to Port Houston's Bayport Container Terminal.

The Port is seeking proposals of interest from companies supplying the components for shore power at the Port's Bayport Terminal. Examples include but are not limited to the following components needed for shore power: Power Source, Transformer, Cables, Switchboard, and a Cables (Power Source), Transformer, Cables, Switchboard, and a Cables (Power Source), Transformer, Cables, Switchboard, and a Cables (Power Source), Transformer, Cables, Switchboard, and a Cables (Power Source), Transformer, Cables, Switchboard, and a Cables (Power Source), Transformer, Cables, Switchboard, and a Cables, Switchboard, and a Cables, Switchboard, and a Transformer, <a href="Tran

CALL FOR PARTNERS

The purpose of this CFP is in establishing subrecipient (Partner) agreements between the Port and selected providers of shore power components. Each Partner will work with the Port to scope a shore power project and submit a competitive grant proposal to the EPA's CPP Notice of Funding Opportunity (NOFO). In addition, established Partners will be eligible to team with the Port on other relevant federal and/or state funding opportunities as they become available. The Port may also identify additional Partner(s) and project team(s)with whom to develop proposals for other programs administered by federal or state agencies that encompass shore power projects.

The Port will evaluate submitted proposals for selection according to the provided eligibility criteria for becoming a Partner and being included in the Port's CPP grant application. The Port intends to work with the Partner(s) selected through this CFP to develop competitive grant proposals through the end of fiscal year 2024. If the grant proposals are successful and are selected to receive grant funds, the Port would then enter into subaward agreement(s) with the applicable Partner(s). The Port may, at its discretion, issue additional calls for partners/projects for other specific grant opportunities if warranted. The Port reserves the right to identify or select one or multiple Partner(s) to enable a pipeline of projects ready for a variety of funding opportunities. The Port also reserves the right to select no Partner(s).

In a subaward arrangement, grant funds would be issued to Partners on a reimbursement basis after eligible project costs are incurred. All Partners will be responsible for adhering to federal and/or state laws, regulations, and terms and conditions associated with awarded grant funds. Potential Partners or other organizations not familiar with these types of requirements are encouraged to read 2 CFR (Code of Federal Regulations) 200 closely to ensure understanding and awareness of federal requirements. Partners will also be required to submit a federally required risk assessment before entering a subaward agreement with the Port.

This information is required for compliance with the anticipated CPP NOFO as well as other federal grant and related procurement regulations. Any questions regarding this CFP should be directed in writing to https://www.grantinterface.com/Home/Logon?urlkey=porthouston. The deadline for submitting questions is Wednesday, January 3, 2024.

Responses to this CFP are due by Wednesday, January 10, 2024, by 5:00 pm Central Standard Time. Final determination of eligibility to participate is anticipated to be made within 30 working days of the submittal deadline. Please see below for further eligibility criteria, recommendations, and other information on response submissions.

ELIGIBILITY CRITERIA

Parties interested in being Partner(s) should submit information on specific candidate project(s) to a sufficient level of detail for the Port to understand the envisioned scope, deployment levels, roles, and responsibilities, with the understanding that some details and project elements may be refined and/or

updated through collaboration with the Port. Such parties should include, at a minimum, organizations that serve as many of the following roles as practicable and relevant. A single organization could serve more than one role. Hereafter, Partners and their potential participants shall be referred to as the "Project Team."

The Port will coordinate with selected Partner(s) to finalize specific project details, however, selected Partner(s) are expected to have at least some project concepts already under development. For the submittal to the CPP NOFO, proposed Partner(s) and their project(s) must:

Required

- o Familiar with High-voltage shore connection (HVSC): 6,600 volts /7.5 MVA
- o Have a CAGE Code.
- o Prepared to comply with the federal Build America, Buy America requirements, or a justification for a waiver.
- o Be an eligible entity for federal funding (i.e., active sam.gov registration).
- o Meet EPA standards.
- o Comply with project eligibility.
- o Support CPP considerations.

Recommended

- o Previous deployment of technology.
- o If applicable, utility provider/collaborator(s).

The completeness of the Project Team(s) and likelihood of successful project implementation will be key factors in selecting successful responses.

Applicant Project Team(s) must identify a Lead and someone to serve as primary point of contact with the Port. The Project Team(s) must submit:

- A signed "Letter of Partnership," on letterhead, that includes a Lead responsible for the Project Team's fiscal decision-making and a designated point of contact.
- A "Partnership Commitment Letter" from named entity that commits to its role and responsibility in the project. All letters must be signed by individuals of decision-making authority within their entities.
- A "Partnership Proposal," limited to 15 pages, that includes the following content:
 - o Description of each entity participating in the Project Team, including expertise in past associated projects, and expected role and responsibilities in the proposed collaboration.
 - o Key staff contact(s) for each entity, along with expected roles and responsibilities in the proposed collaboration.
 - o Description of each Project Team member's experience receiving or managing federal or state grant funds either directly with a federal/state agency or as a subrecipient to another entity.
 - o Description of any long-range organizational goals or plans regarding the

- transition to shore power and needed infrastructure.
- o Readiness of the Project Team to deploy similar project(s) (e.g., do Project Team members need to enter into formal agreements among themselves for the proposed collaborations, are such agreements already in place, etc.).
- o Identification of any key partners necessary for project success not included in the submitting Project Team.
 - 1. Additional Partner(s) may be added to the Project Team after selection through this CFP but may have to be selected through an open, competitive Request for Proposals or solicitation in consultation with the Port.
- o Description/estimate of non-federal match that the Project Team(s) can provide (the Project Team will be expected to provide a required match; the Port does not anticipate providing all matching funds). Also identify any non-cash resources that can be brought to the project. Note that the Port only considers cash match as eligible; any non-cash items should be identified as other resources, not match.
- o The proportion of federal funding available is unknown. Based on other EPA funding programs, the Port anticipates that federal funding would likely range from 50 to 80 percent of total project costs. Therefore, the Project Team(s) would be expected to provide a minimum of 20 to 50 percent non-federal match.
- o Description of any grant-writing resources or support that the Project Team(s) can bring to the project.
- o Description of the envisioned project(s), including as much information as known regarding:
- o If replicable to other ports, and/or other users.
- o Ideas about potential for including future proofing or resilience elements, especially those described in the 2050 Sustainability Roadmap.
- o Anticipated project timelines.
- o Discussion of key risks/pitfalls and proposed solutions.
- o Ideas about how the project could incorporate disadvantaged businesses, workforce development or training initiatives, and community engagement.
- o An estimate of total project costs, to the extent known.

Other attachments may include maps, charts, budget tables, or other information helpful in clarifying the envisioned project. These items do not count toward the 15-page limit.

SELECTION CRITERIA

Selection of the Project Team Partner(s) will be determined based on a qualitative evaluation of the responsiveness to content outlined in the preceding "Eligibility Requirements" section. Evaluation will assess:

Federal Eligibility.

- CAGE Code.
- Active Status.
- Completeness of the Project Team. (Sample assessment question, has the applicant included an entity representing all critical perspectives in the proposal?)
 - o For example, a Project Team that includes general shore power components, would be less complete than one that includes specified and identified component elements, specifically related to high-voltage shore connection (HVSC): 6,600 volts /7.5 MVA. Roles identified as "Critical Team Members" are higher priority than those listed as "Recommended Team Members" and will be assessed accordingly. No changes to the identified Team will be allowed without the approval of the Port.
- Likelihood of project success based on the:
 - o Experience and readiness of the Project Team
 - o Appropriate divisions of roles/responsibilities; and
 - o Maturity/detail of the project ideas being proposed, including budget estimates.
 - Demonstrated availability of matching funds. The Port expects a minimum non-federal match requirement of 20 to 50 percent total project cost will be required and will require all match to be provided by the Project Team. Applicants should detail both amounts and sources of matching funds, as well as financial capabilities to complete the project on time.
 - o Extent of grant-writing or other resources available
 - Degree to which the envisioned project is consistent with recommendations from the 2050 Sustainability Roadmap.

The Port is not obligated to fund any proposal from any entity, Selection through this CFP is not a guarantee of funding, but simply indicates that the selected Project Team(s) will work with the Port on competitive grant proposal(s). Partnership in a proposal submitted by the Port does not constitute a guarantee of grant funding or agreement with the Port for project implementation as funding is contingent on award by the grant funding agency. Selected proposals will be refined in conjunction with the Project Team(s) based on the details of the federal or state grant opportunities to which the Port is submitting. Selected Project Team(s) would have an opportunity to re-confirm their commitment/participation prior to the Port submitting any grant applications.

SCHEDULE

The schedule is as follows:

- CFP Issued: Monday, December 11, 2023.
- Deadline for submitting questions: Wednesday January 3, 2024,
 - Any questions should be directed in writing to: https://www.grantinterface.com/Home/Logon?urlkey=porthouston.
- Responses to CFP due: Wednesday, January 10, 2024, by 5:00 pm Central Standard

Time

SUBMITTAL INSTRUCTIONS

Responses to this CFP are due by 5:00 pm Central Standard Time, Wednesday, January 10, 2024. Responses must be submitted in electronic form to https://www.grantinterface.com/Home/Logon?urlkey=porthouston. Responses received after that time will not be considered and the applicant notified; hard copy responses will not be considered compliant as a response. Electronic response signatures and, if necessary, notary seals, will be considered as "Original."

- Formatting Responses should be no more than 15 pages, single-spaced, in Times New Roman 12-point font (exception for charts 10-point font) with 1-inch margins entity, page number, and total pages in the packet (e.g., [Applicant] 1 of 15). Letters and other supplemental materials do not count against the 15-page limit. In PDF format.
- Content Criteria The applicant entity should provide discussion responding to each of the content elements described under "Required Response Elements".

OTHER

As may be applicable, any applicant entity may be required to comply with federal, state, or local laws, regulations, and other requirements and obtain all necessary permits and clearances.

The Port, in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000(d) to 2000(d)(1) and Title 49, Code of Federal Regulations Part 26, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally Assisted Programs of the Department of Transportation issued pursuant to such Act, hereby notifies all potential Partners that it will affirmatively assure that, in regard to any agreement entered into pursuant to this CFP, disadvantaged business enterprises will be afforded full opportunity to submit this CFP in response to this invitation and will not be discriminated against on the grounds of race, color, sex, or national origin in consideration for an award.

Response information shall be a public record to the extent provided by the Texas Open Records Act and the Freedom of Information Act and shall be available to the public as provided therein.