**GFO-22-504**

**Hydrogen Blending and Lower Oxides of Nitrogen Emissions in Gas-Fired Generation (HyBLOX)**

**Addendum 1**

**February 21, 2023**

The purpose of this addendum is to notify potential applicants of changes that have been made to GFO-22-504. The addendum includes the following revisions to the Solicitation Manual and the Application Form.

The revisions to the Solicitation Manual include the following:

(1) Removal of the lower 300-kilowatt (kW) power limit.

(2) Updating definitions for Key Words/Terms.

(3) Lowering the minimum funding award.

(4) Updating the Key Activities Schedule, including extending the application deadline, because of the changes under Addendum 1.

The revisions to the Application Form include the following:

(1) Lowering the minimum funding award.

Note: Added language appears in **bold underline**, and deleted language appears in [~~strikethrough]~~ and within square brackets.

## **Solicitation Manual**

**Modification #1: Removal of lower 300 kW power limit.**

1. **Page 2, Section I.A. Purpose of Solicitation**

This solicitation will focus on the development, including modifications, and demonstration of smaller-scale ([~~0.3~~] **less than or equal to** 5 megawatts [MW]), H2 fuel-flexible, gas-fired power generation technologies and emission-mitigating technologies to increase safety and reduce emissions from gas-fired generation.

1. **Page 4, Section I.A. Purpose of Solicitation**

Smaller-scale systems, [~~ranging from 0.3~~] **less than or equal** to 5 MW, can provide a suitable power range for demonstrating the different technology developments and approaches that may be used in an integrated H2-blended generation and NOx mitigation system.

1. **Page 8, Section 1.C. Project Focus.**

Eligible power generation technologies must be gas-fired **systems with prime movers that are generally categorized as internal combustion engines (engines in which fuel reacts with an oxidizer, usually air, at high temperature to generate work)** and have a nameplate capacity [~~between 0.3~~] **less than or equal** to 5 MW**. Examples of eligible prime movers include:** [~~from the prime mover, which is limited to:~~]

* Microturbines, **which are a small-scale form of gas turbines,** or
* [~~Internal~~] **Reciprocating** combustion engines.

Minimum Technical Requirements:

1. System emissions must remain compliant with the **applicable** electric generation emissions standards set by the local air district in which the demonstration is located**, or by the California Air Resources Board (CARB) for technology power sizes that would normally be exempt from the local air district standards.21** For reference, the [~~California Air Resources Board (CARB)~~] **CARB** Guidance for the Permitting of Electrical Generation Technologies document may be used. (https://ww2.arb.ca.gov/sites/default/files/2020-08/guidelines.pdf)

Footnote 21: **Pursuant to this solicitation, these exempted systems generally include microturbines up to 250 kW and engines less than 37 kW. For reference, please see CARB’s Distributed Generation Certification Program:** [**https://ww2.arb.ca.gov/our-work/programs/dgcert/about**](https://ww2.arb.ca.gov/our-work/programs/dgcert/about)**.**

**Modification #2: Updating definitions for Key Words/ Terms.**

1. **Page 6, Section I.B. KEY WORDS/TERMS**

|  |  |
| --- | --- |
| Word/Term | Definition |
| **California Tribal Organization** | **A corporation, association, or group controlled, sanctioned, or chartered by a California Native American tribe that is subject to its laws, the laws of the State of California, or the laws of the United States.** |
| **California Native American Tribe/Tribe** | **A Native American Tribe located in California that is on the contact list maintained by the Native American Heritage Commission for the purposes of Chapter 905 of the Statutes of 2004.** |

|  |  |
| --- | --- |
| Disadvantaged Community | These are communities that represent the 25% highest scoring census tracts in CalEnviroScreen 4.0, census tracts previously identified in the top 25% in CalEnviroScreen 3.0, census tracts with high amounts of pollution and low populations, and federally recognized tribal areas as identified by the Census in the 2021 American Indian Areas Related National Geodatabase.  (https://oehha.ca.gov/calenviroscreen/sb535)  [~~These are communities in the top 25% scoring areas from CalEnviroScreen along with other areas with high amounts of pollution and low populations.~~  ~~(https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40)~~] |
|  |  |
| Low-Income Community | *Low-income Communities* are defined as communities within census tracts with median household incomes at or below 80 percent of the statewide median income or [~~the applicable low-income threshold listed in the state income limits updated~~]at or below the threshold designated as low-income by the California Department of Housing and Community Development.  (<https://www.hcd.ca.gov/grants-and-funding/income-limits/state-and-federal-income-rent-and-loan-value-limits>) [~~https://www.hcd.ca.gov/grants-funding/income-limits/state-and-federal-income-limits.shtml)~~] |

**Modification #3: Lowering the minimum funding award because of the removal of the lower power limit.**

1. **Page 11, Section D. Funding**
2. **Amount Available and Minimum/ Maximum Funding Amounts**

There is **up to** **$ 8,500,000** available for grants awarded under this solicitation. The minimum funding amount for each project is **[~~$ 2,125,000~~]** **$ 1,200,000**. The maximum funding amount is **$ 4,250,000**.

**Modification #4: Updating the Key Activities Schedule because of the changes under Addendum 1**

1. **Page 12, Section E. Key Activities Schedule**

| ACTIVITY | DATE | TIME[[1]](#footnote-2) |
| --- | --- | --- |
| Solicitation Release | January 6, 2023 |  |
| **Pre-Application Workshop** | **January 23, 2023** | **10:00 a.m.** |
| **Deadline for Written Questions[[2]](#footnote-3)** | **January 30, 2023** | **5:00 p.m.** |
| Anticipated Distribution of Questions and Answers | Week of February 13, 2023 |  |
| **Deadline to Submit Applications** | **April [~~5~~] 21, 2023** | **11:59 p.m.** |
| Anticipated Notice of Proposed Award Posting Date | June [~~2~~] **29**, 2023 |  |
| Anticipated Energy Commission Business Meeting Date | [~~September 13, 2023~~]  **October 11, 2023** |  |
| Anticipated Agreement Start Date | [~~October 16, 2023~~]  **November 13, 2023** |  |
| Anticipated Agreement End Date | March 31,2027 |  |

**Application Form**

**Modification #1: Lowering the minimum funding award.**

| Funding | *(See the “Funding” section in Part I of the solicitation)* |
| --- | --- |
|  |  |
| Amount Requested**:** $[~~2,125,000~~] **1,200,000** to $4,250,000 | **$** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Match Funding *(must be at least 20% of amount requested above)* | **$** |
| *(The amount must be consistent with the amount or dollar value described in any match funding commitment letters. See Attachment 11.)* | Cashin hand  Equipment  Materials  Information technology services  Travel  Subcontractor costs  Contractor/ project partner in-kind labor costs  Advanced practice costs |

**Crystal Willis,**

**Commission Agreement Officer**

1. Pacific Standard Time or Pacific Daylight Time, whichever is being observed. [↑](#footnote-ref-2)
2. This deadline does not apply to non-technical questions (e.g., questions concerning application format requirements or attachment instructions) or to questions that address an ambiguity, conflict, discrepancy, omission, or other error in the solicitation. Such questions may be submitted to the Commission Agreement Officer listed in Section G at any time prior to the application deadline. Please see Section G for additional information. [↑](#footnote-ref-3)