**GFO-20-305**

**The Next EPIC Challenge: Reimagining Affordable Mixed-Use Development in a Carbon-Constrained Future**

**Addendum 15**

**August 21, 2023**

The purpose of this addendum is to provide further clarification and revisions within the solicitation manual. In addition, the addendum includes a correction to the Project Narrative form (Attachment 6), and revisions to the Scope of Work Template (Attachment 8), and Project Schedule (Attachment 9) to remove the Build Phase Application task. This addendum also replaces Attachment 10 Budget Forms with the current budget form used for CEC proposals.

Revisions to the Solicitation Manual include:

* Revised the maximum length of the project concept video to five minutes.
* Removed non-monetary awards.
* Adding “costs for resident engagement and education” to the list of eligible costs during the Build Phase.
* Lowered the minimum specifications for eligible Rooftop PV to 20%.
* Specified files size limit of 50 mb
* Increased the maximum page limit for the Project Narrative from twenty to thirty pages.
* Updated the Detailed Build Phase Selection Evaluation Criteria (Table 24) for consistency.

The addendum includes the following revisions to the Solicitation Manual and application attachments. Added language appears in **bold underlined** font. Deleted language appears in [~~strikethrough~~] and within square brackets.

**Solicitation Manual**

1. Page 10, Section I.C.3

Amended to read:

**3. Design Phase Implementation**

Projects selected and funded for the Design Phase will be asked to complete and submit the following deliverables to be eligible for the Build Phase:

* Conceptual drawings, design plans, and an architectural-scale model of the development.
* Software modeling results of the development’s expected energy and emissions performance and impacts on tenants’ energy bills.
* A description of the emerging technologies and strategies proposed to be used in the build-out and why they were chosen.
* An analysis of the estimated cost difference between the zero-emission build-out compared to standard building design, construction, and operations.
* A community engagement plan to solicit input from the community throughout the design process.
* [~~Two-minute~~] Video of the project concept **(maximum length of five minutes)**
1. Page 11, Section I.C.4

Amended to read:

A distinguished panel of judges and/or Evaluation Committee members will form the Evaluation Committee for the Build Phase. The Committee will recommend four Recipients under the Build Phase for approval by the Energy Commission, based on the scoring rubric (see Section IV.H for the Build Phase scoring rubric). [~~In addition, non-monetary awards – such as “People’s Choice” and “Most Innovative Architectural Design” – will be given.~~] Technical reviewers will be assigned for each of the selection criteria. The technical reviewers will review each of the designs and provide their assessments. The Build Phase Evaluation Committee will use these assessments as part of their recommendations.

1. Page 13, Section I.C.5

Amended to read:

**Eligible Costs**

EPIC funds may be used for the following Build Phase activities:

* Administrative costs to manage the grant
* Costs to procure, install, operate, and maintain advanced energy features and energy management systems (see Table 7 for eligible technologies)
* Costs to procure, install, operate, and maintain measurement and verification equipment
* Costs to implement advanced construction practices
* Warranties for emerging technologies
* Costs to document and produce the case study report
* **Costs for resident engagement and education**
1. Page 14. Section I.C.5, Table 7

Amended to read:

| **Technology Category** | **Technology or Application** | **Minimum Specifications (If Applicable)** |
| --- | --- | --- |
| Building Envelope  | Automated/Semiautomated air sealing  |   |
|   | Building-integrated heat and moisture exchange panels  |   |
|   | Dynamic building envelopes  |   |
|   | Phase change materials  |   |
|   | Vacuum-insulated panels  | R-12/in  |
|   | Electrochromic fenestration  |   |
|   | Envelope treatments for prefabricated and modular construction  |   |
|   | Highly insulated fenestration  |  R-10  |
|   | Cool paints  |   |
| HVAC  | Low GWP heat pumps  | GWP < 150  |
|   | CO2 heat pumps  |   |
| Nonvapor compression (i.e., membrane-based heat pumps, magnetocaloric, elastocaloric, thermoelastic technologies)  |   |
| Advanced building sensors  |   |
| Renewable Generation  | PV-integrated windows  | > 7% conversion efficiency  |
|   | Rooftop PV  | [~~> 28%~~ ] **20%** conversion efficiency  |
| Thin, flexible PV panels | >15% efficiency |
| Software as a Service for Grid Interactive Buildings   | Transactive energy  |   |
| Building automation  |   |
| Vehicle-to-grid integration  |   |
| Appliances  | DC appliances  |   |
| All-electric commercial kitchen appliances   |   |
| Power Electronics  | Microgrid controller  |   |
|   | Solid-state circuit breakers  |   |
| Power Electronics  | Smart inverters  | Rule 21 Phase III advanced inverter functionality  |
| Energy Storage  | Batteries – lithium ion and non-lithium ion | (Lithium ion >250 Wh/L) |
|   | Flywheel  |   |
|   | Thermal storage  |   |
| Lighting  | Advanced lighting controls systems (ALCS)  |   |
|   | Advanced solid-state lighting  | 100 lm/W  |
|   | Advanced daylighting components  |   |
| Domestic Hot Water  | Heat pump water heater  | CTA-2045 port, or OpenADR Compatible |
| Electric Transportation  | EV charging stations and/or service provider with vehicle-to-building and/or vehicle-to-grid capabilities  | OpenADR2, OCPP, SAE J1772, SEP2, ISO 15118, and/or OCPI  |
| Electric micromobility, shared electric transportation, and associated charging infrastructure with smart charging capabilities  |   |

1. Page 35, Section III.A, Table 12

Amended to read:

Table 12: Design and Build Phase Application Format, Page Limits, and Number of Copies

|  |
| --- |
|  |
| **Format** | * **Font:** 11-point, Arial (excluding Excel spreadsheets, original template headers and footers, and commitment or support letters)
* **Margins:** No less than one inch on all sides (excluding headers and footers)
* **Spacing:** Single spaced, with a blank line between each paragraph
* **Signatures**: Wet signatures only or certified electronic signature
* **File Format:** MS Word version 2007 or later (.doc or .docx format), excluding Excel spreadsheets and commitment or support letters (PDF files are acceptable for the letters)
* **File Storage:** Electronic files of the application must be submitted on a USB memory stick when submitting via **hard copy.**
* **File Size: Individual electronic files of the application are limited to 50 megabytes, there is no limit to the number of files for each application.**
 |

|  |  |
| --- | --- |
| **Maximum Page Limit Recommendations** | * **Executive Summary** (Attachment): **two** pages
* **Project Narrative Form** (Attachment): [**~~twenty~~**] **thirty** pages excluding documentation for CEQA
* **Project Team Form** (Attachment): **two** pages for each resume
* **References and Work Product Form** (Attachment): **one** page for each reference, **two** pages for each project description
* **Commitment and Support Letter Form** (Attachment): **two** pages, excluding the cover page
* **Scope of Work** (Attachment): **thirty** pages
* **Project Schedule** (Attachment): **four** pages
* There are no page limits for the following:
	+ **Application Form** (Attachment)
	+ **Budget Forms** (Attachment)
	+ **CEQA Compliance Form** (Attachment)
	+ **Project Performance Metrics** (Attachment)
 |
| **Number of Copies of the Application** | For Hard Copy Submittal Only:* **One** hard copy (with signatures)
* **One** electronic copy (On USB memory stick)
 |

1. Page 66, Section IV, H, Table 24

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| BUILDING ENERGY, EMISSIONS, AND COST PERFORM-ANCE:  | Development is designed to achieve zero site emissions, able to meet daily peak electricity demand using onsite renewables, onsite storage, and load management, and makes additional improvements to minimize emissions associated with grid electricity purchases. **Development is likely to achieve a very low Energy Use Intensity (EUI) for its building use.** Design incorporates several innovative, grid- interactive building elements with high capability to provide demand flexibility and grid services. Construction and operating cost of mixed-use development is significantly cheaper than a similar development built to code. Tenants are expected to have significantly lower energy bills. | Development is designed to achieve zero emissions and able to meet daily peak electricity demand using onsite renewables, onsite storage, and load management as designed. Development is likely to achieve a low EUI for its building use. Design incorporatesstandard grid- interactive building elements with high capability to provide demand flexibility and grid services. Construction and operating cost of mixed-use development is slightly cheaper than a similar development built to code. Tenants are expected to have lower energy bills compared to a similar development built to code.  | Development is designed to achieve zero emissions and able to partially meet daily peak electricity demand using onsite renewables, onsite storage, and load management. Development is likely to achieve a low EUI for its building use. Design incorporates standard grid- interactive building elements with moderate capability to provide demand flexibility and grid services. Construction and operating cost of mixed-use development is comparable to a similar development built to code. Tenants are expected to have comparable energy bills than a similar development built to code.  | Development is designed to meet zero emissions with very limited exceptions and can partially meet daily peak electricity demand using onsite renewables, onsite storage, and load management. Development is likely to achieve standardEUI for its building use. Design incorporates limited grid-interactive building elements with low capability to provide demand flexibility and grid services. Development is built to code without any enhancing energy features.  Construction and operating cost of mixed-use development is more expensive than a similar development built to code, but costs are expected to reduce at scale.  | Development is not designed to achieve zero emissions and will not meet daily peak electricity demand using onsite renewables, onsite storage, and load management as designed. Development is likely to have a high EUI for its building use. Development does not operate dynamically with the grid. Construction and operating cost of mixed-use development is prohibitively more expensive than a similar development built to code. Tenants are expected to have significantly higher energy bills than a similar development built to code.  |

1. Page 71, Section IV, H, Table 24

Amended to read:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| COMMUNITY AND ECONOMIC IMPACT:  | Project includes plan to mitigate or minimize gentrification that is well aligned with local government and community priorities. Project clearly demonstrates meaningful community engagement and incorporates community feedback into design.  Project will positively impact the broader community in a variety of ways.  | [~~N/A~~] **Project includes plan to mitigate or minimize gentrification that is aligned with local government and community priorities. Project demonstrates meaningful community engagement and incorporates community feedback into design.****Project will positively impact the broader community.** | Project includes plan to mitigate or minimize gentrification. Project team solicited community input and feedback in project Design Phase but does not clearly demonstrate how the feedback was implemented in the design. Project will positively impact the immediate community.  | [~~N/A~~] **Project includes plan to mitigate or minimize gentrification that is inadequate. Project team solicited community input and feedback in project. Design Phase but does not demonstrate how the feedback was implemented in the design.****Project will positively impact the immediate community in a limited way.** | Project does not address gentrification. Project did not consider community input during planning and Design Phase.  |

**Attachment 6 - Project Narrative**

1. Page 2

Amended to read:

**Construction Readiness**

1. How does the development construction timeline align with the timeline of this funding opportunity?
2. What critical milestones (e.g., permitting, CEQA, financing) were completed during the design phase and what critical milestones remain before the project can begin construction? When is construction expected to begin?
3. What is the project team’s plan for financing the development? What additional incentives, such as utility incentives and tax incentives, will the project team pursue to help finance the development.
4. [~~Team Readiness questions~~]

**Attachment 8 – Scope of Work Template**

1. Removed Build Phase Application Package Task.

**Attachment 9 – Project Schedule**

1. Removed Build Phase Application Package Task.

**Attachment 10 - Budget Forms**

1. Budget form replaced with current ECAMS Proposal Budget template form.

**Phil Dyer**

**Commission Agreement Officer**