GOVERNMENT OF THE DISTRICT OF COLUMBIA DEPARTMENT OF GENERAL SERVICES







SOLICITATION DCAM-22-CS-RFP-0011

REDEDVELOPMENT ST. ELIZABETHS EAST CAMPUS-MICROGRID PROJECT

AMENDMENT NO. 4

Amendment Number 4 is hereby issued and posted on the Department's web site July 25, 2022. The Amendment and all RFP documents are available at https://dgs.dc.gov/event/dcam-22-cs-rfp-0011-redevelopment-st-elizabeths-east-campus-%E2%80%93-microgrid-project Except as otherwise noted, all other terms and conditions of the solicitation remain unchanged.

1. Section 1.15 Attachments

Insert: Attachment A14 St. Elizabeths East Campus Microgrid Project One Line Diagram (provided as Exhibit 1 to Amendment 4)

Note: The sample diagram and narrative describe a potential design option to illustrate what a campus style microgrid would look like. The sample diagram is no way to be considered as preferred. The Microgrid Partner is free to develop its own design.

The narrative provided with the One Line Diagram includes the hospital as an off-taker. Potential Offerors are referred to Section 1.4 of the RFP for clarification of off-takers.

2. The second installment of responses to questions about the RFP are provided as Exhibit 2 to Amendment 4.

James H. Marshall

James H. Marshall Contracting Officer <u>July 25, 2022</u> Date

End of Amendment No. 4

DCAM-22-CS-RFP-0011 Redevelopment St. Elizabeths East Campus Microgrid Project Amendment 4

Exhibit 1

Attachment A14 – St. Elizabeth East Campus Microgrid Project One Line Diagram

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ONE LINE DIAGRAM - POWERHOUSE SCALE: N.T.S.

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|------|--|------------------------|-------------------|-----------|
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| TION | SETTY 1415 ELLIOT PLACE, NW SUITE 100 WASHINGTON, DC 20007 P: 202-393-1523 WWW.SETTYcom PROJECT NUMBER: SIPX213003.00 | | | |
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PEPCO AND MICROGRID

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N.C.

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PROJECT MANAGER: ____ No. Date Description Checker 12

SKE502







Setty has prepared the sample conceptual design represented by this 1-line diagram for a campus-style multi-user microgrid serving the three Off-Takers specified in the Draft PPA: the Hospital, the UCC, and the Shelter. Additional off-takers are anticipated in the future as the area is further developed, though those future considerations are the Microgrid Partners alone. Upon selection, the Microgrid Partner is free to pursue their own design, with the information provided considered only as an example of a potentially feasible approach.

Powerhouse

As shown on Sheet SKE501, the single Point of Common Coupling would be at the switchgear line-up in the Powerhouse, where two 13 kV Pepco feeders connect to each main of the main-tie-main system. The two feeders shown are the same feeders designated by Pepco to serve the Hospital. Under normal conditions, on-site generation would meet most of the Off-Taker loads, supplemented by grid supply via a single Pepco feeder. In other words, only one Pepco feeder would be active, with the second Pepco supply breaker open, the tie-breaker between the two mains closed, and the (2) 2MWmicrogrid generator breakers closed. Microgrid Feeders A and B would be available to serve Off-Taker loads from a single common bus.

Under abnormal conditions, if the microgrid 2MW on-site generators were out of service, the tie-breaker between the mains would open, and the breaker for the second Pepco feeder would close. Microgrid Feeder A would then be independent of Microgrid Feeder B, each supplied by a single Pepco feeder off a separate bus. Pepco service would therefore provide back-up capacity for the Microgrid's self-generation, with an appropriate Standby Tariff (consider inserting... to be negotiated independently between Pepco and the Microgrid partner (see Rider ***, with a monthly charge of 45 cents per kW of reserved capacity).

If there were to be a loss of service on the active Pepco feeder, then the Microgrid would enter island mode. If the microgrid 2MW on-site generation plus battery storage were insufficient to meet instantaneous demand, then the Microgrid may need to either bring additional on-site generation on-line (such as a diesel generator) or shed non-critical Off-Taker load, until the original Pepco service is restored or until the alternative Pepco feeder is brought into service.

After submitting a full Level 4 Interconnection Application, Pepco would be contracted to perform a system impact study to assess the fault current contributions of the microgrid to its existing circuits. However, Setty is not aware of any current indications of a lack of fault current capacity in this area.

Distribution

Two 13kV Microgrid-owned distribution feeders, designated Feeder A and Feeder B, would serve the Microgrid Off-Takers.

As shown on Sheet SKE502 at Continuation #3, Feeder A and Feeder B would supply the Hospital at the Hospital's main 13kV main-tie-main switchgear line-up, which is planned to be installed in mid-2023.

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Each Microgrid Feeder would supply a different main. The planned Pepco feeder for each Main would have an interlock relay with the Microgrid Feeders, so that both could never be active at the same time. The design intention is for the Hospital to be normally supplied by the Microgrid, but with the ability to revert to Pepco service as an additional layer of redundancy. This design approach also enables the Hospital to receive Permanent Power during the construction process via Pepco, regardless of whether Microgrid service is yet available.

As shown at Continuation #2, the Men's Shelter could be connected to the Microgrid by installing an outdoor pad-mounted 13kV selector switch immediately upstream of, and physically adjacent to, the existing Pepco transformer. The Shelter would normally receive Microgrid service via Feeder B, but with the ability to revert to Pepco service as an additional layer of redundancy. The operation of the Shelter's existing 1500kW emergency diesel generator via ATS would remain unchanged.

Note that Pepco currently provides 4-wire service to the Shelter. The protection functions on the low side (480V) of the wye-wye service transformer would remain unchanged for reacting to any phase-toground fault. When the selector switch is set to the Pepco side, the current 4-wire service would also remain unchanged from today's conditions. Whenever the selector switch is set to the Microgrid side, the Microgrid's distribution system would need to provide appropriate protection in the event of a fault on the primary side of the service transformer.

Similarly, as shown at Continuation #1, the UCC could be connected to the Microgrid by installing selector switches upstream of the two existing Pepco outdoor pad-mounted transformers. The UCC would normally receive Microgrid service via Feeder A, with alternative service available from Feeder B, serving the two existing mains at the UCC that are connected to the low side of their respective service transformers. The UCC would have the ability to revert to Pepco service as an additional layer of redundancy. The operation of the UCC's soon-to-be-installed replacement emergency diesel generators via ATS would remain unchanged.

Note again that Pepco currently provides 4-wire service to the UCC. The protection functions on the low side (480V) of the wye-wye service transformer would remain unchanged for reacting to any phase-to-ground fault, as would Pepco's conditions when the selector switch is set to the Pepco side. As for the Shelter, whenever the selector switch is set to the Microgrid side, the Microgrid's distribution system would need to provide appropriate protection in the event of a fault on the primary side of each service transformer.

For the Shelter and the UCC, arrangements with Pepco would need to be completed for the Microgrid's use of Pepco's existing transformers, either through ongoing maintenance payments or potentially a purchase of those assets. In addition, arrangements would be needed to ensure that the existing Pepco meters do not record power provided by the Microgrid, either through changes to the existing hardware or through new functionality added to Pepco's billing system software. Setty has been involved in preliminary discussions with Pepco on these issues, but the Microgrid Partner would be responsible for completing any formal agreements with Pepco.

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1465 Northside Drive, Suite 2008 Atlanta, GA 30318 P: 404-670-1329 F: [703-691-8084] DCAM-22-CS-RFP-0011 Redevelopment St. Elizabeths East Campus Microgrid Project Amendment 4

Exhibit 2

DCAM-22-CS-RFP-0011 Redevelopment St. Elizabeths East Campus - Microgrid Project Questions About The RFP

| No. | Question | Response |
|-----|---|--|
| 24 | Clarification of design consideration for future off-takers (Section 1.6) | The RFP does not obligate the Microgrid Partner to add future off-takers. If the Microgrid |
| | | by modification to the DDA and the Microgrid Partner's requirements would include the design |
| | | build finance own and operate the additional off-taker |
| 25 | Who is serving as owner's rep for this project? | DGS, with support from the Cube Root - CBRE Partners (C2JV) joint ventire team, including its |
| | ······································ | subcontractor Urban Ingenuity. |
| 26 | What firm has done the preliminary design and calculations for DGS? | DGS, with support from the C2JV team, including its subcontractor Urban Ingenuity, with |
| | | cooperation from HSEMA and its contractor Setty and from DMPED and its contractor Jacobs. |
| 27 | Where was load data derived and how will it be verified moving forward? | Load data from the UCC is from historical utility usage. Load data from the Shelter and Hospital |
| | | are from the required energy modeling that each site conducted to meet pre-construction |
| | | regulatory requirements. Now that the Shelter has begun operations, recent utility usage is |
| | | being compiled to be issued as an Amendment to Attachment A2. |
| 28 | Please provide updated representative schedule | See Amendment 3, Item No. 1. |
| 29 | Is an extension of the due date possible? | Yes, see Amendment 3, Item No. 4. |
| 30 | Can the photos of mechanical systems of UCC and men's shelter facility be | Yes. The Department has prepared a collection of photos, diagrams, and plans of the Men's |
| | shared? | Shelter, the Unified Communication Center, and the Cedar Hill Regional Hospital. Due to the |
| | | sensitive nature of this information, the Department requires that potential offerors complete a |
| | | Confidentiality Agreement (Attachment A14) (provided as Exhibit 3 to Amendment 3). Submit |
| | | completed Confidentiality Agreement to the attention of James Marshall to |
| | | nttps://octo.quickbase.com/db/bg/rujdk2?a=dbpage&pageiD=2 The RFP information will be |
| | | sent to the email address included in the Confidentiality Agreement within 2 business days. |
| 31 | Can the deadline date to submit questions be extended by 2 weeks? | Yes, see Amendment 3, Item No. 7. |
| 32 | Who will own the microgrid? | The Microgrid and its assets will be owned and operated by the Microgrid Partner selected to |
| | | design, build, finance, operate, maintain and potentially transfer the system to the District at the |
| | | end of the Term of the PPA. The District government will be the single Pepco customer, and the |
| | | sole Pepco meter at the Microgrid Powerhouse will be a DGS account. The new Hospital, as a |
| | | commercial tenant of DGS, will be sub-metered for any electricity it receives from the Microgrid |
| | | and will reimburse the District for those energy costs. |
| 33 | During the Pre-proposal Conference a question regarding community | The Department anticipates that offerors will assemble and propose teams that will most |
| | engagement was asked and the response appeared to establish that there are | effectively deliver the required services. As long as the requirements of the RFP and resulting |
| | four (4) firms currently providing community engagement and related services. | PPA including the SBE Subcontracting and First Source Employment requirements are met, the |
| | Will the Department consider additional community engagement services or are | composition of those teams is the team's decision. |
| | the existing four adequate? | |