

AMENDMENT NO. 1 TO
BAY AREA AIR QUALITY MANAGEMENT DISTRICT
GRANT NO. 2018.245

This amendment to the above-entitled grant ("Grant Amendment") is dated, for reference purposes only, October 27, 2020.

RECITALS:

1. The Bay Area Air Quality Management District ("DISTRICT") and **City of Santa Clara dba Silicon Valley Power** ("GRANTEE") (hereinafter referred to as the "PARTIES") entered into the above-entitled grant to demonstrate the feasibility of battery energy storage systems for back-up power at data centers (the "Agreement"), which Agreement was executed on behalf of GRANTEE on January 18, 2019, and on behalf of DISTRICT on February 8, 2019.
2. The PARTIES mutually seek to extend the term and certain project dates of the Agreement due to unforeseen delays and hardships caused by the COVID-19 pandemic.
3. In accordance with Section 28 of the Agreement, DISTRICT and GRANTEE desire to amend the above-entitled Agreement as follows:

TERMS AND CONDITIONS OF GRANT AMENDMENT:

1. By this Grant Amendment, DISTRICT and GRANTEE amend Section 3, "Term." The term of the Agreement shall be extended so that the termination date of the Agreement is now April 30, 2022.
2. By this Grant Amendment, DISTRICT and GRANTEE amend Section 8, "Payment," of the Agreement to replace paragraph A with the following paragraph:

"A. DISTRICT agrees to award GRANTEE a grant of \$300,000 for the activities described in Attachment A, Work Plan. Grant shall be payable in eight (8) installments, as follows:

 - a) Seven (7) payments of \$37,500 each, upon DISTRICT'S receipt and approval of GRANTEE'S progress report and invoice; and
 - b) One (1) final payment of \$37,500 upon completion of all tasks identified in Attachment A, Work Plan, payable upon DISTRICT's receipt and approval of GRANTEE's invoice and GRANTEE's final report."

3. By this Grant Amendment, DISTRICT and GRANTEE replace Attachment A, Work Plan, with the attached "Attachment A-1, Work Plan" and agree that all references in the Agreement to Attachment A shall be deemed refer to Attachment A-1, Work Plan.
4. DISTRICT and GRANTEE agree that all other terms and conditions of the Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, the PARTIES have caused this Grant Amendment to be duly executed on their behalf by their authorized representatives.

BAY AREA AIR QUALITY
MANAGEMENT DISTRICT

CITY OF SANTA CLARA
dba SILICON VALLEY POWER

By: _____
Jack P. Broadbent
Executive Officer/APCO

By: _____
Deanna J. Santana
City Manager

Date: _____

Date: _____

Approved as to form:
District Counsel

By: _____
Brian C. Bunger
District Counsel

ATTACHMENT A-1

WORK PLAN

GRANTEE will design, procure, and install a 2 MW/4 MWh lithium-ion battery energy storage system (BESS) for a selected data center to reduce and potentially avoid the use of diesel generators with uninterrupted power supply. The project will demonstrate the feasibility of battery storage for data centers, delaying the use of diesel generators as backup power.

Phase 1: Site/Customer Selection and Assessment

Task 1.1: Identify and select data center partner

GRANTEE will launch a solicitation to identify data centers interested in delaying the use of, and potentially replacing a diesel generator with a lithium-ion battery energy storage system. GRANTEE will use the following selection criteria for the ideal candidate: a) located within the BAAQMD CARE boundary (as defined by the Air District: <http://www.baaqmd.gov/plans-and-climate/community-air-risk-evaluation-care-program>) and SVP's service territory, b) has renewable energy and climate goals aligned with GRANTEE's climate goals, and c) is collaborative, willing and interested in potentially scaling up the project in future years.

Deliverables:

1. Criteria for site selection and decision
2. Confirmation from the data center as a partner (e.g., signed agreement, MOU, etc)

Task 1.2: Assess construction project process and preliminary site plan

GRANTEE will assess the construction project process and preliminary site plan for the placement of the battery energy storage system (including permitting and interconnection requirements and service data scheduling). GRANTEE will also ensure proper procedures aligned with city permitting, CEQA (if applicable), and other project clearance steps.

Deliverables:

1. Preliminary site plan (assess site challenges, projected load and ramp schedule, costs, schedule service date, etc.)
2. Checklist of construction project process and necessary permits, codes, standards, engineering designs, approvals, reviews (with dates of execution)
3. Interconnection requirements issued by utility and interconnection agreement

Phase 2: Collaboration and Deployment

Task 2.1: Collaborate with selected sub-contractor to size, design, purchase and install battery storage system

GRANTEE will work with the data center to size, engineer, procure and construct the battery energy storage system. The sub-contractor that will install the battery storage system will be confirmed once the data center selection is finalized and will be responsible for installing the battery, inverter, battery management system, enclosures/racks, controller, and balance of plant for integration of battery energy storage system into the facility. The selected data center will select the sub-contractor. The sub-contractor and battery storage technology provider will also carry out battery testing, verification

inspections, and training related to operation, maintenance, and emergency response procedures for the battery storage system.

Deliverables:

1. Conceptual system design
2. Sub-contractor contract
3. Certificates that ensure engineering requirements, operational testing, inspection, safety codes have been met
4. Equipment specifications
5. Installation documentation and images

Task 2.2: Deploy and test battery storage system and aggregation controller

GRANTEE will deploy and test the battery storage system and aggregation controller. The controller optimally dispatches the battery system network to maximize the lifetime of each battery system and optimizes the battery to maximize GHG reductions. The system will communicate events in real-time across the data center, the utility transmission and operations systems and GRANTEE's real-time energy trading desk.

Deliverables:

1. Battery system performance report (e.g., information on charge, health, voltage, capacity, etc.)
2. Design plan to determine user interface and software platform to manage data

Phase 3: Monitor Outcome and Results

Task 3.1: Monitor project outcome and results by metrics

GRANTEE will monitor progress and track results in terms of: Anticipated performance of the battery system, based on performance models and specifications of the system (e.g., battery cycles per year, avoided emissions from daily charge and discharge of system due to intra daily differences in the wholesale market carbon intensity, etc.) Installation's estimated (monthly, annual, and battery life (~15 years)) energy-use and GHG-emissions reductions

Deliverables:

1. Detailed results included in the project final report (see below)

Progress Reports

Beginning thirty (30) calendar days after execution of the contract, GRANTEE shall provide progress reports describing GRANTEE's progress toward completion of the work outlined above, no later than 15 days following each milestone completion date. Progress reports shall be prepared on the District's Progress Report form (provided separately).

Final Report

Within thirty (30) calendar days of completion of project, GRANTEE shall submit a Final Report. The Final Report, to be prepared on the District's Final Report form (provided separately), should report on the outcomes of the project and learned lessons.

Grant Payments

Grant payments will be made in installments in accordance to Section 8, Payment. **Total payments under this Agreement shall not exceed \$300,000.**

Reporting and Grant Payment Schedule for Grant Funds

Payments of grant funds shall be contingent upon DISTRICT's approval of GRANTEE's progress reports and final report. DISTRICT approval will take into consideration adequate progress in implementing program tasks to meet the milestones set forth below. DISTRICT shall pay GRANTEE its grant payments upon receipt and approval of GRANTEE's progress reports and final report demonstrating that the applicable project milestones have been met as provided in Section 8 of this Agreement.

Milestone	Required progress on project	Completion Date	Report	Payment
1	Task 1.1 – initiated and completed	10/31/19	Progress report (PR) #1 (11/15/19)	\$37,500
2	Task 1.2 – initiated	1/31/20	PR #2 (2/15/20)	\$37,500
3	Task 1.2 – completed Task 2.1 – initiated	3/31/21	PR #3 (4/15/21)	\$37,500
4	Task 2.1 – on-going	6/30/21	PR #4 (7/15/21)	\$37,500
5	Task 2.1 – on-going	9/30/21	PR #5 (10/15/21)	\$37,500
6	Task 2.1 – completed Task 2.2 – initiated Task 3.1 – initiated	12/31/21	PR #6 (1/15/22)	\$37,500
7	Task 2.2 – completed Task 3.1 – on-going	2/28/22	PR #7 (3/15/22)	\$37,500
8 (Final)	Task 3.1 – completed	3/31/22	Final Report (4/15/22)	\$37,500