

GRANT REQUEST FORM (GRF)

CEC-270 (Revised 02/13)

CALIFORNIA ENERGY COMMISSION

New Agreement EPC-14-055 (To be completed by CGL Office)

Division	Agreement Manager:	MS-	Phone
ERDD	Eli Harland	43	916-327-1463

Recipient's Legal Name	Federal ID Number
Chabot-Las Positas Community College District	94-1670563

Title of Project
Las Positas Community College Microgrid

Term and Amount	Start Date	End Date	Amount
	5/8/2015	3/30/2018	\$ 1,522,591

Business Meeting Information
 ARFVTP agreements under \$75K delegated to Executive Director.

Proposed Business Meeting Date	4/8/2015	<input type="checkbox"/> Consent	<input checked="" type="checkbox"/> Discussion
Business Meeting Presenter	Jamie Patterson	Time Needed:	5 minutes

Please select one list serve. EPIC (Electric Program Investment Charge)

Agenda Item Subject and Description

Proposed resolution approving Agreement EPC-14-055 with Chabot Las Positas Community College District for a \$1,525,000 grant to demonstrate a high penetration, renewable, campus-wide microgrid at the Las Positas Community College in Livermore, California.

California Environmental Quality Act (CEQA) Compliance

1. Is Agreement considered a "Project" under CEQA?
 Yes (skip to question 2) No (complete the following (PRC 21065 and 14 CCR 15378)):
 Explain why Agreement is not considered a "Project":
 Agreement will not cause direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment because
2. If Agreement is considered a "Project" under CEQA:
 a) Agreement **IS** exempt. (Attach draft NOE)
 Statutory Exemption. List PRC and/or CCR section number: _____
 Categorical Exemption. List CCR section number: Cal. Code Regs., tit. 14 15301
 Common Sense Exemption. 14 CCR 15061 (b) (3)
 Explain reason why Agreement is exempt under the above section:
 Class 1 - Operation, repair, maintenance, or minor alteration of existing structures or facilities not expanding existing uses.
 The Las Positas Community College Microgrid project will include installation of flow battery containers, electrical switchgear and electronic equipment. The project will include construction, modification of the operation of the facility and equipment, an energy storage benefit study, and design and planning of the energy storage system.
- b) Agreement **IS NOT** exempt. (Consult with the legal office to determine next steps.)
 Check all that apply
 Initial Study Environmental Impact Report
 Negative Declaration Statement of Overriding Considerations
 Mitigated Negative Declaration

List all subcontractors (major and minor) and equipment vendors: (attach additional sheets as necessary)

Legal Company Name:	Budget
Growing Energy Labs, Inc.	\$ 200,200
Pacific Data Electric, Inc.	\$ 196,644
Parsons Brinckerhoff	\$ 196,532
Imergy Power Systems	\$ 67,730
Olivine, Inc.	\$ 95,000
Southland Industries, Inc.	\$ 88,484
Syserco	\$ 23,000
	\$
	\$

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List all key partners: (attach additional sheets as necessary)

Legal Company Name:

Budget Information			
Funding Source	Funding Year of Appropriation	Budget List No.	Amount
EPIC	13-14	301.001A	\$1,522,591
			\$
			\$
			\$
			\$
			\$
R&D Program Area:	ESRO: ETSI	TOTAL:	\$1,522,591
Explanation for "Other" selection			
Reimbursement Contract #:		Federal Agreement #:	

Recipient's Administrator/ Officer		Recipient's Project Manager	
Name:	Lorenzo Legaspi	Name:	Doug Horner
Address:	7600 DUBLIN BLVD	Address:	7600 DUBLIN BLVD
City, State, Zip:	DUBLIN, CA 94568-2909	City, State, Zip:	DUBLIN, CA 94568-2909
Phone:	925-485-5233 / Fax: - -	Phone:	925-485-5277 / Fax: - -
E-Mail:	LLgegaspi@clpccd.org	E-Mail:	dhorner@clpccd.org

Selection Process Used

Competitive Solicitation Solicitation #: PON-14-301

First Come First Served Solicitation

The following items should be attached to this GRF

1. Exhibit A, Scope of Work	<input checked="" type="checkbox"/>	Attached
2. Exhibit B, Budget Detail	<input checked="" type="checkbox"/>	Attached
3. CEC 105, Questionnaire for Identifying Conflicts	<input checked="" type="checkbox"/>	Attached
4. Recipient Resolution	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Attached
5. CEQA Documentation	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Attached

 Agreement Manager Date Office Manager Date Deputy Director Date

EXHIBIT A
SCOPE OF WORK

A. Task List

Task #	CPR¹	Task Name
1		General Project Tasks
2		Develop Basis of Design
3		Microgrid Algorithms
4	X	Coordinate with PG&E
5		Procure Flow Battery
6		Design Electrical and Mechanical Systems
7		Construct System
8		Prepare Commissioning Plan
9		Prepare Measurement and Verification Plan
10		Test and Commission Systems
11		Implement Measurement and Verification Plan
12		Demand Response Modelling
13	X	Develop Microgrid Blueprint
14		Evaluation of Project Benefits
15		Technology/Knowledge Transfer Activities

B. Acronym/Term List

Acronym/Term	Meaning
ANSI	American National Standards Institute
API	Application Program Interface
CAISO	California Independent System Operator
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CPR	Critical Project Review
GELI	Growing Energy Laboratories, Inc
IEEE	Institute of Electrical and Electronic Engineers
KW	Kilowatt
MW	Megawatt
MWH	Megawatt hour
PG&E	Pacific Gas and Electric
PV	Photovoltaic
TAC	Technical Advisory Committee

I. PURPOSE OF AGREEMENT, PROBLEM/SOLUTION STATEMENT, AND GOALS AND OBJECTIVES

A. Purpose of Agreement

The purpose of this Agreement is to install and demonstrate battery storage and a microgrid energy management system using existing photovoltaic (PV) systems. This agreement will fund the evaluation of the next generation of microgrid energy management systems based on a

¹ Please see subtask 1.3 in Part III of the Scope of Work (General Project Tasks) for a description of Critical Project Review (CPR) Meetings.

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concept of an “Internet of Energy” using a standards based Energy Operating System with Energy Management Applications that can connect and communicate with any type of energy asset and can connect and communicate outside the local facility microgrid to the programs and systems of the local energy provider and regional energy coordinators. The results of this project will be described in a Microgrid Blueprint that will provide educational institutions the means to evaluate, plan and implement the addition of energy storage with smart microgrid energy management controls to their existing solar photovoltaic (PV) and other renewable energy sources.

B. Problem/Solution Statement

Problem

California K-12 schools and Community Colleges have installed over 1,000 megawatts (MWs) of solar PV systems distributed across California that provide local renewable energy for their facilities. The school districts essentially use the local utility grid as a battery, impacting the local grid due to the instantaneous and daily fluctuations in the output of the solar photovoltaic (PV) assets. The implications to the California Independent System Operator (CAISO) from the increasing amount of renewable energy on the state grid are illustrated in the “duck curve”; compressed base load energy needs at peak solar energy periods and a steep energy ramp rate at sundown.

Solution

The addition of energy storage assets to store PV over-generation during peak production and discharge over time during sundown can flatten and smooth solar energy production and reduce peak power demands. Customers can realize immediate benefits through reduced peak demand charges and reduced energy usage costs. A solution to managing power on the grid is establishing automated communication and control between energy storage assets and solar PV at a customer’s site. The capability to use local distributed energy storage assets for demand response and other ancillary services to the grid requires a microgrid energy management system. The Las Positas College microgrid energy management system will combine coordination and control of the microgrid assets with forward forecasting algorithms that can forecast capacity availability to the microgrid and deliver that capability when signaled, which will balance the needs and economic interests of the community college campus.

The Las Positas College campus microgrid project will study and evaluate means and methods to manage the impacts from high density, variable renewable energy generation sources. The existing 1.35 MW on-site ground mounted solar PV system and 1.0 MW onsite parking lot systems have been supplying 55 percent of the college campus’ electrical energy for the past 2 years. The campus will install a 1 megawatt hour (MWH) flow battery and use the existing 3,200 ton/hour ice storage system to manage and improve the use of the energy from the solar PV arrays by installing a Growing Energy Laboratories, Inc (GELI) Energy Operating System and Energy Management Applications that will further increase the value of the solar energy by automating energy services to the grid.

C. Goals and Objectives of the Agreement

Agreement Goals

The goals of this Agreement are to:

- Collect, evaluate and publish performance data from an operating institutional-sized smart microgrid combining high density renewable energy assets, multiple energy

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storage media and islanding with modeling of automated demand response and other energy services to the grid.

- Develop and Disseminate a *Microgrid Blueprint* that can be used by educational institutions statewide to evaluate, plan and install a smart microgrid that will manage and coordinate the output of their existing renewable energy assets using energy storage systems with the ability to provide benefits to the local utility grid through automating demand response and other energy services.
- Demonstrate the benefits to customers, utility companies and CAISO of an “Internet of Energy” concept using Institute of Electrical and Electronic Engineers (IEEE) and American National Standards Institute (ANSI) standards based Energy Operating System and standardized Energy Management Applications to control and coordinate local energy assets and enable coordination with utility programs and controls.
- Collaborate with Pacific Gas and Electric (PG&E) to gain a better understanding of the benefits and risks and practical realities of using behind the meter energy assets to provide grid and/or market services using real world operating data.

Ratepayer Benefits:² This Agreement will result in the ratepayer benefit of greater reliability and lower costs by increasing the reliability of the local utility grid by smoothing and controlling the flow of power from variable output renewable energy sources and lower energy costs by reducing the amount of peaking power required to stabilize the grid.

Technological Advancement and Breakthroughs:³ This Agreement will lead to technological advancement and breakthroughs to overcome barriers to the achievement of the State of California’s statutory energy goals by demonstrating the next generation of coordinated energy management using an Energy Operating System platform and Energy Management Applications that can connect any type of energy asset to a Wide Area Network allowing coordination and control of both local microgrids and access to those assets by local utilities to provide energy services to the grid.

Agreement Objectives

The objectives of this Agreement are to:

- Reduce the use of the local utility grid for energy storage from renewable energy sources by reducing the amount of solar energy exported to the grid.
- Demonstrate the effectiveness of microgrid energy management algorithms to forecast energy generation, storage capacity and capacity available to the grid.
- Collect and analyze performance and operational data from the Las Positas College microgrid.
- Provide a model for other California public education school sites.
- Advance the technology to control and coordinate distributed energy assets across multiple platforms.

² California Public Resources Code, Section 25711.5(a) requires projects funded by the Electric Program Investment Charge (EPIC) to result in ratepayer benefits. The California Public Utilities Commission, which established the EPIC in 2011, defines ratepayer benefits as greater reliability, lower costs, and increased safety (See CPUC “Phase 2” Decision 12-05-037 at page 19, May 24, 2012, http://docs.cpuc.ca.gov/PublishedDocs/WORD_PDF/FINAL_DECISION/167664.PDF).

³ California Public Resources Code, Section 25711.5(a) also requires EPIC-funded projects to lead to technological advancement and breakthroughs to overcome barriers that prevent the achievement of the state’s statutory and energy goals.

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II. TASK 1 GENERAL PROJECT TASKS

PRODUCTS

Subtask 1.1 Products

The goal of this subtask is to establish the requirements for submitting project products (e.g., reports, summaries, plans, and presentation materials). Unless otherwise specified by the Commission Agreement Manager (CAM), the Recipient must deliver products as required below by the dates listed in the **Project Schedule (Part V)**. Products that require a draft version are indicated by marking “**(draft and final)**” after the product name in the “Products” section of the task/subtask. If “(draft and final)” does not appear after the product name, only a final version of the product is required. With respect to due dates within this Scope of Work, “**days**” means working days.

The Recipient shall:

For products that require a draft version

- Submit all draft products to the CAM for review and comment in accordance with the Project Schedule (Part V). The CAM will provide written comments to the Recipient on the draft product within 15 days of receipt, unless otherwise specified in the task/subtask for which the product is required.
- Submit the final product to the CAM once agreement has been reached on the draft. The CAM will provide written approval of the final product within 15 days of receipt, unless otherwise specified in the task/subtask for which the product is required.
- If the CAM determines that the final product does not sufficiently incorporate his/her comments, submit the revised product to the CAM within 10 days of notice by the CAM, unless the CAM specifies a longer time period.

For products that require a final version only

- Submit the product to the CAM for approval.
- If the CAM determines that the product requires revision, submit the revised product to the CAM within 10 days of notice by the CAM, unless the CAM specifies a longer time period.

For all products

- Submit all data and documents required as products in accordance with the following Instructions for Submitting Electronic Files and Developing Software:
 - **Electronic File Format**
Submit all data and documents required as products under this Agreement in an electronic file format that is fully editable and compatible with the Energy Commission’s software and Microsoft (MS)-operating computing platforms, or with any other format approved by the CAM. Deliver an electronic copy of the full text of any Agreement data and documents in a format specified by the CAM, such as memory stick or CD-ROM.

The following describes the accepted formats for electronic data and documents provided to the Energy Commission as products under this Agreement, and establishes the software versions that will be required to review and approve all software products:

- Data sets will be in MS Access or MS Excel file format (version 2007 or later), or any other format approved by the CAM.

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- Text documents will be in MS Word file format, version 2007 or later.
- Documents intended for public distribution will be in PDF file format. The Recipient must also provide the native Microsoft file format.
- Project management documents will be in Microsoft Project file format, version 2007 or later.
- **Software Application Development**
Use the following standard Application Architecture components in compatible versions for any software application development required by this Agreement (e.g., databases, models, modeling tools), unless the CAM approves other software applications such as open source programs:
 - Microsoft ASP.NET framework (version 3.5 and up). Recommend 4.0.
 - Microsoft Internet Information Services (IIS), (version 6 and up) Recommend 7.5.
 - Visual Studio.NET (version 2008 and up). Recommend 2010.
 - C# Programming Language with Presentation (UI), Business Object and Data Layers.
 - SQL (Structured Query Language).
 - Microsoft SQL Server 2008, Stored Procedures. Recommend 2008 R2.
 - Microsoft SQL Reporting Services. Recommend 2008 R2.
 - XML (external interfaces).

Any exceptions to the Electronic File Format requirements above must be approved in writing by the CAM. The CAM will consult with the Energy Commission's Information Technology Services Branch to determine whether the exceptions are allowable.

MEETINGS

Subtask 1.2 Kick-off Meeting

The goal of this subtask is to establish the lines of communication and procedures for implementing this Agreement.

The Recipient shall:

- Attend a "Kick-off" meeting with the CAM, the Commission Agreement Officer (CAO), and any other Energy Commission staff relevant to the Agreement. The Recipient will bring its Project Manager and any other individuals designated by the CAM to this meeting. The administrative and technical aspects of the Agreement will be discussed at the meeting. Prior to the meeting, the CAM will provide an agenda to all potential meeting participants. The meeting may take place in person or by electronic conferencing (e.g., WebEx), with approval of the CAM.

The administrative portion of the meeting will include discussion of the following:

- Terms and conditions of the Agreement;
- Administrative products (subtask 1.1);
- CPR meetings (subtask 1.3);
- Match fund documentation (subtask 1.7);

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- Permit documentation (subtask 1.8);
- Subcontracts (subtask 1.9); and
- Any other relevant topics.

The technical portion of the meeting will include discussion of the following:

- The CAM's expectations for accomplishing tasks described in the Scope of Work;
 - An updated Project Schedule;
 - Technical products (subtask 1.1);
 - Progress reports and invoices (subtask 1.5);
 - Final Report (subtask 1.6);
 - Technical Advisory Committee meetings (subtasks 1.10 and 1.11); and
 - Any other relevant topics.
- Provide an *Updated Project Schedule*, *List of Match Funds*, and *List of Permits*, as needed to reflect any changes in the documents.

The CAM shall:

- Designate the date and location of the meeting.
- Send the Recipient a *Kick-off Meeting Agenda*.

Recipient Products:

- Updated Project Schedule (*if applicable*)
- Updated List of Match Funds (*if applicable*)
- Updated List of Permits (*if applicable*)

CAM Product:

- Kick-off Meeting Agenda

Subtask 1.3 Critical Project Review (CPR) Meetings

The goal of this subtask is to determine if the project should continue to receive Energy Commission funding, and if so whether any modifications must be made to the tasks, products, schedule, or budget. CPR meetings provide the opportunity for frank discussions between the Energy Commission and the Recipient. As determined by the CAM, discussions may include project status, challenges, successes, advisory group findings and recommendations, final report preparation, and progress on technical transfer and production readiness activities (if applicable). Participants will include the CAM and the Recipient, and may include the CAO and any other individuals selected by the CAM to provide support to the Energy Commission.

CPR meetings generally take place at key, predetermined points in the Agreement, as determined by the CAM and as shown in the Task List on page 1 of this Exhibit. However, the CAM may schedule additional CPR meetings as necessary. The budget will be reallocated to cover the additional costs borne by the Recipient, but the overall Agreement amount will not increase. CPR meetings generally take place at the Energy Commission, but they may take place at another location, or may be conducted via electronic conferencing (e.g., WebEx) as determined by the CAM.

The Recipient shall:

- Prepare a *CPR Report* for each CPR meeting that: (1) discusses the progress of the Agreement toward achieving its goals and objectives; and (2) includes recommendations and conclusions regarding continued work on the project.

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- Submit the CPR Report along with any other *Task Products* that correspond to the technical task for which the CPR meeting is required (i.e., if a CPR meeting is required for Task 2, submit the Task 2 products along with the CPR Report).
- Attend the CPR meeting.
- Present the CPR Report and any other required information at each CPR meeting.

The CAM shall:

- Determine the location, date, and time of each CPR meeting with the Recipient's input.
- Send the Recipient a *CPR Agenda* and a *List of Expected CPR Participants* in advance of the CPR meeting. If applicable, the agenda will include a discussion of match funding and permits.
- Conduct and make a record of each CPR meeting. Provide the Recipient with a *Schedule for Providing a Progress Determination* on continuation of the project.
- Determine whether to continue the project, and if so whether modifications are needed to the tasks, schedule, products, or budget for the remainder of the Agreement. If the CAM concludes that satisfactory progress is not being made, this conclusion will be referred to the Deputy Director of the Energy Research and Development Division.
- Provide the Recipient with a *Progress Determination* on continuation of the project, in accordance with the schedule. The Progress Determination may include a requirement that the Recipient revise one or more products.

Recipient Products:

- CPR Report(s)
- Task Products (draft and/or final as specified in the task)

CAM Products:

- CPR Agenda
- List of Expected CPR Participants
- Schedule for Providing a Progress Determination
- Progress Determination

Subtask 1.4 Final Meeting

The goal of this subtask is to complete the closeout of this Agreement.

The Recipient shall:

- Meet with Energy Commission staff to present project findings, conclusions, and recommendations. The final meeting must be completed during the closeout of this Agreement. This meeting will be attended by the Recipient and CAM, at a minimum. The meeting may occur in person or by electronic conferencing (e.g., WebEx), with approval of the CAM.

The technical and administrative aspects of Agreement closeout will be discussed at the meeting, which may be divided into two separate meetings at the CAM's discretion.

- The technical portion of the meeting will involve the presentation of findings, conclusions, and recommended next steps (if any) for the Agreement. The CAM will determine the appropriate meeting participants.
- The administrative portion of the meeting will involve a discussion with the CAM and the CAO of the following Agreement closeout items:
 - Disposition of any state-owned equipment.

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- Need to file a Uniform Commercial Code Financing Statement (Form UCC-1) regarding the Energy Commission's interest in patented technology.
 - The Energy Commission's request for specific "generated" data (not already provided in Agreement products).
 - Need to document the Recipient's disclosure of "subject inventions" developed under the Agreement.
 - "Surviving" Agreement provisions such as repayment provisions and confidential products.
 - Final invoicing and release of retention.
-
- Prepare a *Final Meeting Agreement Summary* that documents any agreement made between the Recipient and Commission staff during the meeting.
 - Prepare a *Schedule for Completing Agreement Closeout Activities*.
 - Provide *All Draft and Final Written Products* on a CD-ROM or USB memory stick, organized by the tasks in the Agreement.

Products:

- Final Meeting Agreement Summary (*if applicable*)
- Schedule for Completing Agreement Closeout Activities
- All Draft and Final Written Products

REPORTS AND INVOICES

Subtask 1.5 Progress Reports and Invoices

The goals of this subtask are to: (1) periodically verify that satisfactory and continued progress is made towards achieving the project objectives of this Agreement; and (2) ensure that invoices contain all required information and are submitted in the appropriate format.

The Recipient shall:

- Submit a monthly *Progress Report* to the CAM. Each progress report must:
 - Summarize all Agreement activities conducted by the Recipient for the preceding month, including an assessment of the ability to complete the Agreement within the current budget and any anticipated cost overruns. See the Progress Report Format Attachment for the recommended specifications.
 - Provide a synopsis of the project progress, including accomplishments, problems, milestones, products, schedule, fiscal status, and any evidence of progress such as photographs.
- Submit a monthly or quarterly *Invoice* that follows the instructions in the "Payment of Funds" section of the terms and conditions. In addition, each invoice must document and verify:
 - Energy Commission funds received by California-based entities;
 - Energy Commission funds spent in California (*if applicable*); and
 - Match fund expenditures.

Products:

- Progress Reports
- Invoices

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Subtask 1.6 Final Report

The goal of this subtask is to prepare a comprehensive Final Report that describes the original purpose, approach, results, and conclusions of the work performed under this Agreement. The CAM will review and approve the Final Report, which will be due at least **two months** before the Agreement end date. When creating the Final Report Outline and the Final Report, the Recipient must use a Style Manual provided by the CAM.

Subtask 1.6.1 Final Report Outline

The Recipient shall:

- Prepare a *Final Report Outline* in accordance with the *Style Manual* provided by the CAM.
- Submit a draft of the outline to the CAM for review and comment.
- Once agreement has been reached on the draft, submit the final outline to the CAM. The CAM will provide written approval of the final outline within 10 days of receipt.

Recipient Products:

- Final Report Outline (draft and final)

CAM Products:

- Style Manual
- Comments on Draft Final Report Outline
- Approval of Final Report Outline

Subtask 1.6.2 Final Report

The Recipient shall:

- Prepare a *Final Report* for this Agreement in accordance with the approved Final Report Outline and the Style Manual provided by the CAM.
- Submit a draft of the report to the CAM for review and comment. Once agreement on the draft report has been reached, the CAM will forward the electronic version for Energy Commission internal approval. Once the CAM receives approval, he/she will provide written approval to the Recipient.
- Submit one bound copy of the Final Report to the CAM.

Products:

- Final Report (draft and final)

CAM Product:

- Comments on Draft Final Report

MATCH FUNDS, PERMITS, AND SUBCONTRACTS

Subtask 1.7 Match Funds

The goal of this subtask is to ensure that the Recipient obtains any match funds planned for this Agreement and applies them to the Agreement during the Agreement term.

While the costs to obtain and document match funds are not reimbursable under this Agreement, the Recipient may spend match funds for this task. The Recipient may only spend match funds during the Agreement term, either concurrently or prior to the use of Energy

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Commission funds. Match funds must be identified in writing, and the Recipient must obtain any associated commitments before incurring any costs for which the Recipient will request reimbursement.

The Recipient shall:

- Prepare a *Match Funds Status Letter* that documents the match funds committed to this Agreement. If no match funds were part of the proposal that led to the Energy Commission awarding this Agreement and none have been identified at the time this Agreement starts, then state this in the letter.

If match funds were a part of the proposal that led to the Energy Commission awarding this Agreement, then provide in the letter:

- A list of the match funds that identifies:
 - The amount of cash match funds, their source(s) (including a contact name, address, and telephone number), and the task(s) to which the match funds will be applied.
 - The amount of each in-kind contribution, a description of the contribution type (e.g., property, services), the documented market or book value, the source (including a contact name, address, and telephone number), and the task(s) to which the match funds will be applied. If the in-kind contribution is equipment or other tangible or real property, the Recipient must identify its owner and provide a contact name, address, telephone number, and the address where the property is located.
- A copy of a letter of commitment from an authorized representative of each source of match funding that the funds or contributions have been secured.
- At the Kick-off meeting, discuss match funds and the impact on the project if they are significantly reduced or not obtained as committed. If applicable, match funds will be included as a line item in the progress reports and will be a topic at CPR meetings.
- Provide a *Supplemental Match Funds Notification Letter* to the CAM of receipt of additional match funds.
- Provide a *Match Funds Reduction Notification Letter* to the CAM if existing match funds are reduced during the course of the Agreement. Reduction of match funds may trigger a CPR meeting.

Products:

- Match Funds Status Letter
- Supplemental Match Funds Notification Letter *(if applicable)*
- Match Funds Reduction Notification Letter *(if applicable)*

Subtask 1.8 Permits

The goal of this subtask is to obtain all permits required for work completed under this Agreement in advance of the date they are needed to keep the Agreement schedule on track. Permit costs and the expenses associated with obtaining permits are not reimbursable under this Agreement, with the exception of costs incurred by University of California recipients. Permits must be identified and obtained before the Recipient may incur any costs related to the use of the permit(s) for which the Recipient will request reimbursement.

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The Recipient shall:

- Prepare a *Permit Status Letter* that documents the permits required to conduct this Agreement. If no permits are required at the start of this Agreement, then state this in the letter. If permits will be required during the course of the Agreement, provide in the letter:
 - A list of the permits that identifies: (1) the type of permit; and (2) the name, address, and telephone number of the permitting jurisdictions or lead agencies.
 - The schedule the Recipient will follow in applying for and obtaining the permits.

The list of permits and the schedule for obtaining them will be discussed at the Kick-off meeting (subtask 1.2), and a timetable for submitting the updated list, schedule, and copies of the permits will be developed. The impact on the project if the permits are not obtained in a timely fashion or are denied will also be discussed. If applicable, permits will be included as a line item in progress reports and will be a topic at CPR meetings.

- If during the course of the Agreement additional permits become necessary, then provide the CAM with an *Updated List of Permits* (including the appropriate information on each permit) and an *Updated Schedule for Acquiring Permits*.
- Send the CAM a *Copy of Each Approved Permit*.
- If during the course of the Agreement permits are not obtained on time or are denied, notify the CAM within 5 days. Either of these events may trigger a CPR meeting.

Products:

- Permit Status Letter
- Updated List of Permits (*if applicable*)
- Updated Schedule for Acquiring Permits (*if applicable*)
- Copy of each Approved Permit (*if applicable*)

Subtask 1.9 Subcontracts

The goals of this subtask are to: (1) procure subcontracts required to carry out the tasks under this Agreement; and (2) ensure that the subcontracts are consistent with the terms and conditions of this Agreement.

The Recipient shall:

- Manage and coordinate subcontractor activities in accordance with the requirements of this Agreement.
- Incorporate this Agreement by reference into each subcontract.
- Include any required Energy Commission flow-down provisions in each subcontract, in addition to a statement that the terms of this Agreement will prevail if they conflict with the subcontract terms.
- If required by the CAM, submit a draft of each *Subcontract* required to conduct the work under this Agreement.
- Submit a final copy of the executed subcontract.
- Notify and receive written approval from the CAM prior to adding any new subcontractors (see the discussion of subcontractor additions in the terms and conditions).

Products:

- Subcontracts (*draft if required by the CAM*)

TECHNICAL ADVISORY COMMITTEE

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Subtask 1.10 Technical Advisory Committee (TAC)

The goal of this subtask is to create an advisory committee for this Agreement. The TAC should be composed of diverse professionals. The composition will vary depending on interest, availability, and need. TAC members will serve at the CAM's discretion. The purpose of the TAC is to:

- Provide guidance in project direction. The guidance may include scope and methodologies, timing, and coordination with other projects. The guidance may be based on:
 - Technical area expertise;
 - Knowledge of market applications; or
 - Linkages between the agreement work and other past, present, or future projects (both public and private sectors) that TAC members are aware of in a particular area.
- Review products and provide recommendations for needed product adjustments, refinements, or enhancements.
- Evaluate the tangible benefits of the project to the state of California, and provide recommendations as needed to enhance the benefits.
- Provide recommendations regarding information dissemination, market pathways, or commercialization strategies relevant to the project products.

The TAC may be composed of qualified professionals spanning the following types of disciplines:

- Researchers knowledgeable about the project subject matter;
- Members of trades that will apply the results of the project (e.g., designers, engineers, architects, contractors, and trade representatives);
- Public interest market transformation implementers;
- Product developers relevant to the project;
- U.S. Department of Energy research managers, or experts from other federal or state agencies relevant to the project;
- Public interest environmental groups;
- Utility representatives;
- Air district staff; and
- Members of relevant technical society committees.

The Recipient shall:

- Prepare a *List of Potential TAC Members* that includes the names, companies, physical and electronic addresses, and phone numbers of potential members. The list will be discussed at the Kick-off meeting, and a schedule for recruiting members and holding the first TAC meeting will be developed.
- Recruit TAC members. Ensure that each individual understands member obligations and the TAC meeting schedule developed in subtask 1.11.
- Prepare a *List of TAC Members* once all TAC members have committed to serving on the TAC.
- Submit *Documentation of TAC Member Commitment* (such as Letters of Acceptance) from each TAC member.

Products:

- List of Potential TAC Members
- List of TAC Members
- Documentation of TAC Member Commitment

EXHIBIT A

SCOPE OF WORK

Subtask 1.11 TAC Meetings

The goal of this subtask is for the TAC to provide strategic guidance for the project by participating in regular meetings, which may be held via teleconference.

The Recipient shall:

- Discuss the TAC meeting schedule with the CAM at the Kick-off meeting. Determine the number and location of meetings (in-person and via teleconference) in consultation with the CAM.
- Prepare a *TAC Meeting Schedule* that will be presented to the TAC members during recruiting. Revise the schedule after the first TAC meeting to incorporate meeting comments.
- Prepare a *TAC Meeting Agenda* and *TAC Meeting Back-up Materials* for each TAC meeting.
- Organize and lead TAC meetings in accordance with the TAC Meeting Schedule. Changes to the schedule must be pre-approved in writing by the CAM.
- Prepare *TAC Meeting Summaries* that include any recommended resolutions of major TAC issues.

Products:

- TAC Meeting Schedule (draft and final)
- TAC Meeting Agendas (draft and final)
- TAC Meeting Back-up Materials
- TAC Meeting Summaries

III. TECHNICAL TASKS

*Products that require a draft version are indicated by marking “(draft and final)” after the product name in the “Products” section of the task/subtask. If “(draft and final)” does not appear after the product name, only a final version of the product is required. **Subtask 1.1 (Products)** describes the procedure for submitting products to the CAM.*

TASK 2 DEVELOP BASIS OF DESIGN

The goal of this task is to create the basis of design for the microgrid and energy storage systems.

The Recipient shall:

- Model the power and energy flow of the Las Positas College campus. Establish power demand flattening goals.
- Determine energy storage capacity.
- Determine power flow rates.
- Prepare baseline energy use and power demand data.
- Evaluate the impact of variable power flow from the solar arrays to the PG&E local grid.
- Prepare and provide an *Assessment Report* of the microgrid’s existing incentives participation and opportunities, including:
 - Current retail rates and participation in demand response programs
 - Opportunities for participation into wholesale including the design of one or more market resources made up of microgrid assets
 - Identification of potential wholesale market bidding and retail strategies, including continued participation in retail programs

EXHIBIT A

SCOPE OF WORK

- Identification of forecasting and scheduling needs to support identified strategies
- Prepare and provide the *Preliminary Basis of Design* that includes but is not limited to the following:
 - A description of the storage battery system
 - Establish Power Flow rates
 - Preliminary Economic Analysis
 - A description of the modifications to the central plant chiller system
 - Establish Test and Verification points and meter/test equipment
 - An outline specification of the flow battery defining rated capacity in kilowatt (kW) and kWh
 - A discussion of the characteristics of the micro grid control approach
- Review the *Preliminary Basis of Design* with the TAC.
- Review the *Assessment Report* with PG&E.
- Prepare and provide *Final Basis of Design* that includes updated information contained in the *Preliminary Basis of Design* plus:
 - Power Flow limits.
 - Demand Response requirements.

Products:

- Assessment Report
- Preliminary Basis of Design
- Final Basis of Design

TASK 3 MICROGRID ALGORITHMS

The goal of this task is to refine prototype energy control algorithms developed by GELI and develop new algorithms to apply to the Las Positas College.

The Recipient shall:

- Review the prototype algorithms for instantaneous power flow management between the solar array and the flow battery.
- Review the prototype algorithms for the time based power flow management between the solar array and the central plant chillers.
- Develop algorithms to coordinate the flow of power into the PG&E grid from the solar array and/or the battery.
- Collaborate with the firm that currently provides building controls for the campus (Alerton) to develop logic and interfaces between the GELI power flow network and the Alerton Building Automation System controlling the central plant.
- Adapt Energy Management Applications for specific energy assets at Las Positas College.
- Install and integrate the Olivine, Inc Demand Response Application without creating or coding new software.
 - Integrate and Test
 - Connect the Application Program Interface for GELI systems to integrate with Olivine systems and integrate with the CAISO and interact with PG&E
 - Develop test plans for specific strategies
 - Integration of forecasting and operational data
 - Note: Software will not be developed under this task.
- Prepare and provide a *Demand Response Application Fact Sheet* that describes the functional capabilities of the Demand Response Application.

EXHIBIT A

SCOPE OF WORK

- Prepare and provide a *Preliminary Energy Management and Control Report* that includes but is not limited to the following:
 - A discussion of the instantaneous and time-based reactive and predictive algorithms that will be implemented to manage power flow
 - A discussion of the potential interaction with the PG&E power flow and demand response on the grid segment feeding Las Positas College
 - A discussion of the interface between the power management system and the Alerton Building Automation System
 - A schedule for development of control system logic and hardware and software required

Products:

- Preliminary Energy Management and Control Report
- Demand Response Application Fact Sheet

Task 4 COORDINATE WITH PG&E

The goal of this task is to collaborate with PG&E to develop confidence in the application of the microgrid and energy management system at Las Positas College and obtain support in the coordination with the energy management system into the PG&E grid.

The Recipient Shall:

- Meet with PG&E to discuss impacts to the PG&E grid from the installation of the micro grid technology at Las Positas College
- Review the control relays in the PG&E incoming switchgear to confirm coordination with the planned energy management system.
- Meet with PG&E to discuss how the microgrid energy management could improve PG&E's demand management and power characteristics on the PG&E distribution grid.
- Coordinate the approach to islanding the battery and solar array.
- Revise the *Preliminary Energy Management and Control Report* with input from PG&E.
- Provide a *Final Energy Management and Control Report*.
- Prepare and provide a *Memorandum of Understanding* with PG&E that will include but not limited to the following:
 - PG&E acceptance of installation of microgrid energy management system at Las Positas Community College
 - A list of any PG&E requirements prior to energizing the microgrid and battery storage
 - Outline of procedures for islanding the battery/solar array
- Participate in CPR per Task 1.3.

Products:

- Final Energy Management and Control Report
- Memorandum of Understanding
- CPR Report

TASK 5 PROCURE FLOW BATTERY

The goal of this task is to specify the Imergy Power Systems flow battery and execute a purchase order.

The Recipient shall:

EXHIBIT A

SCOPE OF WORK

Prepare and provide detailed *Battery Equipment Specifications* which will include but not limited to:

- Battery rating in KW.
- Battery capacity in kWh.
- Battery flow rate in kW.
- Battery physical characteristics such as dimensions, weight.
- Power flow control module.
- Finalize battery purchase price.
- Establish battery fabrication and delivery schedule.
- Define installation requirements, such as:
 - Foundation requirements
 - Anchorage requirements
 - Electrical connection points and configurations
 - Power flow control module logic, programming capabilities and connections.

Issue *Battery Purchase Order* and receive the *Flow Battery Delivery Receipt*.

Products:

- Battery Equipment Specifications
- Copy of Battery Purchase Order
- Copy of Flow Battery Delivery Receipt

Task 6 DESIGN ELECTRICAL AND MECHANICAL SYSTEMS

The goal of this task is to prepare construction drawings defining the work required to install the battery system, modify the central plant chiller systems including modifications to the Alerton Building Automation System.

The Recipient shall:

- Facilitate and manage meetings between the design/build electrical and mechanical contractors and the power flow management and battery technical persons to coordinate requirements and basis of design.
- Determine key test and metering points for Measurement and Verification.
- Develop detailed construction drawings for the installation of the battery system.
- Develop detailed construction drawings for the modifications of the central plant chiller and ice storage system.
- Develop control logic changes for the central plant chillers and piping control valves.
- Hold Design Review Meetings *at 30%, 60% and 95% design completion* and provide *Design Review Meetings minutes*. Design review team will include:
 - Las Positas College facilities and Maintenance and operations staff
 - Project Team Project Management
 - Imergy Power Systems battery technical engineers
 - GELI power management technical engineers
 - Design/Build Mechanical and Electrical Firms
 - PG&E representatives
 - TAC members
- Prepare and provide *Construction Design Documents* which include but not limited to:
 - Site plan
 - Civil Plan
 - Structural foundations and details
 - Electrical equipment layout
 - Electrical single line

EXHIBIT A

SCOPE OF WORK

- Electrical power wiring
- Electrical control wiring
- Electrical site layout
- Mechanical equipment layout
- Metical piping process and instrumentation diagram
- Metical piping layout
- Alerton control logic and wiring diagram
- Outline specifications
- Finalize construction cost.
- Prepare and provide *Construction Contract* which includes
 - Guaranteed Maximum Construction Cost
 - Project Schedule
 - Schedule of Values
 - General Conditions

Products:

- Meeting minutes for Design Review Meetings
- Construction Design Documents
- Construction Contract

TASK 7 CONSTRUCT SYSTEMS

The goal of this task is to install and connect the battery, and modify the central plant chilled water system.

The Recipient shall:

- Form, pour and cure foundation systems.
- Install battery and electrical equipment.
- Install power management hardware and software.
- Modify chilled water piping.
- Modify chilled water control systems and devices.
- Prepare and provide *Monthly Construction Report* which includes
 - Monthly status updates
 - Progress photographs.
- Prepare and provide *Project Completion Report* which verifies that the microgrid construction is complete.

Products:

- Monthly Construction Report
- Project Completion Report

TASK 8 PREPARE COMMISSIONING PLAN

The goal of this task is to prepare a commissioning plan that proves the system performs in compliance with the *Final Basis of Design* in TASK 2.

The Recipient shall:

- Develop commissioning protocols to confirm performance of algorithms with adjustment of inputs and variables and observing outputs and actions.
- Confer with Alerton Controls to develop commissioning test situations.
- Confer with PG&E to develop commissioning test situations.
- Confer with Imergy to establish limits on battery stress testing.

EXHIBIT A

SCOPE OF WORK

- Meet with TAC to review Commissioning Plan.
- Prepare *Commissioning Plan* which will include but not limited to:
 - Commissioning test protocol with anticipated outcomes
 - Pre-commissioning Test procedures
 - Test and commissioning test document formats

Product:

- Commissioning Plan

TASK 9 PREPARE MEASUREMENT AND VERIFICATION PLAN

The goal of this task is to prepare a measurement and verification plan to compare projected performance with actual performance.

The Recipient shall:

- Review Basis of Design for goals and objectives of the system.
- Meet with TAC to evaluate measurement and verification plan.
- Meet with PG&E to evaluate measurement and verification plan.
- Establish projected measurement values for each variable.
- Prepare and provide *Measurement and Verification Plan* which includes but is not limited to:
 - Data collection points
 - Baseline data
 - Projected changes from baseline data
 - Test and measurement equipment

Product:

- Measurement and Verification Plan

TASK 10 TEST AND COMMISSION SYSTEMS

The goal of this task is to confirm the system is installed per plans and specifications and performs per *Final Basis of Design*.

The Recipient shall:

- Test each component and system for installation.
- Record results of each test and note corrections or modifications required.
- Confirm all test results meet requirements before beginning commissioning.
- Perform commissioning protocols and record results.
- Prepare and provide *Commissioning Report* which includes:
 - Records of commissioning tests for each component installed
 - Notations of issues and actions required to resolve
 - Commissioning protocols and results

Product:

- Commissioning Report

TASK 11 - IMPLEMENT MEASUREMENT AND VERIFICATION PLAN

The goal of this task is to collect twelve months of information from the systems and compare with baseline information to determine if systems meet project goals.

The Recipient shall:

EXHIBIT A

SCOPE OF WORK

- Collect data from power flow control network.
- Collect data from PG&E metering equipment.
- Collect data from Alerton Building Automation System trend reports.
- Collect data from the solar array metering equipment.
- Prepare and provide *System Performance Report* which includes but not limited to:
 - Comparison of power demand over time between baseline, predicated and actual
 - Comparison of exported power characteristics with baseline, predicted and actual
 - Collect data on equipment performance, scheduled and required maintenance
 - Collect data on battery cycle performance

Product:

- System Performance Report

TASK 12 DEMAND RESPONSE MODELLING

The goal of this task is to demonstrate the potential to participate in a Demand Response program through automated interface with the Demand Response Provider.

The Recipient shall:

- Demonstrate Operational Capabilities.
 - Using Olivine's market simulation capabilities and real-time access to market data and signals participation, including Automatic Generation Control signals, price awards, and automated dispatches for both reliability and economic purposes
 - Demonstrate the full range of operational capabilities for dispatchable energy services to the grid based on defined scenarios
- Use defined scenarios, including excess generation, to evaluate strategies to optimize value for Las Positas College
- *Prepare and provide a Demand Response Participation Report* including but not limited to:
 - Strategies used to optimize value for Las Positas College Potential application for educational facilities statewide
 - Potential benefits to local energy suppliers and CAISO

Product:

- Demand Response Participation Report

TASK 13 DEVELOP MICROGRID BLUEPRINT

The goal of this task is to develop a blueprint for development of battery storage systems with microgrid technology by the public sector. This task will combine the data collected from the microgrid in a document that could be used by public or private entities to evaluate, plan and develop a microgrid with a battery storage system.

The Recipient shall:

- Model the sources of savings to the Recipient including:
 - Reduced demand charges by load shifting from peak periods.
 - Utility support from Demand Management using battery flows.
 - Elimination of diesel emergency backup systems.
- Model System long term operation costs including:
 - System efficiency.
 - 20 year maintenance cost.

EXHIBIT A

SCOPE OF WORK

- 20 year component replacement requirements.
- Battery deration curve.
- Develop and provide *Financial ProForma* which includes:
 - Annual cost and savings.
 - Financing Internal Rate of Return.
 - Ownership Return on Investment.
- Develop and provide *Microgrid Blueprint* for installation of a battery storage system which includes:
 - Summary of modeled sources of savings.
 - Summary of modeled long term operation costs.
 - *Financial ProForma*.
 - Review of Technologies.
 - Benefits and assumptions underlying such benefit.
- Participate in CPR per Task 1.3

Products

- Financial ProForma
- Microgrid Blueprint
- CPR Report

TASK 14 EVALUATION OF PROJECT BENEFITS

The goal of this task is to report the benefits resulting from this project.

The Recipient shall:

- Complete three Project Benefits Questionnaires that correspond to three main intervals in the Agreement: (1) *Kick-off Meeting Benefits Questionnaire*; (2) *Mid-term Benefits Questionnaire*; and (3) *Final Meeting Benefits Questionnaire*.
- Provide all key assumptions used to estimate projected benefits, including targeted market sector (e.g., population and geographic location), projected market penetration, baseline and projected energy use and cost, operating conditions, and emission reduction calculations. Examples of information that may be requested in the questionnaires include:
 - For Product Development Projects and Project Demonstrations:
 - Published documents, including date, title, and periodical name.
 - Estimated or actual energy and cost savings, and estimated statewide energy savings once market potential has been realized. Identify all assumptions used in the estimates.
 - Greenhouse gas and criteria emissions reductions.
 - Other non-energy benefits such as reliability, public safety, lower operational cost, environmental improvement, indoor environmental quality, and societal benefits.
 - Data on potential job creation, market potential, economic development, and increased state revenue as a result of the project.

EXHIBIT A

SCOPE OF WORK

- A discussion of project product downloads from websites, and publications in technical journals.
- A comparison of project expectations and performance. Discuss whether the goals and objectives of the Agreement have been met and what improvements are needed, if any.
- Additional Information for Product Development Projects:
 - Outcome of product development efforts, such copyrights and license agreements.
 - Units sold or projected to be sold in California and outside of California.
 - Total annual sales or projected annual sales (in dollars) of products developed under the Agreement.
 - Investment dollars/follow-on private funding as a result of Energy Commission funding.
 - Patent numbers and applications, along with dates and brief descriptions.
- Additional Information for Product Demonstrations:
 - Outcome of demonstrations and status of technology.
 - Number of similar installations.
 - Jobs created/retained as a result of the Agreement.
- For Information/Tools and Other Research Studies:
 - Outcome of project.
 - Published documents, including date, title, and periodical name.
 - A discussion of policy development. State if the project has been cited in government policy publications or technical journals, or has been used to inform regulatory bodies.
 - The number of website downloads.
 - An estimate of how the project information has affected energy use and cost, or have resulted in other non-energy benefits.
 - An estimate of energy and non-energy benefits.
 - Data on potential job creation, market potential, economic development, and increased state revenue as a result of project.
 - A discussion of project product downloads from websites, and publications in technical journals.
 - A comparison of project expectations and performance. Discuss whether the goals and objectives of the Agreement have been met and what improvements are needed, if any.
- Respond to CAM questions regarding responses to the questionnaires.

The Energy Commission may send the Recipient similar questionnaires after the Agreement term ends. Responses to these questionnaires will be voluntary.

Products:

- Kick-off Meeting Benefits Questionnaire
- Mid-term Benefits Questionnaire
- Final Meeting Benefits Questionnaire

TASK 15 TECHNOLOGY/KNOWLEDGE TRANSFER ACTIVITIES

The goal of this task is to develop a plan to make the knowledge gained, experimental results,

EXHIBIT A

SCOPE OF WORK

and lessons learned available to the public and key decision makers.

The Recipient shall:

- Prepare an *Initial Fact Sheet* at start of the project that describes the project. Use the format provided by the CAM.
- Prepare a *Final Project Fact Sheet* at the project's conclusion that discusses results. Use the format provided by the CAM.
- Prepare a *Technology/Knowledge Transfer Plan* that includes:
 - An explanation of how the knowledge gained from the project will be made available to the public, including the targeted market sector and potential outreach to end users, utilities, regulatory agencies, and others.
 - A description of the intended use(s) for and users of the project results.
 - Published documents, including date, title, and periodical name.
 - Copies of documents, fact sheets, journal articles, press releases, and other documents prepared for public dissemination. These documents must include the Legal Notice required in the terms and conditions. Indicate where and when the documents were disseminated.
 - A discussion of policy development. State if project has been or will be cited in government policy publications, or used to inform regulatory bodies.
 - The number of website downloads or public requests for project results.
 - Additional areas as determined by the CAM.
- Conduct technology transfer activities in accordance with the Technology/Knowledge Transfer Plan. These activities will be reported in the Progress Reports.
- When directed by the CAM, develop *Presentation Materials* for an Energy Commission-sponsored conference/workshop on the results of the project.
- Prepare a *Technology/Knowledge Transfer Report* on technology transfer activities conducted during the project.

Products:

- Initial Fact Sheet (draft and final)
- Final Project Fact Sheet (draft and final)
- Presentation Materials (draft and final)
- Technology/Knowledge Transfer Plan (draft and final)
- Technology/Knowledge Transfer Report (draft and final)

IV. PROJECT SCHEDULE

See the attached Excel spreadsheet.

To: Office of Planning and Research
PO Box 3044, 1400 Tenth Street, Room 222
Sacramento, CA 95812-3044

From: California Energy Commission
1516 Ninth Street, MS-48
Sacramento, CA 95814

Project Title: Las Positas Community College Microgrid

Project Location - Specific: 3000 Campus Hill Boulevard

Project Location - City: Livermore Project Location - County: Alameda

Description of Project:

Installation of 5 20' x 8' shipping containers on existing in parking lot paving.
Installation of conduit, wire and electrical distribution panel at the PV array in Lot H.

Name of Public Agency Approving Project: California Energy Commission

Name of Person or Agency Carrying Out Project: Chabot-Las Positas Community College District

Exempt Status: (check one)

- Ministerial (Sec. 21080(b)(1); 15268);
Declared Emergency (Sec. 21080(b)(3); 15269(a));
Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
[X] Categorical Exemption. State type and section number Cal. Code Regs., tit. 14 15301
Statutory Exemptions. State code number.
Common Sense Exemption. 15061(b)(3)

Reasons why project is exempt:

Class 1 - Operation, repair, maintenance, or minor alteration of existing structures or facilities not expanding existing uses.

The Las Positas Community College Microgrid project will include installation of flow battery containers, electrical switchgear and electronic equipment. The project will include construction, modification of the operation of the facility and equipment, an energy storage benefit study, and design and planning of the energy storage system. The project is categorically exempt from further environmental review because the impacts from the project are considered Class 1 impacts as defined by CCR Title 14 15301.

Responsible Agency

Contact Person: Eli Harland Area code/Telephone/Ext: 916-327-1463

If filed by applicant:

- 1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project? Yes No

Signature: Date: Title:

[X] Responsible by Lead Agency

[] Signed by Applicant

Date received for filing at OPR: