

New Agreement EPC-17-030 (To be completed by CGL Office)

ERDD	Molly O'Hagan	51	916-445-5311
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Prospect Silicon Valley	27-0220018
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California Opportunities for Procurement to Accelerate Clean Energy (Cal-OP ACE)			
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	4/2/2018	3/31/2023	\$ 3,998,715
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<input type="checkbox"/> ARFVTP agreements under \$75K delegated to Executive Director.			
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Proposed Business Meeting Date	3/21/2018	<input type="checkbox"/> Consent	<input checked="" type="checkbox"/> Discussion
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Business Meeting Presenter	Nicholas Blair	Time Needed:	5 minutes
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Please select one list serve. EPIC (Electric Program Investment Charge)

Agenda Item Subject and Description

PROSPECT SILICON VALLEY. Proposed resolution approving Agreement EPC-17-030 with Prospect Silicon Valley for a \$3,998,715 grant to fund a mentor/co-working program geared toward bridging the gap between California clean energy companies and institutional/commercial customers that rely on formal procurement processes to purchase distributed energy resource solutions and packages. As part of the agreement, the recipient will provide technical assistance to large procurement customers on streamlining processes for greater access to emerging energy technology solutions.

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: 15306, 15322, 15323
- Common Sense Exemption. 14 CCR 15061 (b) (3)

Section 15306 Information Collection provides that projects which consist of basic data collection, research, experimental management, and resource evaluation activities, which do not result in a serious or major disturbance to an environmental resource are categorically exempt from the provisions of CEQA. This project will involve data collection and analysis concerning specific energy markets and related transactions which will not result in a serious or major disturbance to an environmental resource.

Section 15322 Educational or Training Programs Involving No Physical Changes provides that the adoption, alteration, or termination of educational or training programs which involve no physical alteration in the area affected or which involve physical changes only in the interior of existing schools or training structures are categorically exempt from the provisions of CEQA. This project will involve the adoption of education and training programs which will involve no physical alteration in the area effected as they will be conducted at existing sites designed for such events.

Section 15323 Normal Operations of Facilities for Public Gatherings provides that normal operations of existing facilities for public gatherings for which the facilities were designed, where there is a past history of the facility being used for the same or similar kind of purpose are categorically exempt from the provisions of CEQA. This project will involve public gatherings of energy industry individuals and groups which will involve normal operations of existing office and conference facilities for public gatherings which were designed for this purposes and for which there is a past history of being used for this or similar purpose.

b) Agreement **IS NOT** exempt. (Consult with the legal office to determine next steps.)

Check all that apply

GRANT REQUEST FORM (GRF)

CEC-270 (Revised 10/2015)



- | | |
|--|---|
| <input type="checkbox"/> Initial Study
<input type="checkbox"/> Negative Declaration
<input type="checkbox"/> Mitigated Negative Declaration | <input type="checkbox"/> Environmental Impact Report
<input type="checkbox"/> Statement of Overriding Considerations |
|--|---|

Legal Company Name:	Budget
Energy Solutions International	\$ 1,200,000
Lawrence Berkeley National Laboratory	\$ 1,100,000
Zero Net Energy Alliance, Inc.	\$ 400,240
Local Government Commission (LGC)	\$ 89,000
ASWB Engineering	\$ 90,000
TerraVerde Renewable Partners, LLC	\$ 93,000
Ecomedes, LLC	\$ 95,000
California State University - Office of the Chancellor	\$ 93,000
ProQure CA, LLC	\$ 89,000

EXHIBIT A Scope of Work

I. TASK ACRONYM/TERM LISTS

A. Task List

Task #	CPR ¹	Task Name
1		General Project Tasks
2	X	Program Design and Development
3	X	Cal-OP Procurement Initiative Implementation
4		Evaluation of Project Benefits
5		Technology/Knowledge Transfer Activities

B. Acronym/Term List

Acronym/Term	Meaning
API	Application Program Interface
CBEs	California-Based Entity (for purposes of this agreement a California-Based Entity is an entity that has its headquarters in California and manufactures the DER products in California or an entity that has an office in California and substantially manufactures the DER products in California)
Cal-OP	California Opportunities Procurement
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CCC	California Community Colleges
CMAS	California Multiple Awards Schedule
CPR	Critical Project Review
CPUC	California Public Utilities Commission
CSUCO	California State University Chancellor's Office
DER	Distributed Energy Resource
DGS	Department of General Services
DOE	Department of Energy
EE	Energy Efficient
EEPP	Energy-Efficient Product Procurement
Energy Commission	California Energy Commission

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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Acronym/Term	Meaning
EPA's EPPP	EPA's Environmentally Preferable Purchasing Program
FEMP	Federal Energy Management Program
GHG	Greenhouse Gas
GPO	Group Purchasing Organization
GSA	General Services Administration
M&V	Measurement and Verification
RFP	Request for Proposals
TAC	Technical Advisory Committee
UCOP	University Office of the President
ZNE	Zero Net Energy

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

A. Purpose of Agreement

The purpose of this Agreement is to fund a self-sustaining mentor/co-working program specifically geared towards bridging the gap between California clean energy companies and institutional/commercial customers that rely on formal procurement processes to purchase distributed energy resource (DER) solutions and packages.

B. Problem/ Solution Statement

Problem:

California has set aggressive goals to reduce greenhouse gas emissions (GHG) and to double energy efficiency. To do this, institutions must substantially increase deployment of distributed energy resource (DER) solutions. While scaling up DER solutions can simultaneously help buyers and sellers of DER technologies, there are barriers in connecting the two parties. For DER technology companies to sell into institutional and commercial markets, they must navigate complicated institutional procurement processes, and procurement customers must overcome structural inertia to adopt new DER technologies. Because of this, customer acquisition costs for DER sellers are far too high, and adoption rates for innovative technologies far too low.

Solution:

Based on ongoing, holistic assessments of stakeholder requirements and limitations, the Recipient will design and implement various procurement initiatives to eliminate or mitigate identified procurement barriers between California's DER sellers and institutional buyers.

C. Goals and Objectives of the Agreement

Agreement Goals:

The goals of this Agreement are to:

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- Design and deploy a comprehensive program that will self-sustainably address the needs, opportunities and limitations of DER buyers and sellers, and will scale rapidly to accelerate achievement of California's statutory energy goals. This program will be known as the California Opportunities Procurement Program or Cal-OP Program.
- Enable a high-volume, high-visibility leadership cohort of California's largest institutional and commercial electricity ratepayers to accelerate state-wide GHG and energy efficiency goal achievement beyond Senate Bill 350 (statutes of 2015, chapter 547) requirements.
- Integrate proven, early-stage, and California-Based Entities' (CBEs') DER technologies into institutional energy procurement processes.
- Substantially reduce both capital and soft costs associated with procurement of validated DER products and solutions through standardization, systems integration, group purchasing, strategic partnerships, and behavior change.
- Provide market-specific data, insight, and strategies through a two-way flow of information between buyers and sellers.

Ratepayer Benefits:² This Agreement will result in ratepayer benefits of lower costs, greater electricity reliability, and the reduction of harmful emissions by systematically targeting the three factors involved in organizational change management:

- Changing technology – enhancing existing procurement systems to include best-in-class products and services and creating new or enhanced product specifications that facilitate development and deployment of superior DER products;
- Changing behavior – incentivizing buyers to adopt superior DER products via improved information, education, and systems design; and
- Changing policies and processes – facilitating adoption of procurement best practices that align with organization goals to procure, install and integrate best-in-class DERs and energy efficient devices.

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 assisting DER sellers and institutional buyers through the design and implementation of a series of buyer-driven procurement assistance initiatives to eliminate or mitigate identified procurement barriers between California's DER sellers and institutional buyers.

Agreement Objectives:

The objectives of this Agreement are to:

- Establish the Cal-OP Website to provide education, information, market insights and connection points to California's DER sellers, and enable institutional buyers to search for qualifying products, essential features, competitive prices, and procurement locations;

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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- Assess and prioritize the needs, barriers, and opportunities of DER buyers and sellers;
- Deploy high-impact DER procurement assistance initiatives that target \$500M in the 2019-2022 timeframe;
- Develop educational resources for DER sellers, including in-person trainings at established industry events, and a series of networking events and webinars to connect the Cal-OP community; and
- Create a self-funding revenue model to enable Cal-OP to sustain full deployment of its programs beyond 2021, yielding annual energy savings of at least \$684 million per year, and annual GHG reductions of at least 1,642 million metric tons of CO₂e.

III. 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, including the Final Report Outline and Final Report

- 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.
- Consider incorporating all CAM comments into the final product. If the Recipient disagrees with any comment, provide a written response explaining why the comment was not incorporated into the final product.
- Submit the revised product and responses to comments within 10 days of notice by the CAM, unless the CAM specifies a longer time period, or approves a request for additional time.

For products that require a final version only

- Submit the product to the CAM for acceptance. The CAM may request minor revisions or explanations prior to acceptance.

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**

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- 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.
- 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

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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);
- 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

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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.
- 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.

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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.
 - 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 progress made on all Agreement activities as specified in the scope of work for the preceding month, including accomplishments, problems, milestones, products, schedule, fiscal status, and 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.
- Submit a monthly or quarterly *Invoice* that follows the instructions in the "Payment of Funds" section of the terms and conditions, including a financial report on Match Fund and in-state 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 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 the 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. (See Task 1.1 for requirements for draft and final products.)

Recipient Products:

- Final Report Outline (draft and final)

CAM Product:

- Style Manual
- Comments on Draft Final Report Outline
- Acceptance 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, Style Manual, and Final Report Template provided by the CAM with the following considerations:
 - Ensure that the report includes the following items, in the following order:
 - Cover page (**required**)
 - Credits page on the reverse side of cover with legal disclaimer (**required**)
 - Acknowledgements page (optional)
 - Preface (**required**)
 - Abstract, keywords, and citation page (**required**)
 - Table of Contents (**required**, followed by List of Figures and List of Tables, if needed)
 - Executive summary (**required**)
 - Body of the report (**required**)
 - References (if applicable)
 - Glossary/Acronyms (If more than 10 acronyms or abbreviations are used, it is required.)
 - Bibliography (if applicable)
 - Appendices (if applicable) (Create a separate volume if very large.)
 - Attachments (if applicable)
 - Ensure that the document is written in the third person.
 - Ensure that the Executive Summary is understandable to the lay public.
 - Briefly summarize the completed work. Succinctly describe the project results and whether or not the project goals were accomplished.
 - Identify which specific ratepayers can benefit from the project results and how they can achieve the benefits.

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- If it's necessary to use a technical term in the Executive Summary, provide a brief definition or explanation when the technical term is first used.
- Follow the Style Guide format requirements for headings, figures/tables, citations, and acronyms/abbreviations.
- Ensure that the document omits subjective comments and opinions. However, recommendations in the conclusion of the report are allowed.
- Include a brief description of the project results in the Abstract.
- Submit a draft of the report to the CAM for review and comment. The CAM will provide written comments to the Recipient on the draft product within 15 days of receipt
- Consider incorporating all CAM comments into the Final Report. If the Recipient disagrees with any comment, provide a written response explaining why the comment was not incorporated into the final product
- Submit the revised Final Report and responses to comments within 10 days of notice by the CAM, unless the CAM specifies a longer time period or approves a request for additional time.
- Submit one bound copy of the *Final Report* to the CAM along with *Written Responses to Comments on the Draft Final Report*.

Products:

- Final Report (draft and final)
- Written Responses to Comments on the Draft Final Report

CAM Product:

- Written Comments on the 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 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

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- 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.
- If different from the solicitation application, provide 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.

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*.

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- 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

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.

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- 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

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.

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- 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

IV. 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: PROGRAM DESIGN AND DEVELOPMENT

The goals of this task are to: (1) Launch the Cal-Op Program and supporting infrastructure and systems; (2) Understand institutional buyer barriers and opportunities for accelerated adoption of emerging DER products through formal procurement mechanisms; (3) Understand the strategies by which early-stage DER product companies (DER sellers) can successfully compete in institutional procurement processes (by product category and customer segment); (4) Prioritize the product categories, procurement assistance services, and sequence of activities that will be offered to Cal-OP participants; (5) Provide feedback to DER Sellers on the alignment of their product with buyers’ needs; and (6) notify buyers and sellers of the selected Procurement Initiative(s) that Cal-OP will be pursuing (as part of Task 3). The key outcomes of the task are (1) prioritized recommendations for specific procurement initiatives and (2) targeted feedback to DER sellers on how to align their products with buyers in the Cal-Op Program. The buyer and seller characterization and procurement initiative prioritization will be refreshed on an annual basis, ensuring that Cal-OP maintains pace with changes in technologies and aligns with institutional buyer budget cycles.

Subtask 2.1. Launch the Cal-Op Program

The goal of this subtask is to launch the Cal-Op Program. Prior to program launch, Recipient will conduct a full review of existing clean energy mentor/ co-working/ incubator programs to identify best practices, assess gaps in existing programs, and refine new program strategies to meet market needs. The Recipient will launch the Cal-OP Program website shortly after project kickoff, as the Cal-Op Program website (www.cal-op.org) will serve as the main clearinghouse of information on all aspects of the program. The Cal-Op Program development and deployment process will engage stakeholders that will include, but are not limited to:

- Existing incubators, accelerators, and educational programs.
- Entrepreneurs and technologists.
- Large-scale buyers in key market segments.
- Service providers seeking to expand their capabilities to include design, installation, commissioning, operations and maintenance of Cal-OP-qualified DER products.
- Wholesalers and resellers such as distributors, manufacturer reps, value added resellers and system integrators.
- Policy makers.

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- Utility program planners, program managers, program implementers, and account representatives.

The Recipient shall:

- Review existing entrepreneurship mentor/co-working programs, including incubators, accelerators, training providers, and university programs, and their strategies for preparing companies to align DER solutions with customer and community needs.
- Identify lessons learned and best practices from existing clean technology entrepreneur programs. Programs reviewed may include, but are not limited to: CalSEED, LA Cleantech Incubator, Prospect Silicon Valley, CleanTech San Diego, Ideo, Stanford Graduate School of Design, the Lean Startup Company, Powerhouse, and others.
- Create *Entrepreneurial Mentoring/Co-Working Programs Report* summarizing existing efforts in the clean-tech incubator space.
- Create a test-site for the Cal-Op Program Website (www.cal-op.org) to educate prospective buyer and seller participants, as well as other stakeholders, about the Cal-Op Program. This website will serve as the central resource for all program activities, a clearinghouse for information, and provide a portal to Cal-OP e-procurement tools.
 - At program launch, the free and publically-accessible Cal-Op Program Website will include, but is not limited to:
 - Cal-Op Program goals and objectives.
 - Buyers and Seller Surveys (See Sub-Task 2.2 and 2.3).
 - Links to studies and information about various green procurement initiatives and resources.
 - Upcoming events.
 - Contact information.
 - Links to e-Procurement tools.
 - Eventual website components to include:
 - Procurement Initiatives enrollment information and marketing collateral.
 - Sample requests for proposal (RFPs).
 - Energy and water saving impacts.
 - Other Cal-Op Program deliverables.
- Create a *Cal-Op Program Website Memorandum* summarizing the Cal-Op Program website wireframe, the website functionality, key website screenshots, and any additional business requirements.
- Submit the Cal-Op Program Website Memorandum to CAM for review.
- Incorporate CAM feedback on the Cal-Op Program Website Memorandum into the Cal-Op Program Website test-site.
- Launch the Cal-Op Program Website.
- Develop the *Cal-Op Product Search Tool* to allow institutional buyers to have access to a list of products that meet minimum state and federal procurement standards as it pertains to energy, water, and material use.
 - The Cal-Op team will create a product search tool tailored for California institutions – building on the tool now available for the federal government (www.sftool.gov), while adding additional information on DER products, their performance attributes, and alignment with California standards.
 - The Cal-Op Product Search Tool will enable users (universities, cities, etc.) to create a user account to enable further customization of the product list and the distributors and buying sources they will access. The custom account will also enable data collection on users and product interests and purchases, which will assist customers with compliance reporting, and allow Cal-OP and its users to

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leverage their buying power through volume discounts and joint purchasing initiatives where appropriate.

- Create the *Cal-Op Product Search Tool Memorandum* summarizing the business requirements of the tool and the tool's functionality.
- Submit the Cal-Op Product Search Tool Memorandum to CAM for review.
- Incorporate CAM feedback on the Cal-Op Product Search Tool Memorandum, into the Cal-Op Product Search Tool.
- Launch the Cal-Op Product Search Tool.

Products:

- Entrepreneurial Mentoring/Co-Working Programs Report (Draft and Final)
- Cal-Op Program Website Memorandum
- Cal-Op Product Search Tool Memorandum

Subtask 2.2: Conduct Buyer Barriers and Opportunities Analysis

The goal of this task is to understand the barriers of institutional DER technology buyers, and opportunities for those institutions to adopt high-performance and CBEs' DER products through enhancement of formal procurement mechanisms. The first part of the assessment will examine existing processes, procedures and technical specifications used by institutions that have adopted clean energy goals (e.g., the California Department of General Services (DGS), Federal General Services Administration (GSA), University Office of the President (UCOP), California State University Chancellor's Office (CSUCO), cities, California Community Colleges (CCCs), K-12, etc.), as well as institutions with less formal/more distributed clean energy commitments (including private enterprises and group purchasing organizations (GPOs)). The team will conduct an energy spending analysis of capital and operating costs pertaining to equipment. The team will also assess the strengths and shortcomings of existing procurement programs, such as: the California Multiple Awards Schedule (CMAS) offered through DGS to state and local agencies, Department of Energy Federal Energy Management Program (DOE-FEMP), Better Buildings, Environmental Protection Agency's Environmentally Preferable Purchasing Program (EPA's EPPP), and procurement programs at the UCOP, CSUCO, CCCs, and others.

In addition to studying these procurement programs, Recipient will work through partners to survey buyers to determine their level of awareness of the programs, and their perceptions regarding strengths and opportunities for improvement. Interviews will be conducted with a subset of customers surveyed to better understand decision-making processes, technology requirements, and any perceived concerns with participating in potential Cal-OP procurement initiatives. Surveys will be informed by and aligned with the Sustainable Purchasing Leadership Council BENCHMARK tool, which will itself be further evaluated for relevance and efficacy in the context of Cal-OP Program design and evaluation.⁴ Our goal is to have 100 survey responses across a minimum of seven institutional buyer groups.

The Recipient shall:

- Review existing procurement assistance programs to:
 - Determine the scope of support services offered and gaps in service offerings that Cal-OP could fill;
 - Identify opportunities to collaborate through the implementation of Cal-OP; and

⁴ <https://www.sustainablepurchasing.org/benchmarking/>

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- Identify lessons learned and best practices from existing programs.
 - Programs reviewed may include, but are not limited to: Sustainable Purchasing Leadership Council, DOE-FEMP Energy-Efficient Product Procurement (EPPP), GSA, High Impact Technologies, Better Buildings, DOE-FEMP Affordable Power Infrastructure Partnership, New York's Renewing the Energy Vision Connect, EPA's EPPP, DGS (CMAS, etc.), GPOs, UCOP, CSUCO, CCCs, contractors.
 - The review will include, but is not limited to: Buyer eligibility requirements; procurement assistance service offerings; product coverage; lessons learned and best practices.
- Review available literature on institutional procurement barriers including:
 - EPA's EPPP Report (<https://www.epa.gov/sites/production/files/2015-08/documents/energyefficientpurchasing.pdf>)
 - Subcontractor's Achieved and Potential Savings through Energy Efficient Procurement Report (<https://eta.lbl.gov/publications/achieved-potential-energy-savings>)
- Survey existing procurement policies and commercial end-use survey studies to identify high impact opportunities in different sectors, including segment-specific DER penetration and energy efficiency potential.
- Develop a *Procurement Resource Summary* of existing programs, procurement tools and subject matter experts based on the reviews and survey described above.
- Create an *Institutional Buyer Survey* targeting public agencies, large enterprises, and other institutions. One of the survey fields shall identify existing ZNE or 100% renewable commitments, so that Recipient can identify how barriers, needs and opportunities differ between institutions that have top-down clean energy directives and those that do not. Survey topics addressed will include, but are not limited to:
 - Characterization of barriers and opportunities with existing procurement processes and systems.
 - Customer awareness of DER products and value propositions, perceived barriers, and buying criteria when purchasing new DER products (e.g., warranty, reliability, third-party performance validation, security, interoperability, standards compliance, cost/ROI, financing options; etc.).
 - Awareness of procurement assistance programs (e.g., CMAS, FEMP, others).
 - Customer spending on relevant DERs, energy efficiency (EE) devices, and energy-using products (for the previous three years and projected spend for the coming three years, where data is available).
 - ZNE and/or clean energy goal setting and planning processes.
 - Capital improvement plans and energy project plans for facilities managed (typically addressing one-to-three-year planning cycles).
 - Project payback requirements and internal rate of return requirements.
 - Project finance options and needs.
 - Level of interest and level of importance of purchasing from CBEs.
- Submit the Institutional Buyer Survey to CAM for review.
- Incorporate CAM feedback on the Institutional Buyer Survey
- Administer surveys to institutional buyers through the following channels:
 - Cities and Counties: Local Government Commission;
 - State Agencies: California DGS;
 - CCC: CCC Chancellor's Office;
 - University of California: UCOP;
 - California State Universities: CSUCO;

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- Federal Government: GSA;
- K-12 Schools: California Association of School Business Officers; and
- Large private sector customers (vertical market leads will be identified for healthcare, high tech, manufacturing, commercial real estate, transportation, etc.).
- Analyze customer responses, segmenting customers based on their procurement assistance needs, ability and timing to participate in the Cal-OP, DER product needs and opportunities, commitment to ZNE and renewable goals, and other factors.
- Conduct interviews with a subset of customers surveyed to better understand decision-making processes, technology requirements, and perceived concerns with participating in potential procurement initiatives.
- Request detailed purchasing data for institutional buyers that have significant potential – demonstrated by ZNE and/or renewable goals, significant capital improvement plans, large energy-related spending, and alignment with Cal-Op Program goals.
- Analyze customer spending on relevant energy-intensive appliances and equipment, e.g., lighting, DERs, EE devices, energy information and management systems, etc. for the previous three years.
- Create a *Buyer Barriers and Opportunities Memorandum* summarizing the survey, analyses, and interview responses, and identifying top DER product categories to be addressed in the DER Seller Survey (Subtask 2.3).

Products:

- Procurement Resource Summary
- Institutional Buyer Survey (Draft and Final)
- Buyer Barriers and Opportunities Memorandum

Subtask 2.3: Conduct Seller Barriers and Opportunities Analysis

The goal of this sub-task is to understand the ability of California DER product sellers to successfully compete in institutional customer procurement processes (by product category and customer segment).

The Recipient shall:

- Develop a *DER Seller Survey* specific to key product categories and topics, which may include, but are not limited to:
 - Technical specifications; product warranty; existing third-party validations and testing standards (e.g. ENERGY STAR, Design Light Consortium); safety and security; interoperability and communications (e.g. Open ADR, SEP 2.0, Zigbee, etc.);
 - Availability and terms for financing.
- Submit the DER Seller Survey to CAM for review.
- Incorporate CAM feedback on the DER Seller Survey.
- Administer the DER Seller Survey to relevant sellers via the Cal-Op Program Website – focusing on the top DER categories listed in the Buyer Barriers and Opportunities Memorandum. Targeted sellers will include DER manufacturers, service providers, distributors, contractors, etc. Analyze seller survey responses, seeking to understand the degree to which DER Sellers comply with the needs and address the opportunities identified through the Institutional Buyer Surveys.
- Identify the product categories and types of procurement assistance that best meet the interests, opportunities, and needs identified by customers.

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- Create a *Seller Barriers and Opportunities Memorandum* summarizing the survey, analyses, and interview responses, as well as risk mitigation strategies such as insurances and performance bonds; and financing mechanisms such as equipment leases (including true leases).

Products:

- DER Seller Survey (Draft and Final)
- Seller Barriers and Opportunities Memorandum

Subtask 2.4: Prioritize and Recommend Procurement Initiatives

Once the barriers and opportunities are well-defined for both buyers and sellers, potential procurement assistance initiatives will be ranked based on potential energy impact; presence of competition among DER sellers; cost to implement the initiative; and the degree to which the interests, opportunities and needs identified by customers can be addressed (including alignment with budgetary cycles). The outcome of this task will be a Cal-Op Procurement Initiative Strategy Memorandum, which specifies requirements for the products, services, assessment data, and intervention strategies that will be facilitated and enabled through the Cal-Op Program.

The Recipient Shall:

- Create a Cal-OP Procurement Initiative Prioritization Tool that weighs the alternative priorities that Cal-OP could focus on. The tool will address, but is not limited to, these factors for program prioritization:
 - Demand for a product category;
 - Commercial readiness of products in the product category;
 - Demand for a type of procurement assistance from buyers (e.g., enhancements to e-procurement systems, group purchasing, product specifications, etc.);
 - Potential benefits of a product category to a customer segment (energy savings, peak demand reductions, ability to accelerate California energy goals, etc.);
 - Level of compliance with buyer needs (technical, warranty, etc.);
 - Timeline of customer procurement opportunities (sourced from customer capital improvement plans and energy project plans);
 - Cost to provide the procurement services and likely impact on DER adoption; and
 - Impacts from emerging building codes and appliance standards.
- Create a *Cal-Op Procurement Initiative Prioritization Tool Memorandum* that summarizes the factors addressed by the tool, the tool functionality, and any additional business requirements of the Cal-Op Procurement Initiative Prioritization Tool.
- Submit the Cal-Op Procurement Initiative Prioritization Tool Memorandum to CAM for review.
- Incorporate CAM feedback on the Cal-Op Procurement Initiative Prioritization Tool Memorandum into the Cal-Op Procurement Initiative Prioritization Tool.
- Launch the Cal-Op Procurement Initiative Prioritization Tool.
- Develop the *Cal-Op Procurement Initiative Strategy Memorandum* laying out Cal-Op's 1) preferred procurement initiatives; 2) priority product categories; 3) intervention strategies; 4) strategy for identification of technical specifications, operations and maintenance requirements, M&V requirements; and 5) assessment of potential for various product and program strategies to advance state statutory energy goals, including renewable energy, storage, energy efficiency, demand response, electric

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vehicle deployment and grid integration, building standards, sustainable state agency procurement, and other relevant goals.

- Gather buyer and seller feedback on preferred procurement initiatives. The Recipient will:
 - Notify buyers and sellers of the selected procurement initiative(s) Cal-OP will be pursuing through the Cal-Op Program Website, the DER seller services channels (Subtask 5.2), and other channels;
 - Gather verbal and written feedback on the procurement initiatives; and
 - Make any adjustments to procurement initiatives based on feedback.
 - Capture buyer and seller feedback into the *Procurement Initiative Strategy Memorandum* (Final).
- Track buyer and seller feedback on procurement initiatives in a common location spreadsheet to be included in the *Procurement Initiative Strategy Memorandum* (Final).
- Prepare *CPR Report #1* in accordance with subtask 1.3 (CPR Meetings).
- Participate in a CPR meeting.

Products:

- Cal-Op Procurement Initiative Prioritization Tool Memorandum
- Procurement Initiative Strategy Memorandum (Draft and Final)
- CPR Report #1

Subtask 2.5 Develop Self-Sustaining Cal-OP Business Model

The goal of this subtask is to establish a self-sustaining revenue stream to enable the Cal-OP Program to be sustained after initial Energy Commission funding. As the Cal-OP model creates substantial value for stakeholders on both the demand and supply sides, this value will be transformed into revenue to enable the program to be self-sustaining, and to continue to drive impact beyond the timeline of the Energy Commission grant.

The Recipient shall:

- Identify revenue sources and program structures that will enable the Cal-OP Program to operate independently on a sustainable, full-cost recovery basis. (Note that this analysis will take place at the program-wide level for all of Cal-OP and with respect to each individual segment-specific procurement initiative, described below.) Examples of possible revenue models include: 1) US GSA supply schedules which include modest fees embedded into product procurement; and 2) the Skaggs Amendment used between FEMP and federal agencies for energy contracting support services.
- Analyze which of the segment-specific procurement initiatives identified in Task 2.4 will be ongoing, e.g., group purchasing, standards and specifications development, a Cal-OP procurement challenge, ongoing technical assistance, etc.
- Identify ongoing operating costs from procurement initiative activities, including the potential procurement initiatives listed in Subtask 3.2.
- Identify costs and revenue streams related to each procurement initiative to offset ongoing costs. Options to be assessed include but are not limited to: supply schedule fees, membership dues (linked to organization size), shared savings from group procurement, modest transaction fees, and scaled forms of demand-side sponsorship of the Cal-OP challenge.
- Compile findings into the *Self-Sustaining Cal-OP Revenue and Cost Model* to ensure that the program lasts beyond the grant period.
- Draft the *Cal-OP Business Plan Summary* to outline roll-out and implementation of revenue-generating elements of program.
- Submit the Cal-OP Business Plan Summary to CAM for review.

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- Incorporate CAM feedback on the Cal-OP Business Plan Summary.

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Products:

- Self-Sustaining Cal-OP Revenue and Cost Model
- Cal-OP Business Plan Summary (Draft and Final)

TASK 3: CAL-OP PROCUREMENT INITIATIVE IMPLEMENTATION

The goal of this task is to plan and implement the procurement initiatives recommended by the Recipient and approved by the Energy Commission in Task 2.4.

Subtask 3.1: Conduct Procurement Initiative Enrollment

The goals of this task are to: (1) Increase awareness of DER product and service procurement solutions among institutional buyers, (2) Increase awareness of institutional buying policies and procedures among DER solution providers; and (3) Enroll buyers and sellers in the Cal-OP procurement initiatives. The Recipient will create Marketing Collateral for each CAM-approved procurement initiative and engage the applicable customer segments and DER product companies. During enrollment, Cal-OP will make concerted efforts to increase awareness of high-performance CBEs' DER products among institutional buyers, and increase awareness of institutional buying policies and procedures among DER providers. The team will endeavor to identify larger-scale buyers and leading DER product and service sellers in the Cal-OP procurement initiatives to develop opportunities for enhancing economies of scale through group purchasing and deployment opportunities. Channel partners (sector leaders that the Recipient will mobilize to serve as Cal-OP project advisors) will serve a key role in conducting outreach to the segment at large and to specific large-scale buyers to promote maximum enrollment, as defined by the Cal-Op Program Intent to Participate Memorandum.

The Recipient shall:

- Create *Procurement Initiative Marketing Collateral* for each CAM-approved procurement initiative. At a minimum, an educational PowerPoint presentation and two-page fact sheet will be developed and made available on the www.cal-op.org website.
- Create *Buyer Program Intent to Participate Memorandum* which outlines a DER procurement initiative by market segment and/or technology segment and the method for buyer participation for use to confirm active interest to participate on the part of prospective buyers.
- Create *Seller Program Intent to Participate Memorandum* which outlines a DER procurement initiative by market segment and/or technology segment and the method for seller participation for use to confirm active interest to participate on the part of prospective sellers.
- Launch marketing campaigns for the Cal-OP targeted to institutional buyers and DER sellers.
- Identify and match appropriate procurement initiatives to committed institutional buyers and DER sellers by educating facility managers, asset managers, financial and budget analysts, governing boards of relevant institutions, and other influencers about the goals, services, and benefits of the various Cal-Op Program Procurement Initiatives.
- Facilitate networking events between buyers and sellers; four for Northern California and four for Southern California (including the San Joaquin Valley). Networking events should provide a venue for: (1) sellers to communicate their products' benefits; (2) buyers to communicate their evaluation criteria, needs and desires; and (3) financing providers to communicate the benefits of their solution to buyers and sellers.

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- Prior to holding networking events, prepare the *Networking Event Plans* (one for each of the eight networking events to be held) which will include a draft agenda, potential speakers, and a discussion on the overall conduct of the event.
- Following the events, create the *Networking Event Reports* (one for each of the eight networking events to be held). These reports will summarize the networking events, as well as include any presentations, or other materials used at the events.
- Group similar buyers and DER sellers to achieve economies of scale and leveraged buying power.
- Enroll buyers and sellers into specific procurement initiatives and secure commitments in the form of a Cal-Op Program Intent to Participate Memorandum.
- If prospective buyers cannot participate in a specific procurement or financing opportunity, determine why, and develop a longer-term approach that enables Cal-OP to re-engage when the customer initiates their planning for the following year.
- Prepare *CPR Report #2* in accordance with subtask 1.3. (CPR Meetings).
- Participate in a CPR meeting.

Products:

- Procurement Initiative Marketing Collateral (for each CAM-approved procurement initiative)
- Buyer Program Intent to Participate Memorandum (for each CAM-approved procurement initiative)
- Seller Program Intent to Participate Memorandum (for each CAM-approved procurement initiative)
- Networking Event Plans
- Networking Event Reports
- CPR Report #2

Subtask 3.2: Cal-Op Program Planning and Procurement Initiative Design

The goals of this task are to: (1) Plan the Cal-Op Program activities and resources through the design and implementation of CAM-approved procurement initiatives targeted to key vertical markets and technology categories; and (2) Develop the Cal-OP Program policies, processes, and data requirements. The team will work with enrolled buyers to identify technical and contractual requirements, plan the procurement assistance services to align with organization objectives and budgetary cycles, and develop the appropriate policies, processes, data tools and resources, bid requirements, and collateral. A procurement initiative will include one or more DER product categories and one or more customer sectors. (Where customer sectors are the focus, the initiative will typically include a broad range of relevant DERs. Where a specific DER technology is the focus, e.g., energy storage, the initiative will be designed to reach key storage customers in all relevant sectors.) The Recipient will implement between five and ten major procurement initiatives over the first four years of the procurement initiative, based on buyer and seller needs and market response in the procurement initiative design and deployment process. Each procurement initiative will have a specific Cal-OP Procurement Initiative Work Plan outlining the goals and objectives, scope and sequencing of services to be rendered, key milestones, budget, resourcing, marketing activities, and other program elements required to successfully implement the procurement initiative.

In general, Cal-OP's procurement initiatives will seek to increase DER adoption and effective implementation by means of these key levers for systemic change:

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- Changing technology – via: 1) Enhancing existing procurement systems to include best-in-class products and services and; 2) Creating new or enhanced product specifications that facilitate development and deployment of superior DER products;
- Changing behavior – incentivizing buyers to adopt superior DER products via improved information, education, and outreach;
- Changing policies and processes to facilitate procurement of best-in-class DERs and energy efficient devices, and effectively installing, integrating, and optimizing them at customer sites.

In Task 2, the objective is to characterize and prioritize the needs, barriers and opportunities for both the buyer and seller - resulting in a CAM-approved Cal-Op Procurement Initiative Strategy Memorandum (Subtask 2.4). In Task 3.2, a Cal-OP Procurement Initiative Work Plan will be created for each procurement initiative to be undertaken during the coming year. Each Cal-OP Procurement Initiative Work Plan will specifically identify the strategies by which highest-performance DERs and CBEs' (DER companies) will be highlighted and promoted within that initiative. Each of the procurement initiatives will be separately developed for review, refinement, and approval by the CAM. Likewise, Cal-OP will align its initiatives with budgetary and program planning by specific buyer groups to optimize the program design, and ensure full customer and buyer engagement in procurement processes, including financing and deployment.

The Recipient shall:

- Develop a *Cal-OP Procurement Initiative Work Plan* for each procurement initiative to be undertaken as determined by the Cal-Op Procurement Initiative Strategy Memorandum (Subtask 2.4). The Cal-OP Procurement Initiative Work Plan will outline the goals and objectives, scope and sequencing of services to be rendered, key milestones, budget, resourcing, marketing activities, and other key aspects required to implement the procurement initiative. The scope of services may include, but is not limited to:
 - Identifying and enrolling leading buyers, existing purchasing organizations, relevant trade associations, and channel partners.
 - Direct technical assistance to enrolled buyers and sellers.
 - Integrating DER products into existing procurement platforms with relevant codes and application programming interfaces (APIs).
 - Facilitating and holding networking events.
 - Creating RFP templates (product specifications, terms and conditions, etc.)
 - Supporting buyers with adopting and utilizing new e-procurement systems .
 - Providing education for facility/energy managers, asset managers, and relevant governing bodies (e.g. boards of directors, city councils, etc.).
 - Organizing and facilitating group purchasing efforts.
- Create *DER Bid and/or System Specifications* for each planned procurement initiative.
 - Engage with the Energy Commission GFO 17-301 Group 1 and 2 awardees to leverage the outcomes from the Cal Test Bed and Cal-EPE product evaluations. Where possible, the Cal-Op Program will leverage the Cal-EPE's Buyer's Guide to assist customers in making decisions about new DER specifications
 - Engage with the GFO 17-301 Group 4 awardee to ensure that best-in-class procurement-related software is fully integrated into the Cal-OP platform and procurement initiative program designs
- Conduct education and bidder recruitment to enroll DER sellers to the procurement initiative and validate that the DER seller satisfies the established requirements.
- Update the Cal-OP Procurement Initiative Work Plan annually based on changing Cal-OP Program priorities.

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(Note that development of Self-Sustaining Cal-OP Revenue and Cost Model has been separately identified in Task 2.5 to ensure that the Cal-OP program and segment-specific procurement initiatives are sustained through and beyond the grant period. Procurement Initiative design concepts, marketing strategies, and lessons learned will be incorporated into the Cal-OP Business Plan Summary)

Products:

- Procurement Initiative Work Plan
- DER Bid and/or System Specifications (for each planned procurement initiative)

Subtask 3.3: Buyer and Seller Implementation Support

The goals of this task are to implement the Cal-OP procurement initiatives, and to support buyer and seller success in accelerating effective DER deployment. This includes ensuring that relevant DER products meet the qualifications and needs of DER buyers in the context of each procurement initiative focus area. Depending on the type of initiatives selected, services will typically include: 1) Deployment of Premium DER Standards (including reviews and qualification of DER company product attributes); 2) E-Procurement assistance; 3) Group purchasing; 4) Procurement challenges; 5) Direct technical assistance to buyers, sellers, and relevant associations; 6) Facilitation of training and networking events, 7) Creation/identification of segment-specific market information; 8) Development of segment-specific buyers' and sellers' guides and other resources to be hosted on www.cal-op.org; 9) RFP models and bid specifications, and 10) Other activities appropriate to the targeted vertical market and/or technology type.

The Recipient shall:

- Conduct a review of participating DER Sellers relevant to each procurement initiative focus, including:
 - Review of relevant product test and performance data, verifying claimed third-party ratings, connectivity requirements and other product attributes.
 - Ensure that ratings and other relevant performance and standards-related information appear on the Cal-OP Portal and, where feasible and appropriate, other leading e-procurement portals.
 - Review basic financial health of the DER seller.
 - Review and confirm that product warranties meet buyer needs.
 - Review and confirm pricing of DER products.
- Develop and implement at least six procurement initiatives, engaging appropriate segment-specific support efforts (described in Task 2) which include, but are not limited to:
 - Direct technical assistance to buyers, sellers, and relevant associations.
 - Integrating DER products into existing e-procurement platforms with relevant codes and APIs.
 - Organizing and facilitating group purchasing efforts.
 - Facilitating networking events.
 - Creating content and posting updates on www.cal-op.org.
 - Providing education and training events (per schedule below) for relevant sellers and buyers, including facility/energy managers, asset managers, and relevant governing bodies (e.g. boards of directors, city councils, etc.).
- Develop at least six Procurement Challenges, initiatives which bring high-profile attention to specific DER product categories (e.g., Smart Thermostats, HVAC, BEMS, etc.) and/or deployment strategies (e.g. ZNE Buildings, 100% Renewables, etc.) by

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encouraging buyer adoption of DER technologies or procurement strategies. Examples may include conducting competitions, or providing awards for the institution with the highest rate of progress toward important DER goals, such as all-electric and renewably-powered facilities, including electric vehicle charging.

- Develop Leadership Cohort of Large-Volume Buyers to jump-start DER deployment in key institutions (starting with education and municipal sectors).
- Develop quarterly *Implementation Support Progress Reports* for each procurement initiative which will detail buyer and seller enrollment, sales figures, barriers, and strategies employed to overcome barriers.
- Develop Cal-Op *DER Seller Guide* for sellers to navigate institutional procurement processes, including guidance on supply chain partnerships, common requirements such as bonding and insurance, schematics on typical procurement procedures and timelines, and strategies for successful responses.
- Develop a dedicated section on the Cal-Op website for DER sellers www.cal-op.org/resources. This Cal-Op Procurement Resource Center will include all relevant publications, toolkits, and resources produced by the Cal-Op Program, including Groups 1 – 4 awarded from California Energy Commission's GFO-17-301. Notable resources from Group 3 may include (but not be limited to):
 - CA-DER Seller Guide;
 - Cal-OP Buyer Barriers and Opportunities Memorandum;
 - Cal-OP Seller Barriers and Opportunities Memorandum;
 - Cal-OP DER Product Specifications for each Procurement Initiative;
 - Cal-OP RFP Templates;
 - Cal-OP Best Practices for Group Procurement;
 - Links to procurement assistance services;
 - Cal-Op Program Intent to Participate Memorandum templates for buyers and sellers;
 - Web links to leading DER market research; and
 - Web links to relevant procurement and channel development resources.
- Develop a total of 24 live DER seller and buyer training and networking events over the 2018-2021 program period, including:
 - Webinars: At least twice yearly the Cal-Op Program team will host webinars for DER sellers to train them on the tools and strategies for successfully participating in institutional procurements. These webinars will be recorded and available for free viewing on www.cal-op.org.
 - Prior to holding webinars, prepare *Webinar Plans* which will include draft agenda, potential speakers, and a discussion on the overall conduct of the webinar.
 - Following the webinars, create *Webinar Reports*. This report will summarize the webinar, as well as include any presentations, or other materials used at the event.
 - Sector-specific trainings: A total of eight in-person DER seller trainings will be implemented over the 2018-2022 program period to focus on successful penetration of specific DER market segments. Information will be provided on procurement trends, upcoming RFPs, procurement platforms, and emerging standards and product specifications.
 - Prior to holding trainings, prepare *Sector-Specific Training Plans* which will include draft agenda, potential speakers, and a discussion on the overall conduct of the event.

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- Following the trainings, create a *Sector-Specific Training Reports*. This report will summarize the training, as well as include any presentations, or other materials used at the event.
- Large-Scale DER Summit Trainings: Two annual DER Summits will be held each year that bring buyers and sellers together at each of the following locations:
 - A NorCal training will be held at Recipient's annual Innovation and Impact Symposium. This event brings together 250+ leaders from clean energy startups and major companies to dialogue on challenges and opportunities to advance distributed clean energy solutions, and to share best practices and solutions.
 - A SoCal training will be developed and co-hosted with an established incubator/accelerator or university partner, e.g. CleanTech San Diego, LACI, the UCLA Luskin Center for Innovation, etc. This forum will include at least two days of activities and break-out sessions addressing: Market dynamics in key DER market segments; Procurement trends and tools; Channel development and go-to-market strategies; RFPs and Procurement platforms; Emerging standards and product specifications, etc.
 - Prior to holding training, prepare *Large-Scale DER Summit Training Plans* which will include draft agenda, potential speakers, and a discussion on the overall conduct of the events.
 - Following the trainings, create *Large-Scale DER Summit Training Reports*. These reports will summarize the trainings, as well as include any presentations, or other materials used at the events.
- Develop DER Seller Support Services:
 - The Cal-Op Program will provide staff time to respond directly to phone and email inquiries from DER sellers throughout the program duration.
 - Maintain staff of technology envoys to work directly with buyers and sellers.
- Create *Support Program Marketing Collateral* for each procurement initiative. At a minimum, an educational PowerPoint presentation and two-page fact sheet will be developed and made available on the www.cal-op.org website.

Products:

- DER Sellers Guide
- Implementation Support Progress Reports
- Webinar Plans
- Webinar Reports
- Sector-Specific Training Plans
- Sector-Specific Training Reports
- Large-Scale DER Summit Training Plans
- Large-Scale DER Summit Training Reports
- Support Program Marketing Collateral

Subtask 3.4: Conduct Third-Party Measurement and Verification

The goal of this task is to validate the energy and cost savings of each procurement initiative. Each procurement initiative will have a measurement and verification (M&V) plan that must be followed to validate the energy and cost savings of each procurement initiative. The actual initiatives to be undertaken will be determined in coordination with Task 3.2. M&V plans will be created by a program third-party M&V consultant. The third-party M&V consultant will provide

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independent, expert M&V services based on their comprehensive understanding of the guidelines underlying industry best practices embodied by International Performance Measurement and Verification Protocol (IPMVP®) and American Society of Heating, Refrigerating and Air-Conditioning Engineers Guideline 14, upon which it is based.

The Recipient shall:

- Evaluate energy consumption and savings based on the four standard M&V options used for proper savings determination. These include: partially measured retrofit isolation (Option A), retrofit isolation (Option B), whole facility (Option C), and calibrated simulation (Option D).
- Create *M&V Plans (by Initiative)* for each procurement initiative. Each M&V Plan will include the following sections:
 - Background and description of technology.
 - Description of M&V Option.
 - Test Procedure:
 - Facility description.
 - Sequence of operations.
 - Data Processing including error analysis.
 - Financial analysis:
 - Assumptions and methodology.
 - Annual cost savings.
 - Simple payback analysis.
 - Discussion.
 - Conclusions and recommendations.
- Collect the appropriate data over the course of implementing the procurement initiative. Data inputs will differ based on the DER product category and customer segment, but in general may include:
 - DER sales data.
 - Number of institutional buyers and DER sellers engaged.
 - Capital, implementation, and operating costs.
 - Revenue generated and cost savings, and
 - Interviews with participants.
 - Metered and/or sub-metered performance data (if appropriate).
- Develop an *M&V Interim Report* summarizing the cost-effectiveness of different procurement initiatives and the Cal-OP Program overall at the program midpoint.
- Develop an *M&V Final Report* summarizing the cost-effectiveness of different procurement initiatives and the Cal-OP Program overall at the end of the program.
- Submit the M&V Final Report to CAM for review.
- Incorporate CAM feedback on the M&V Final Report.

Products

- M&V Plans (by Initiative)
- M&V Interim Report
- M&V Final Report (Draft and Final)

TASK 4: EVALUATION OF PROJECT BENEFITS

The goals of this task are: 1) To report the benefits resulting from this project; 2) To gain insight on program effectiveness; and, 3) To utilize these insights to improve Cal-OP program effectiveness as part of our continuous improvement system. Cal-OP has also incorporated

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independent third-party M&V to ensure robust data collection, data management, and analytic practices are implemented. Thus, Task 4 also includes compiling the results of M&V activities in Subtask 3.4 into the analytic model developed for project benefit calculation.

The Recipient shall:

- Work with buyers and sellers to evaluate effectiveness of efforts.
- Develop metrics to measure overall program effectiveness which shall include but not be limited to; 1) number of buyers and sellers participating in each Cal-OP activity and procurement initiative; 2) percentage of products purchased that meet program DER standards; 3) volume of products and services procured through the Cal-OP website and Cal-OP related procurement channels; 4) Estimated ratepayer and other benefits of deployed products and services.
- Develop metrics to measure growth of individual DER firms resulting from increased procurement activity.
- Develop metrics to measure impacts on CBEs (specifically clean energy and DER sector companies) including investment levels, economic impact, employment, and research activity.
- Explain selected metrics in *The Proposed Cal-OP Metrics Memorandum*
- 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.
- Respond to CAM questions regarding responses to the questionnaires.
- Create an *Annual Report* that at a minimum describes the Cal-OP services provided, and technical and commercialization milestones achieved.
- Submit the *Annual Report* to CAM for review.
- Incorporate CAM feedback on the *Annual Report*.

Products:

- The Proposed Cal-OP Metrics Memorandum
- Kick-off Meeting Benefits Questionnaire
- Mid-term Benefits Questionnaire
- Final Meeting Benefits Questionnaire
- Annual Report (Draft and Final)

TASK 5: TECHNOLOGY/KNOWLEDGE TRANSFER ACTIVITIES

The goal of this task is to develop a plan to make the knowledge gained, experimental results, and lessons learned available to the public and key decision makers. The team will share results broadly through the Cal-OP network of channel partners, seeking to scale the procurement initiatives' best practices and lessons learned to other customers and sectors.

The Recipient shall:

- Prepare an *Initial Fact Sheet* at start of the project that describes the project (using the format provided by the CAM).
- Prepare a *Final Project Fact Sheet* at the project's conclusion that discusses results.

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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 will include the Legal Notice required in the terms and conditions and indicate where and when the documents were disseminated.)
 - A discussion of policy development stating if the 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; and
 - Additional areas as determined by the CAM.
- Publish a downloadable list of DER specifications.
- Conduct technology transfer activities in accordance with the Technology/Knowledge Transfer Plan. These activities will be reported in the Progress Reports.
- Work with the recipients of Group 4 as awarded through GFO-17-301 and other eProcurement platforms to integrate DER technologies or product options so that buyers and specifiers have seamless access to performance data.
- When directed by the CAM, develop *Presentation Materials* for an Energy Commission-sponsored conference/workshop(s) on the project.
- When directed by the CAM, participate in annual EPIC symposium(s) sponsored by the California Energy Commission.
- Provide at least six *High Quality Digital Photographs* (minimum resolution of 1300x500 pixels in landscape ratio) of pre and post technology installation at the project sites or related project photographs.
- Prepare a *Technology/Knowledge Transfer Report* on technology transfer activities conducted during the project.
- Attend the annual California Energy Innovation Strategy Summit to share lessons learned and strategize for the upcoming year with participants in the Energy Innovation Ecosystem.
- Publish all relevant information on the Cal-Op Program Website.

Products:

- Initial Fact Sheet (Draft and Final)
- Final Project Fact Sheet (Draft and Final)
- Presentation Materials (Draft and Final)
- High Quality Digital Photographs
- Technology/Knowledge Transfer Plan (Draft and Final)
- Technology/Knowledge Transfer Report (Draft and Final)

V. Project schedule

Please see the attached Excel spreadsheet.

STATE OF CALIFORNIA

STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION - RE: PROSPECT SILICON VALLEY

RESOLVED, that the State Energy Resources Conservation and Development Commission (Energy Commission) adopts the staff CEQA findings contained in the Agreement or Amendment Request Form (as applicable); and

RESOLVED, that the Energy Commission approves Agreement EPC-17-030 from GFO-17-301 with Prospect Silicon Valley for a \$3,998,715 grant to fund a mentor/co-working program geared toward bridging the gap between California clean energy companies and institutional/commercial customers that rely on formal procurement processes to purchase distributed energy resource solutions and packages. As part of the agreement, the recipient will provide technical assistance to large procurement customers on streamlining processes for greater access to emerging energy technology solutions; and

FURTHER BE IT RESOLVED, that the Executive Director or his/her designee shall execute the same on behalf of the Energy Commission.

CERTIFICATION

The undersigned Secretariat to the Commission does hereby certify that the foregoing is a full, true, and correct copy of a Resolution duly and regularly adopted at a meeting of the California Energy Commission held on March 21, 2018.

AYE: [List of Commissioners]

NAY: [List of Commissioners]

ABSENT: [List of Commissioners]

ABSTAIN: [List of Commissioners]

Cody Goldthrite,
Secretariat