

Original Agreement # EPC-18-002 Amendment # 3

Division	Agreement Manager:	MS-	Phone
ERDD	Molly O'Hagan	51	916-776-0799

Recipient's Legal Name	Federal ID #
California Clean Energy Fund dba CalCEF Ventures	77-0640000

Revisions: (check all that apply)	Additional Requirements
□ Term Extension New End Date: 3/31/2028	Include revised schedule and complete items A, B, C, & F below.
	Include revised budget and complete items A, B, C, D, & F below.
☐ Budget Reallocation	Include revised budget and complete items A, B, C, & F below.
Scope of Work Revision	Include revised scope of work and complete items A, B, C, E, & F below.
☐ Change in Project Location or Demonstration Site	Include revised scope of work and complete items A, B, C, E, & F below.
☐ Novation/Name Change of Prime Recipient	Include novation documentation and complete items A, B, C, & F below.
☐ Terms and Conditions Modification	Include applicable exhibits with bold/underline/ strikeout and complete items A, B, C, & F below.

A) Business Meeting Information

Business Meeting approval is not required for the following types of Agreements:

☐ Minor amendments delegated to Executive Director per December 2013 Reso	lutior
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Proposed Business Meeting Date 8/10/2022 ☐ Consent ☒ Discussion

Business Meeting Presenter Molly O'Hagan Time Needed: 5 minutes

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

Agenda Item Subject and Description:

California Clean Energy Fund dba CalCEF Ventures

Proposed resolution approving Amendment 3 to Agreement EPC-18-002 with California Clean Energy Fund dba CalCEF Ventures to continue and expand the successful California Test Bed (CalTestBed) program established under this agreement, and adopting staff's determination that this action is exempt from CEQA. This amendment will provide an additional \$10,998,701 in follow-on funding and extend the agreement term by four years, enabling CalTestBed to continue providing critical technology testing and commercialization services to California clean energy entrepreneurs. This program leverages partnerships with more than 60 testing facilities spread across nine University of California campuses and the

CALIFORNIA ENERGY COMMISSION

Lawrence Berkeley National Lab to provide clean energy companies access to testing facilities to test prototypes of pre-commercial distributed energy resource technologies and help them refine their prototype to meet customer specifications. (EPIC Funding) Contact: Molly O'Hagan (Staff Presentation: 5 minutes)

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

Legal Company Name:	Budget	
Los Angeles Cleantech Incubator	\$ 34,364	
Build Momentum (d.b.a. Momentum)	\$ 460,358 (\$2,719 Match)	
C) List all key partners: (attach additional sheets as necess	ary)	
Legal Company Name:		

D) Budget Information (only include amendment amount information)

Funding Source	Funding Year of Appropriation	Budget List Number	Amount
EPIC	21-22	301.0011	\$10,998,701

R&D Program Area: EDMFO: EDMF TOTAL: \$ 10,998,701

Explanation for "Other" selection

Federal Agreement #:

1.

2.

E) California Environmental Quality Act (CEQA) Compliance

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":
If Agreement is considered a "Project" under CEQA:
a) 🗵 Agreement IS exempt.
☐ Statutory Exemption. List PRC and/or CCR section number:
\square Categorical Exemption. List CCR section number: Cal. Code Regs., tit. 14, \S 15306
☐ Common Sense Exemption. 14 CCR 15061 (b) (3)
Explain reason why Agreement is exempt under the above section: Agreement will fund collaboration efforts of organizations and entrepreneurs, information gathering and analysis, technology testing within existing facilities, information-based services, and small forums and other meetings consisting of the operation of existing public and private facilities involving negligible or no expansion of use beyond that existing. California Code of Regulations, title 14, section 15306 exempts basic data collection, research, experimental management, and resource evaluation activities that do not result in a serious or major disturbance to an

CALIFORNIA ENERGY COMMISSION

environmental resource. The proposed projects testing, data analysis, and related activities will have no significant effect on the environment and fall within the categorical exemption of section 15306. b) Agreement **IS NOT** exempt. (consult with the legal office to determine next steps) Check all that apply ☐ Initial Study Negative Declaration Mitigated Negative Declaration Environmental Impact Report Statement of Overriding Considerations F) The following items should be attached to this GARF (as applicable) □ N/A Attached 1. Exhibit A, Scope of Work/Schedule 2. Exhibit B, Budget Detail N/A Attached 3. CEQA Documentation \bowtie N/A Attached 4. Novation Documentation \bowtie N/A ☐ Attached 5. CEC 105, Questionnaire for Identifying Conflicts Attached **Agreement Manager Date** Office Manager **Date Deputy Director Date**

TASK ACRONYM/TERM LISTS

A. Task List

Task #	CPR ¹	Task Name
1		General Project Tasks
2	CPR	Develop CalTestBed Initiative Pre-Launch Materials
3		Launch CalTestBed Initiative
4		Target Customer Engagement
5		Required Reporting And Attendance For Group 1 Funding
6		Technology & Knowledge Transfer
7		Evaluation of Project Benefits

B. Acronym/Term List

Acronym/Term	Meaning	
CalCEF	California Clean Energy Fund	
CalSEED	California Sustainable Energy Entrepreneur Development Initiative	
CalTestBed	California Test Bed Initiative	
CalTestBed	California Test Bed Network	
Network	California Test Bed Network	
CAM	Commission Agreement Manager	
CAO	Commission Agreement Officer	
Energy	California Energy Commission	
Commission	California Energy Commission	
CPR	Critical Project Review	
CPUC	California Public Utilities Commission	
CSU	California State University	
CRADA	Cooperative Research and Development Agreement	
DAC	Disadvantaged Community	
DER	Distributed Energy Resources	
DVBE	Disabled Veteran Business Enterprise	
EPIC	Electric Program Investment Charge Program	
EIE	Energy Innovation Ecosystem	
Entrepreneur	An organization that applies for, or receives a, voucher. See Exhibit C for	
Littlepreneui	complete definition. May also be referred to as voucher recipients.	
ERDD	Energy Research and Development Division	
IOU	Investor Owned Utility	
LBNL	Lawrence Berkeley National Laboratory	
LLNL	Lawrence Livermore National Laboratory	
LI	Low-Income	
Plan	CalTestBed Initiative Plan	
REIC	Regional Energy Innovation Clusters	
TAC	Technical Advisory Committee	
<u>UAE</u>	Uniform Agreement for Entrepreneurs	

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

Acronym/Term	Meaning
UAT	Uniform Agreement for Testbeds
UCM	Uniform Contracting Mechanism
UC	University of California
UCOP	University of California Office of the President
<u>VRA</u>	Voucher Recipient Agreement

Additional terms are defined in the Agreement, including but not limited to definitions located in Exhibits C and D.

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

A. Purpose of Agreement

The purpose of this Agreement is to <u>renew funding for</u> the <u>continued</u> development <u>and implementation</u> of the California Test Bed Initiative (CalTestBed) voucher program. The Project Team will <u>continue to</u> develop, implement, and manage a <u>the</u> voucher program that <u>will-includes</u> a Uniform Contracting Mechanism (UCM) that enables California Distributed Energy Resources (DER) entrepreneurs to <u>have</u> access to the <u>world-class</u> and <u>certification-testing</u> facilities needed to refine their technology prototypes, meet customer specifications, and accelerate the successful commercialization of California's most promising DER technologies, including but not limited to distributed renewable generation resources, energy efficiency, energy storage, and demand response technologies.

B. Problem/ Solution Statement

Problem

California's early-stage clean energy entrepreneurs face a series of significant hurdles in accessing testing facilities, validation, and certification as they attempt to move their technologies from prototype to pilot and demonstration scale. This problem must be addressed at this time because clean energy innovations that are critical to helping to meet California's ambitious energy goals are stalling out in the product-testing, validation, and certification phases and are slowed or stopped on their path to successful commercialization in California's energy marketplace.

Test beds are existing facilities that provide these testing, validation, and certification services for DER technologies. Test beds primarily focus on hardware technologies, though they may also be able also support testing of integrated technologies which feature software innovations in relationship with hardware technology innovations. A host of clean energy test bed facilities exist in California, including those contained within the University of California (UC) and California State University (CSU) systems, as well national laboratory test beds, utility test beds, and privately-owned test bed operations. Currently, these test beds are largely disorganized, disparate, disconnected, and underfunded. Further, little or no ecosystem or infrastructure is in place to provide clean energy innovators with a roadmap for understanding how to identify, access, solicit, negotiate, contract, and fund these test bed services.

Solution

The CalTestBed Initiative is a voucher program that will dramatically advance the rate of technological and scientific innovation in California by assisting California's clean energy entrepreneurs in gaining access to critical testing validation, and certification facilities as they move their innovative technologies from prototype to pilot-scale demonstration. Streamlining

access to these facilities by providing vouchers to California DER entrepreneurs, the CalTestBed Initiative will assist entrepreneurs in <u>de-risking innovation</u>, refining their technology prototypes, better meeting customer specifications, and ultimately, accelerating some of California's most promising early-stage clean energy technologies on the pathway to successful commercialization.

C. Goals and Objectives of the Agreement

Agreement Goals

The goals of this Agreement are to:

- Accelerate EPIC-aligned clean energy companies toward commercialization
- Enable entrepreneurs' connection to next level partners for follow-on funding, pilot/demonstration projects, and customer acquisition.
- Build the capacity and partnership models for research institutions to collaborate with the state to streamline access for private sector start-ups to world-class testing facilities and provide opportunities for research staff, including graduate students, to gain experience at the intersection of applied research and market-based products to solve the planet's most pressing problem, climate change.
- Identify testing facilities located at national labs, universities, and private facilities that are outside of the CalTestBed network and reach out to enrich the facility offering available to entrepreneurs.
- Continue expansion
 Test and refine standardized of entrepreneur-facing services in the starting participating cohort of testbed facilities as a first step towards all of California's testbeds refining and adopting a suite of entrepreneur support services that which will attract early-mid stage clean energy entrepreneurs to bring their product ideas to California for development and testing.
- **Review, revise,** manage, and administer a voucher-type UCM that accelerates the most promising clean technologies by making funding available to test beds.
- Add additional testbed and certification resources to the project as needed.
- Create an Improve access to the CalTestBed Facilities Directory, the online portal for all current and future clean energy entrepreneur-facing services in one accessible location.
- Facilitate the adoption of an Make continuous improvement to industry-accepted intake process in which entrepreneurs are trained to navigate and plan for the testbed phase and use the facilities and services; the process consists of solicitation, review, recommendation, and consultation phases.
- Develop-Make continuous improvements to established industry-accepted customer feedback procedures that include the needs of Disadvantaged Communities and are integrated into the testbed system while incorporating a justice, equity, diversity and inclusion (JEDI) lens and adjust processes and procedures in order to accommodate feedback.
- Develop and implement an outreach program to inform disabled veteran-owned businesses of California Energy Commission (Energy Commission) workshops, training, and funding opportunities;
- Creating a transparent process that fairly and neutrally engages, coordinates and optimizes the entirety of services and assets available to clean energy entrepreneurs.
- Reach a national and international audience of clean energy innovators, accelerators, investors and policy makers with information about voucher

recipient organizations, partnership opportunities, and best practices for implementing the testbed vouchers and ecosystem approach.

Ratepayer Benefits:2

This Agreement will result in the ratepayer benefits of greater electricity reliability, lower costs, and increased safety.

Increased Reliability

- Increase electricity reliability by increasing the array of energy efficient technologies that decrease demand on the grid.
- Testing new clean energy technologies for failure in testbeds increases the reliability of the end product for the California ratepayer.

Lower Costs

- Lower costs to the ratepayer by accelerating new clean energy technologies to the market that offer energy efficiency and lower costs to the ratepayers.
- Avoided cost to California ratepayers of current slow and stalling entrepreneur-facing services.
- Faster commercialization of clean energy products reduces costs to the ratepayer of older non-renewable and inefficient energy products.
- Lower costs of ratepayers' future investment in early clean energy technology testing
 as a result of a highly sophisticated California Testbed Network (CalTestBed
 Network) and their adoption of a suite of services supportive to accelerating the early
 to mid-stage entrepreneur through testing to bring technologies to market that help
 California achieve its clean energy goals.

Increased Safety

- Increase safety by streamlining the ratepayer / customer feedback process among testbeds to better meet customer safety specifications.
- Coordinate standardization of safety testing and certifications for testbeds in CalTestBed.
- Coordinated testbeds can share and respond better to a growing number of decentralized power vendors and their needs for safety testing for clean energy technologies.

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 advancing an inspiring long-term vision in which clean tech entrepreneurs can be introduced to a coordinated ecosystem of streamlined entrepreneur-facing services established across California's testbeds. The project

² California Public Resources Code, Section 25711.5(a) requires projects funded by the EPIC program to result in ratepayer benefits. The California Public Utilities Commission (CPUC), 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.

team will lead the promotion and outreach of the voucher program; the development and dissemination of the voucher results to the broader EPIC community and specifically back to the target customers; and lead the development growth of standardized contracting mechanism for testbeds and managed labs.

Agreement Objectives

The objectives of this Agreement in relation to Market Facilitation are:

- Formalize a Expand the CalTestBed Network that begins with the entirety of test beds⁴ within the project team, and seek to add more test bed assets both inside and outside of the existing testbeds, as appropriate and beneficial;
- Disburse <u>an additional</u> \$8.8 <u>\$7.92</u> million in vouchers, <u>after the original</u> \$8.8 <u>M in vouchers is disbursed</u>, within the Agreement period to approximately <u>70 40 to 50</u> of the most promising new DER technology entrepreneurs for two tiers of projects;
- Create a <u>Review and revise</u> the streamlined UCM to ensure that the program serves to accelerate, rather than decelerate, commercialization of early <u>to mid-</u>stage clean energy technologies;
- Work with Energy Commission staff <u>and ecosystem partners</u> to devise a plan that ensures promising technologies are elicited from a wide range of demographics and communities:
- Work with Energy Commission staff to explore potential pathways for awardees of CEC-led grant funding opportunities to undertake testing within the CalTestBed program framework as part of the Tech Transfer Task that all EPIC awards incorporate by design;
- Manage entrepreneur-facing services developed for and evaluated by Entrepreneurs;
- Communicate about the CalTestBed entrepreneurs through featuring them in the Entrepreneur Directory, symposium, and social media;
- Share information about CalTestBed entrepreneurs with next level partners including investors, industry partners, customers, funders, accelerators, and government agencies to assist their progress as they exit the program;
- Build collaborative partnerships with state, national, and international entities that are interested in building and fostering a similar clean energy testbed ecosystem in their geographies.

⁴ The initial set of participating testbeds consists of the Center for the Built Environment (CBE), California Institute for Energy and the Environment, Center for Information Technology Research in the Interest of Society (CITRIS), Western Cooling Efficiency Center, California Lighting Technology Center, Green Transportation Battery Laboratory, Irvine Smart Grid Demonstration Project (ISGD), Advanced Power and Energy Testbed Program (APEP), National Fuel Cell Research Center (NFCRC), WINSmartGrid, Smart Grid Energy Research Center (SMERC), UC Advanced Solar Technology Institute, Center for Environmental Research and Technology (CE-CERT), Southern California Research Initiative for Solar Energy, Sustainable Integrated Grid Initiative (SIGI), Sustainable Power and Energy Center (Microgrid), UC San Diego Urban Mobility Testbed and Laboratory, Solid Oxide Fuel Cell Laboratory (SOFC), System Identification and Control Laboratory (SICL), Kleissl Urban Energy Efficiency Laboratory, Laboratory for Energy Storage and Conversion (LESC), ARPA-E CHARGES Project, Microgrid & Energy Research Park, Institute for Energy Efficiency, Materials Research Laboratory, Independent testbed facilities, FLEXLAB, Demand to Grid Laboratory (D2G), Appliance Standards Test Chambers, Lawrence Berkeley National Laboratory (LBNL). With the exception of LBNL, the test labs listed above are within campuses of the University of California and are part of the UC system. LBNL is a U.S. Department of Energy (DOE) facility, operated by the University of California, Berkeley Campus, under agreement with U.S. DOE.

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

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 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);
- Critical Project Review 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;
- o An updated Project Schedule;
- Technical products (subtask 1.1);
- Progress reports and invoices (subtask 1.5);
- Final Report (subtask 1.6);
- o 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.

- 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.

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

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

- 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:
 - o 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.
 - If it is 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.

- o Ensure that the document omits subjective comments and opinions. However, recommendations in the conclusion of the report are allowed.
- o 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 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. 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.
 - o 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

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;
 - o 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

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

IV. TECHNICAL TASKS

Note:

By mutual agreement, the following language is not incorporated by reference from CalCEF's grant application, Attachment 4, pages 15-16:

"By maximizing their standing resource sharing agreements, the sister family of organizations—CalCEF Innovations, CalCEF Ventures, and CalCEF Catalyst, with its wholly owned subsidiary CalCharge—are poised to execute and manage CalTestBed."

The purpose of this exclusion is to emphasize that California Clean Energy Fund (d.b.a., CalCEF Ventures) is the Recipient, and the affiliates mentioned above (i.e., CalCEF Innovations, CalCEF Catalyst, and CalCharge), are not subcontractors or subrecipients.

TASK 2: REVIEW AND DEVELOP <u>REVISE</u> CALTESTBED INITIATIVE PRE-LAUNCH <u>MATERIALS</u>-FOUNDATIONAL DOCUMENTS

The goals of this task are to develop and finalize review and update all materials foundational documents necessary developed to launch the CalTestBed Initiative.

Subtask 2.1 CALTESTBED INITIATIVE PLAN

The goal of this subtask is to develop refine the CalTestBed Initiative Plan (Plan) to serve which serves as the strategic and operational implementation plan for the CalTestBed Initiative, and develop and manage update the technical aspects of the CalTestBed Initiative in accordance with the Plan learned experience and best practices that have emerged during the initial implementation.

The Recipient shall work with the University of California Office of the President (UCOP) in developing the Plan. The UCOP's role will be as a partner to coordinate the various UC Campuses and test labs and LBNL regarding the CalTestBed Initiative. The UCOP is not a subcontractor; nor it is providing match funding or in-kind match services to the Project.

- Develop and submit a *Draft <u>Revised</u> CalTestBed Initiative Plan* to the CAM for review and comment. The *CalTestBed Initiative Plan* should include:
 - Description of the procedures, processes, tools and resources that will be used to implement, develop, and manage the CalTestBed Initiative in a manner that achieves the Goals and Objectives of the agreement.
 - Description of all participating test bed facilities. Descriptions should include, at a minimum, technical capabilities of each facility, range of DER technologies that can be tested at each facility.
 - Procedure for including additional test facilities beyond the initial set of participating facilities.
- Incorporate CAM feedback and submit the Final <u>Revised</u> CalTestBed Initiative Plan for CAM approval.
- Develop-Update and maintain the tools and resources identified in the Plan.
- Provide or make available on an as-needed-basis the tools and resources for use by applicants and recipients.
- Develop <u>Expand</u>, maintain, and update, as needed, a CalTestBed Network <u>Reviewer</u>
 List of technical experts that, upon request from the Recipient, will provide:
 - Independent technical reviews to be used in scoring, evaluating, and recommending applications for awards vouchers.
 - o Technical consulting to recipients of awards vouchers.

- The CalTestBed <u>Reviewer</u> List shall include the following for each technical expert as permissible while achieving compliance with evolving data privacy standards:
 - Name
 - Affiliation
 - o Area(s) of expertise
 - Contact information
 - Services provided to CalTestBed: technical review of proposals, technical consulting independent observer of testbed consultations.

Products:

- CalTestBed Initiative Plan (draft and final)
- CalTestBed Network Reviewer List

Subtask 2.2 CALTESTBED APPLICATION AND AWARDEE PROCESS

The goal of this subtask is to develop review and update application materials and on-line application forms to solicit applications for inclusion in the CalTestBed Initiative.

- Develop Review, revise, and submit to the CAM a draft Revised CalTestBed Initiative Application Manual and FAQ that communicates the aspects of the CalTestBed Initiative necessary for entrepreneurs and researchers to produce quality applications for receiving vouchers. This will be a public document that will describe the following to potential applicants (i.e., Entrepreneurs):
 - o The solicitation release and notification process;
 - o An intuitive and streamlined application system for applicants;
 - The eligibility requirements for applicants;
 - o The application screening and selection criteria;
 - The award voucher recommendation, review, approval and consultation recommendation and Energy Commission approval process;
 - The process for unsuccessful applicants that were not recommended for a voucher to request debriefings reviewer comments;
 - The contract management process.
- Incorporate CAM feedback and submit a final <u>Revised</u> CalTestBed Initiative Application Manual and FAQ
- Utilize existing research assets developed by California Energy Commission in parallel solicitations on scientific breakthroughs, possible future scientific breakthroughs, and their potential applications to energy for inclusion in the CalTestBed Initiative Application Manual.
- Create <u>Review and revise</u> on-line Application Forms for the CalTestBed Initiative in accordance with the final revised CalTestBed Initiative Application Manual and FAQ.
- Develop an *Annual Solicitation Schedule(s)* and schedule up to three one solicitation per year as directed by the CAM, taking into account the number of voucher applications received, the budget, and the status of program administration workload.
- Seek approval from <u>Consult with</u> the Energy Commission on the solicitation focus areas <u>and definitions</u> as each new solicitation is developed, ensuring all solicitations are consistent with the EPIC Triennial Investment Plans. Upon approval of the solicitation package, develop, release, and advertise the solicitation to promote geographically and organizationally diverse applicants in accordance with the CalTestBed Initiative Plan developed under Subtask 2.1.

- Develop-Reach out to target awardees applicant pools for initial solicitation rounds, which may include, but not be limited to, CalSEED Awardees, Small Business Innovation Research and Advanced Research Projects Agency-Energy Awardees, and National Renewable Energy Laboratory (NREL) Demonstration Program Awardees; and develop REIC Awardee Nomination and Evaluation Plan for four Regional Energy Innovation Clusters (REIC), including Los Angeles Regional Energy Innovation Cluster, Central Valley Regional Energy Innovation Cluster, San Diego Regional Energy Innovation Cluster and Bay Area Regional Energy Innovation Cluster.
- Research organizations that support underrepresented communities in the clean energy ecosystem and develop channel partnerships with them to magnify messaging about the application solicitations to ensure intentional inclusivity in outreach about the voucher opportunity.
 - Participate in a Critical Project Review (CPR) meeting and prepare a CPR Report prior to the public launch of the CalTestBed Initiative.

Products:

- Revised CalTestBed Initiative Application Manual and FAQ (draft and final)
- Revised Application Forms (draft and final)
- Annual Solicitation Schedule 2023 and 2024 #1-5
- REIC Awardee Nomination and Evaluation Plan
- CPR Report

Subtask 2.3 Develop Universal Contract Mechanism (UCM)

The goal of this subtask is to develop review and update standard contract terms and formats for scopes of work, budgets and instructions, personnel classifications and rates, and invoices for voucher recipients and Test Beds. The idea is to update prepare the set of template user agreements (or purchase order-type agreements) and related documents (a.k.a. contract package) to govern the relationships between Entrepreneurs, Test Beds, and the Recipient based on the learned experience from the first 40 agreement packages that have been executed.

If testing of a technology involves testing energy technology performance in buildings outside of a laboratory-type setting or testing of the buildings themselves (e.g., how the building energy usage changes), then the testing may involve utility customer information that may be "Personal Information" under the Information Practices Act. Under these circumstances, pursuant to Exhibit D, if any information under this Agreement is "Personal Information" as defined under the Information Practices Act (see California Civil Code section 1798.3(a) and Exhibit D section 3 of this Agreement for the definition of "Personal Information") then Recipient must, and ensure any subcontractor, partner, Test Bed, or Entrepreneur who collects or otherwise has access to the Personal Information must, comply with the Information Practices Act (California Civil Code sections 1798 et seq.) when performing activities under this Agreement.

The Recipient shall:

 Develop Review, revise and submit to CAM Draft Revised User Agreement for Entrepreneurs (UAE) and Draft Revised User Agreement for Test Beds (UAT). The user agreements will govern the relationship between a successful CalTestBed Initiative Entrepreneur that receives a voucher and a Test Bed facility. The Draft User Agreement for Test Beds will also cover the payment relationship between the Recipient and the Test Beds, along with several provisions similar to certain flow-down requirements for subcontractors. Because these user agreements will be essential to success of the

Project, the Recipient will work closely with the Energy Commission staff in developing the user agreements. The UCOP Liaison will collaborate on the updates to the user agreements. More than one draft may be necessary. Items to be included in the user agreements are:

- Services, facilities, and equipment the Test Bed will provide to the Entrepreneur;
- Intellectual property rights regarding any innovations developed at a TestBed facility;
- Confidentiality of data and information;
- Consequences for Test Beds and Entrepreneurs who fail to carry out agreed upon tasks or otherwise breach the user agreement;
- Conflicts of interest;
- Incorporate CAM feedback and submit Final <u>Revised</u> User Agreement for Entrepreneurs and Final **Revised** User Agreement for Test Beds.
- Review and update Draft <u>Revised</u> Standard Terms and Conditions for Entrepreneurs.
 The terms and conditions will govern the relationship between CalTestBed Entrepreneurs and the Recipient.
- Incorporate CAM feedback and submit *Final* <u>**Revised**</u> Standard Terms and Conditions for Entrepreneurs.
- Develop Review and update the Uniform Contract Package for Entrepreneurs Voucher
 Recipient Agreement (VRA), which provides the necessary templates and instructions
 for CalTestBed Entrepreneurs to be accepted into the CalTestBed Initiative. The Uniform
 Contract Package for Entrepreneurs Revised Voucher Recipient Agreement will
 include standardized templates for documents that include, but are not limited to:
 - Scopes of work
 - Project timelines
 - Budgets
 - Invoices with instruction on how to list items such as personnel classifications and rates
- The Recipient will also review and update the analogous agreement package developed with LBNL which includes the Strategic Partnership Project Agreement (SPP), Short-Form Cooperative Research and Development Agreement (CRADA) and Work Order Templates in addition to the Voucher Recipient Agreement.

Products:

- User Agreement for Entrepreneurs (draft and final)
- User Agreement for Testbeds (draft and final)
- Standard Terms and Conditions for Entrepreneurs (draft and final)
- Uniform Contract Package for Entrepreneurs Voucher Recipient Agreement (VRA) (draft and final)
- LBNL Strategic Partnership Project Agreement (draft and final)
- Short-Form Cooperative Research and Development Agreement (CRADA) (draft and final)
- Work Order Templates (draft and final)

Subtask 2.4 CALIFORNIA TESTBED FACILITIES NETWORK

The goal of this subtask is to coordinate and organize a CalTestBed Network of public and private energy test beds in California to streamline funding for the delivery of technology testing, validation, and certification services to early **to mid**-stage clean energy entrepreneurs.

The Recipient shall:

- Publish the Directory of California Energy Test Beds Annually update the CalTestBed Facilities Directory that identifies each participating University or Laboratory campus, their facilities, capacities, services, and point of contacts;
- Prepare and submit to the CAM a Draft Review and update the Business Requirements
 Document which outlines the branding, and design, of public-facing materials describing
 the CalTestBed Initiative;
- Publish a Update the website in accordance with the revised Business Requirements Document and user feedback. The website should organize and present all test bed services provided by the testbeds; present relevant news and upcoming opportunities; detail the process of receiving a voucher as a CalTestBed Entrepreneur; feature the voucher recipients, their innovations and contact information in the CalTestBed Entrepreneur Directory, provide information about CalTestBed impacts for the ratepayers of the state, feature ecosystem partners, and provide a link to the empower innovation platform. Provide downloadable instructions for managing and invoicing a successful Award; guide for planning tests in the testbeds.

Products:

- <u>Updated Facilities</u> Directory of California Energy Test Beds
- Updated CalTestBed Entrepreneurs Directory
- Revised Business Requirements Document
- Updated CalTestBed Website

Subtask 2.5 APPLICANT RECRUITMENT AND OUTREACH

The goal of this task is to create, implement, and manage an outreach process to ensure a robust pool of clean energy entrepreneurs can is reached and invited to apply for the CalTestBed Initiative a CalTestBed voucher.

- Create Revise and submit to CAM *Draft Marketing Materials* to encourage participation in the CalTestBed Initiative including strategic outreach to underrepresented groups. The marketing materials should be consistent with the Final Business Requirements Document developed under Subtask 2.4. Examples of marketing materials may include:
 - o Entrepreneur Success Story video testimonials
 - Brochures
 - o Pamphlets
 - Postcards
- Incorporate feedback from CAM and submit Final Marketing Materials.
- Develop and submit to CAM *Draft Presentation Materials* to present CalTestBed Initiative at public events, which could include but are not limited to Energy Commission events
- Incorporate feedback from CAM and submit Final Presentation Materials.
- Promote the CalTestBed Initiative to organizations with a presence throughout California, including, but not limited to, non-governmental organizations, federal/state agencies, university partners, test beds, California-based incubator and accelerators, and the EIE.
- Promote and coordinate CalTestBed Initiative with EIE events to determine if a role exists for CalTestBed at the events.

- Coordinate introduction of the CalTestBed <u>Facilities</u> Network at four locations in California (ie. Universities, National Labs, Private Labs, special events).
- Develop and submit to CAM *Draft Press Notifications and Media Releases* regarding the CalTestBed Initiative and upcoming solicitations.
- Incorporate CAM feedback and submit Final Press Notifications and Media Releases
- Distribute *Email Notifications* to Energy Commission email distribution list for solicitation round if requested by the CAM.

Products:

- Updated Marketing Materials (draft and final)
- **Updated** Presentation Materials (draft and final)
- Press Notifications and Media Releases
- Email Notifications

TASK 3: LAUNCH IMPLEMENT ANNUAL CYCLE OF ACTIVITIES FOR CALTESTBED INITIATIVE

The goal of this task is to publicly launch the CalTestBed Initiative – including accepting applicants into the initiative, match-making them with the appropriate test bed facility, managing the voucher program, and reporting on the progress of Entrepreneurs who received vouchers. The goal of this task is to implement the annual cycle of activities that support the CalTestBed Initiative – including application solicitation, review, recommendation and consultation process, executing agreement packages for each voucher, processing invoices for testbed facilities, collecting and assessing monthly reporting by both the entrepreneurs and testbed staff, reporting on the progress of Entrepreneurs who received vouchers, and continuous communication with relevant stakeholders.

Subtask 3.1 APPLICANT SCORING AND REVIEW

The goal of this subtask is to screen applications for eligibility; initiate project evaluation and selection recommendation processes; and recommend approval of recommended projects for funding to the by the CAM and other select CEC staff.

- Develop <u>Update</u> Scorer and Reviewer Forms in accordance with the Final CalTestBed Initiative Application Manual and FAQ developed under Subtask 2.2 for CalTestBed applicant reviewers.
- Identify a Technical Review Team to evaluate applicant proposals and submit a *List of Technical Review Team Members* that includes the team members' names, companies, and email addresses.
 - The initial eligibility review team is comprised of CalCEF staff in consultation with CEC staff to determine if applicants fit within the eligibility parameters prior to assigning applications for review by the Subject Matter Experts included in the Technical Review Team.
 - The Technical Review Team is responsible for independently reviewing, evaluating, and scoring CalTestBed applications received.
 - The Technical Review Team may be comprised of individuals including, but not limited to, those identified in the CalTestBed Network List (developed under Subtask 2.1), members of the TAC, and Energy Commission staff, with the following exception. The Technical Review Team is comprised of Subject Matter Experts (SMEs) identified in the CalTestBed Reviewer List

(developed under Subtask 2.1). No one, including employees, officers, directors, and consultants to the California Clean Energy Fund and/or any of its affiliates, shall be permitted to participate in the Technical Review Team, unless such an individual has no actual or foreseeable conflict of interest and no circumstances that may be perceived as a conflict of interest, as demonstrated in documentation provided to the CAM prior to that person's involvement on the Technical Review Team. (See Exhibit E to the Agreement.)

- Conduct at least one training session for the Technical Review Team prior to the start of application scoring.
 - The training session will cover, at a minimum, scoring policies, procedures, recusal process in case of conflicts of interest, and expected timeline consistent with the CalTestBed Initiative Application Manual and FAQ
- Distribute eligible applications to Technical Review Team and ensure that scoring is conducted properly.
- Hold a final recommendation meeting with reviewers to secure the final slate of recommendations for voucher recipients.
 - Submit to the CAM <u>a list of Entrepreneur Recommended Voucher Recipients</u>
 Package after the Technical Review Team has finished its review of eligible
 applications. The list <u>of Recommended Voucher Recipients</u> should include the
 following information for each recommended voucher recipient:
 - Entrepreneur's name (e.g., corporate name)
 - Project Manager
 - Organization
 - Address and Project Location (if different from address)
 - Status, if applicable, as Disabled Veteran Business Enterprise (DVBE), minority-, women-, or LGBT-owned business (not mandatory, only if available based on optional survey questions)
 - Requested Voucher Amount
 - Requested Test Bed facility
 - Project description
 - Description of how the project will benefit California IOU electric ratepayers
 - A seguential identification number
 - A composite score and rank order
 - A funding justification
 - A project scope of work, and schedule
 - A project budget showing all proposed expenditures.
 - A fact sheet for each proposed voucher recipient with a Project Summary; description
 of Technology Readiness Level (TRL); discussion of Entrepreneur Qualifications,
 Objectives and Needs; and discussion of prospective customer development and
 commercialization plan for distribution to audiences identified in other tasks.
 - Organization's name
 - Applicant Name
 - Company Address and Region
 - Requested Test Bed facility
 - A composite score and rank order

Products:

- List of Technical Review Team Members
- Scorer and Reviewer Form <u>Templates</u> (draft and final)

Entrepreneur Recommended Voucher Recipient Packages

Subtask 3.2 PAIRING AWARDEES WITH TESTBED FACILITIES

The goal of this task is to implement a system to match CalTestBed Entrepreneurs with participating test beds once the Entrepreneurs' vouchers are approved by the Energy Commission, and to aid Entrepreneurs with executing the required documents to begin testing their technology at a testbed. This pairing process will support an efficient and transparent process that can guide Entrepreneurs to the best available test bed resources for their proposed innovation.

The Recipient shall:

- Utilize the Directory of California Energy Test Beds developed in Subtask 2.4 to inform
 participating entrepreneurs of the test bed facilities available within the voucher program.
- Distribute Entrepreneur fact sheets to participating test beds once Entrepreneur has received approval from the Energy Commission.
- Develop and use recurring CalTestBed Webinars to introduce participating test beds to Entrepreneurs.
- Support Entrepreneurs in completing the Uniform Contract Package for Entrepreneurs developed under Subtask 2.3.
- Support Entrepreneurs in executing the User Agreement for Entrepreneurs, developed under Subtask 2.3; and ensure Entrepreneurs understand all aspects of the Standard Terms and Conditions for Entrepreneurs, developed under Subtask 2.3.
- Submit to CAM, an Executed Entrepreneur Award Package for each approved Entrepreneur, which shall include:
 - A Completed Uniform Contract Package for Entrepreneurs

Executed copy of the User Agreement for Entrepreneurs

Executed copy of the User Agreement for Testbeds

Products:

- CalTestBed Webinars
- Executed Entrepreneur Award Package

Subtask 3.2 CONSULTATIONS WITH TESTBED FACILITIES

The goal of this task is to connect the CalTestBed Entrepreneurs with Principle Investigators from their preferred testing facility inorder to develop the scope, schedule and budget for their project in the Statement of Work Template, which is then reviewed for final approval by the CEC CAM and select staff for contract initiation. The consultation process also aids recommended voucher recipients with support during the execution of the required documents to begin testing their technology at a testbed. This serves as a transparent process that can provide Entrepreneurs with the best available test bed resources for their proposed prototype testing.

- Share voucher recipient fact sheets with recommended voucher recipients' first ranked facilities for review and agreement prior to consultation scheduling.
- Conduct separate CalTestBed Consultation Webinars with the recommended voucher recipients and with testbed facility staff to go over the consultation purpose, outcome, and process.

- Support the teams as needed in the consultation process to develop their Statements of Work which clearly outline the proposed scope, schedule, and budget for review and approval by the CEC.
- <u>Submit completed Statements of Work on the predefined rolling deadlines for review and CEC approval.</u>
- Once SOWs have been approved, support Entrepreneurs in executing their
 agreement packages, which include a signed SOW as an attachment to both the
 User Agreement for Entrepreneurs and the Voucher Recipient Agreement
 developed under Subtask 2.3.
- <u>Submit to CAM, an Executed Entrepreneur Award Package for each approved</u> Entrepreneur, which shall include:
 - Executed copy of the User Agreement for Testbeds
 - Executed copy of the User Agreement for Entrepreneurs
 - Executed Voucher Recipient Agreement
- Recommended Applicants collaborating with LBNL will have a similar process as above, with the analogous agreement templates including:
 - Executed copy of the Strategic Partnership Project Agreement (SPP)
 - Executed copy of the Short-Form Cooperative Research and Development Agreement (CRADA)
 - Executed copy of the Voucher Recipient Agreement (VRA)

Products:

- CalTestBed Consultation Webinars
- Executed Voucher Recipient Package

Subtask 3.3 VOUCHER AGREEMENT AND AWARD MANAGEMENT

The goal of this task is to actively manage CalTestBed Entrepreneurs, including award evaluation and outcomes analysis.

- Develop and Manage the evaluation of the quality of service provided to Entrepreneurs by each test bed facility and the experience of the test bed facilities as partners in the voucher program.
- This evaluation is conducted on a monthly basis with reporting submitted by both the voucher recipients and the testbed facility staff. Any issues that are identified are immediately addressed and reported to the CEC in regular check-in meetings.
- Contract third-party evaluator to evaluate the quality of service provided to the
 Entrepreneurs by each test bed facility and the experience of the test bed facilities as
 partners in the voucher program. Compile the findings and provide recommend
 improvements in quality of service in a Summary Results of Voucher Program
 Evaluation for Entrepreneurs and Test Beds Report.
- Develop and submit to the CAM *Draft Tracking and Evaluation Tools* to measure and track the progress of Entrepreneurs and the voucher program as a whole. Examples of metrics to include in the tools include, but are not limited to:
 - o Public, high-level, non-confidential data guery to filter and sort data
 - User survey data
 - Real-time updates of available and expended voucher funds
 - Map the geographic array of voucher applications and awards as well as participating test beds with overlays of Disadvantaged Communities.

- Array of types of technologies funded by the voucher program.
- Number of Entrepreneurs that successfully graduate from the Research and Development phase to Pilot phase.
- Amount of time it takes for Entrepreneurs to complete the Test Bed phase and its various components including: research testbeds, application for voucher, matchmaking process, intake process, testing, and customer feedback.
- Number of vouchers from underrepresented and/or Disadvantaged Community groups.
- Incorporate CAM feedback and develop Final Tracking and Evaluation Tools

Products:

- Summary Results of Voucher Program Evaluation for Entrepreneurs and Test Beds
- Tracking and Evaluation Tools (draft and final)
- Annual CalTestBed at a Glance factsheet (draft and final)

Task 4: TARGET CUSTOMER ENGAGEMENT

The goals of this task are to engage target customer groups and to advise Entrepreneurs as to the potential commercial value of their innovation; refine prototypes in order to meet customer specifications; and provide feedback to Entrepreneurs on test bed results and outcomes.

Subtask 4.1 Entrepreneur Information Dissemination

The goal of this task is to distribute information about Entrepreneurs to various stakeholders and include Entrepreneurs at public events throughout the state to attract potential customers and investors.

- Distribute Entrepreneur Fact Sheets to UC/CSU/Utility Energy Efficiency Partnership for customer feedback and refinement.
- Integrate Entrepreneur Presentations on their technologies at a conference with the approval of the CAM.
- Preview technologies to customer groups for feedback and refinement of specifications at public events, which may include, but are not limited to the following:
 - Annual CalCharge Battery Summit bringing together energy storage and power electronics customers and developers. Hosted at Lawrence Berkeley Lab and Lawrence Livermore National Lab.
 - Los Angeles CleanTech Institute's Southern California Conference of IOUs to showcase DER technologies.
- Utilize the following methods to have customers in the listed groups preview the technologies and provide feedback.
 - Technology demonstration and pitches
 - Develop and distribute Report on CalTestBed Technologies CalTestBed Entrepreneur Directory that discusses
 - Description of technologies tested
 - Description of testing performed
 - Lessons learned
 - Future needs
 - Customer / technology matchmaking
- Coordinate customer feedback to technology developers by collecting surveys from each group that previewed technologies and delivering the information to each CalTestBed

Entrepreneur. Summarize the process and customer feedback in Report on Customer Feedback Process.

- Develop informal USTestBed Network to engage emerging state test bed efforts around the country in the annual CalTestBed symposium and other meetings to discuss best practices, evaluate emerging trends, opportunities, and common goals. and summarize in USTestBed Network Annual Symposium Memos
- Provide a List of Participating Organizations in the annual Symposium.
- Conduct research and compile a list of potential USTestBed Network organizations and programs to connect with. Update as needed.

Products:

- Report on CalTestBed Technologies
- Report on Customer Feedback Process
- USTestBed Network Annual
- CalTestBed Entrepreneur Directory
- Symposium Memos
- List of Participating Organizations
- List of potential Organizations for inclusion in informal USTestBed Network

Subtask 4.2 TECHNOLOGY DEMONSTRATION

The goal of this subtask is to connect Entrepreneurs to pilot and demonstration opportunities post prototype, but before commercialization.

The Recipient shall:

- Conduct evaluation of pilot and demonstration opportunities
- Survey utility, private and governmental (local, regional, state and federal) programs that provide opportunities to pilot DER technologies in operational environments to evaluate pilots or demonstrations of Entrepreneur technologies.
- Invite Entrepreneurs to demonstrate their technologies at customer events listed in Subtask 2.5.
- Summarize the process of supporting technology demonstrations in Summary Report of Pilot Programs.
- Host annual CalTestBed Symposium and prepare an *Annual CalTestBed Network Symposium Memo* detailing the event and action items following the event.

Products:

- Summary Report of Pilot Programs
- Annual CalTestBed Network-Symposium
- Annual Symposium Memo

Task 5: REQUIRED REPORTING

The goal of this task is to fulfill additional requirements set for Group 1 under GFO-17-301.

- Produce and submit to CAM an annual Draft CalTestBed Initiative Annual Report that details:
 - Breakdown of applicant pool
 - Vouchers distributed
 - What services were provided by test bed facilities

- High-level summary of the results of completed tests, excluding Entrepreneur Confidential Information
- o Full scale pilots resulting from voucher program
- Evaluation of the test bed facilities used
- Survey of the Entrepreneurs as to their satisfaction with the CalTestBed Initiative
- o Types of feedback given by customers stakeholders
- Summary of the tools and resources developed as identified in the CalTestBed Initiative Plan developed under Subtask 2.1
- Summary of the findings derived from the Final Tracking and Evaluation Tools developed under Subtask 3.3
- Efforts to sustain CalTestBed after funding expires.
- Incorporate CAM feedback and develop a Final CalTestBed Initiative Annual Report
- Attend an annual California Energy Innovation Strategy Meeting and, after the event, submit a *Strategy Meeting Action Items Memo*.

Products:

- CalTestBed Initiative Annual Report (draft and final)
- Strategy Meeting Action Items Memo

Task 6: TECHNOLOGY & KNOWLEDGE TRANSFER

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 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 Report* that includes:
 - A case study documenting the steps taken to create, implement, and manage the CalTestBed Initiative.
 - Lessons learned and recommendations for developing similar voucher programs in other areas (e.g. other states).
 - 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.
 - Additional areas as determined by the CAM.
- 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 (6) 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.

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 Report (draft and final)

Task 7: EVALUATION OF PROJECT BENEFITS

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

The Recipient shall:

- Complete the Initial Project Benefits Questionnaire. The Initial Project
 Benefits Questionnaire shall be initially completed by the Recipient with 'Kickoff' selected for the 'Relevant data collection period' and submitted to the CAM
 for review and approval.
- Complete the Annual Survey by January 31st of each year. The Annual Survey includes but is not limited to the following information:
 - <u>Technology commercialization progress</u>
 - New media and publications
 - Company growth
 - Follow-on funding and awards received
- Complete the Final Project Benefits Questionnaire. The Final Project
 Benefits Questionnaire shall be completed by the Recipient with 'Final'
 selected for the 'Relevant data collection period' and submitted to the CAM for
 review and approval.
- Respond to CAM questions regarding the questionnaire drafts.
- Complete and update the project profile on the CEC's public online project and recipient directory on the Energize Innovation website (www.energizeinnovation.fund), and provide Documentation of Project Profile on EnergizeInnovation.fund, including the profile link.
- If the Prime Recipient is an Innovation Partner on the project, complete and update the organizational profile on the CEC's public online project and recipient directory on the Energize Innovation website (www.energizeinnovation.fund), and provide Documentation of Organization Profile on EnergizeInnovation.fund, including the profile link.

Products:

- Initial Project Benefits Questionnaire
- Annual Survey(s)
- Final Project Benefits Questionnaire
- Documentation of Project Profile on EnergizeInnovation.fund
- Documentation of Organization Profile on EnergizeInnovation.fund

- 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.
- 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

V. PROJECT SCHEDULE

Please see the attached Excel spreadsheet.

RESOLUTION NO: 22-0810-9

STATE OF CALIFORNIA

STATE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION: California Clean Energy Fund dba CalCEF Ventures

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

RESOLVED, that the CEC approves Amendment 3 to Agreement EPC-18-002 with California Clean Energy Fund dba CalCEF Ventures to continue and expand the successful California Test Bed (CalTestBed) program established under this agreement. This amendment will provide an additional \$10,998,701 in follow-on funding and extend the agreement term by four years, enabling CalTestBed to continue providing critical technology testing and commercialization services to California clean energy entrepreneurs. This program leverages partnerships with more than 60 testing facilities spread across nine University of California campuses and the Lawrence Berkeley National Lab to provide clean energy companies access to testing facilities to test prototypes of pre-commercial distributed energy resource technologies and help them refine their prototype to meet customer specifications; and

FURTHER BE IT RESOLVED, that the Executive Director or their designee shall execute the same on behalf of the CEC.

CERTIFICATION

The undersigned Secretariat to the CEC 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 CEC held on August 10, 2022.

AYE:		
NAY:		
ABSENT:		
ABSTAIN:		
		
	Liza Lopez	

Secretariat