

GRANT REQUEST FORM (GRF)New Agreement EPC-15-038 (To be completed by CGL Office)

Division	Agreement Manager:	MS-	Phone
ERDD	Juventino Mendoza	51	916-445-5281

Recipient's Legal Name	Federal ID Number
California State University, Fresno Foundation	94-6003272

Title of Project
Central Valley Energy Innovation Cluster: BlueTechValley Energy Cluster

Term and Amount	Start Date	End Date	Amount
	5/16/2016	3/31/2022	\$ 5,000,000

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

Proposed Business Meeting Date	4/13/2016	<input type="checkbox"/> Consent	<input checked="" type="checkbox"/> Discussion
Business Meeting Presenter	Diana Gonzales	Time Needed:	5 minutes

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

Agenda Item Subject and Description

CALIFORNIA STATE UNIVERSITY, FRESNO FOUNDATION. Proposed resolution approving Agreement EPC-15-038 with California State University, Fresno Foundation for a \$5,000,000 grant to significantly expand and improve incubator-type services and facilities in the Central Valley and North State regions. The Central Valley Regional Energy Innovation Cluster will primarily focus on incubation services for entrepreneurs developing energy technologies for the water and agriculture sectors and connecting them with businesses and economic development organizations in the Central Valley and North State. (EPIC FUNDING) Contact: Juventino Mendoza (Staff Presentation 5 minutes)

California Environmental Quality Act (CEQA) Compliance

1. Is Agreement considered a "Project" under CEQA?
 Yes (skip to question 2) No (complete the following (PRC 21065 and 14 CCR 15378)):
 Explain why Agreement is not considered a "Project":

2. If Agreement is considered a "Project" under CEQA:

a) Agreement **IS** exempt. (Attach draft NOE)

Statutory Exemption. List PRC and/or CCR section number: _____

Categorical Exemption. List CCR section number: Cal. Code Regs., tit 14, § 15301

Common Sense Exemption. 14 CCR 15061 (b) (3)

Explain reason why Agreement is exempt under the above section:

This project is exempt under 14 CCR 15301 because it consists of minor alteration to an existing 20,000 sq. ft. Water, Energy & Technology Center (WET Center) laboratory facility at CSU, Fresno involving negligible or no expansion of use. The alterations include the addition of new equipment such as test fixtures, software and office supplies to expand bench- and pilot-scale testing capabilities.

This project is also exempt under 14 CCR 15303 because it consists of the conversion of an existing 2,700 sq. ft. structure from one use to another where only minor modifications will be made. The existing structure is an old California Agricultural Technology Institute (CATI) building located directly across the street from the WET Center laboratory facility at CSU, Fresno. The conversion will allow the old CATI building to be used as an extension of the existing WET Center facilities increasing the amount of office, classroom and conference space available. The physical alterations include: relocation of staff; upgrading doors, carpets, windows and furnishings; adding restricted access; installing new software; and procuring new office supplies.

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

Check all that apply

Initial Study

Environmental Impact Report

Negative Declaration

Statement of Overriding Considerations

Mitigated Negative Declaration

GRANT REQUEST FORM (GRF)

CEC-270 (Revised 02/13)

CALIFORNIA ENERGY COMMISSION



List all subcontractors (major and minor) and equipment vendors: (attach additional sheets as necessary)	
Legal Company Name:	Budget
AGH2O	\$99,900
California State University, Bakersfield	\$99,900
California State University, Chico	\$99,900
California State University, Sacramento	\$99,900
Central Valley Business Incubator	\$400,000
Foundation of California State University Monterey Bay	\$99,900
Humboldt State University Sponsored Programs Foundation	\$99,900
Kern Economic Development Corporation	\$50,000
Schatz Energy Research Center	\$200,000
Sierra Business Council	\$99,900
The Cleantech Open	\$80,000
The Grant Farm, Inc.	\$80,000
The Regents of the University of California, Davis Campus	\$400,000
University of California, Berkeley, School of Law	\$40,000
TBD Construction Contractor	\$255,000

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

Budget Information			
Funding Source	Funding Year of Appropriation	Budget List No.	Amount
EPIC	14-15	301.001B	\$3,000,000
EPIC	15-16	301.001C	\$1,000,000
EPIC	16-17	301.001D	\$1,000,000
			\$
R&D Program Area:	EDMFO: EDMF	TOTAL:	\$5,000,000
Explanation for "Other" selection			
Reimbursement Contract #:		Federal Agreement #:	

Recipient's Administrator/ Officer				Recipient's Project Manager			
Name:	Maral Kismetian			Name:	David Zoldoske		
Address:	4910 N CHESTNUT AVE			Address:	5370 N Chestnut Ave M/S Office 18		
City, State, Zip:	FRESNO, CA 93726-1852			City, State, Zip:	Fresno, CA 93740-0001		
Phone:	559-278-0840 /	Fax:	- -	Phone:	559-278-2066 /	Fax:	- -
E-Mail:	orsp@csufresno.edu			E-Mail:	davidzo@csufresno.edu		

Selection Process Used	
<input checked="" type="checkbox"/> Competitive Solicitation	Solicitation #: GFO-15-306
<input type="checkbox"/> First Come First Served Solicitation	

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

_____ Agreement Manager	_____ Date	_____ Office Manager	_____ Date	_____ Deputy Director	_____ Date
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Exhibit A Scope of Work

I. TASK ACRONYM/TERM LISTS

A. Task List

Task #	CPR ¹	Task Name
1	N/A	General Project Tasks
2		Expand and Provide Cluster Facilities to Innovators and Entrepreneurs
3	X	Cluster Hub Incubation Expansion
4		Technology Innovation Evaluation (TIE): Recruitment and Evaluation
5		Incubation and Support for Entrepreneurs and Innovators
6		Market Feasibility and Commercialization Research and Services
7		Funding and Resource Advisory Support
8		Outreach, Marketing and Sustainability
9		Reports and Forums
10		Evaluation of Project Benefits
11		Technology/Knowledge Transfer Activities

B. Acronym/Term List

Acronym/Term	Meaning
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
Cluster Hubs	Created by this Agreement to serve as satellite locations, include California State University campuses at Bakersfield, Chico, Humboldt, Monterey Bay, Fresno, and Sacramento, and the Sierra Business Council's Small Business Development Center
Central Valley Region	Counties of: Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Inyo, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Mono, Monterey, Nevada, Placer, Plumas, Sacramento, San Joaquin, San Benito, San Luis Obispo, Shasta, Sierra, Siskiyou, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne Yolo, Yuba
CPR	Critical Project Review
CVBI	Central Valley Business Incubator at Fresno State
DACs	Disadvantaged Communities – communities located entirely within a 2010 census tract with the poorest environmental quality as defined by a CalEnviroScreen 2.0 in the 75 or greater percentile range. Please refer to the following for more information: http://www.calepa.ca.gov/EnvJustice/GHGInvest/
Energy Commission	California Energy Commission
ICWT	International Center for Water Technology at Fresno State
Innovation Cluster	A concentration of interconnected companies, universities, investors, business incubators and business accelerators that stimulate innovative activity by promoting intensive interaction and collaboration, sharing of facilities, competition and promotion of entrepreneurship
IOU	Investor Owned Utility

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.

Exhibit A Scope of Work

Acronym/Term	Meaning
Recipient	California State University, Fresno Foundation
SBDC	Small Business Development Center
SBIR	Small Business Innovation Research
STTR	Small Business Technology Transfer
SEED	Sustainable Energy Entrepreneur Development
SEED-TAC	Sustainable Energy Entrepreneur Development- Technical Advisory Committee
sq. ft.	Square Feet
TAC	Technical Advisory Committee
TIE	Technology Innovation Evaluation Program – program used to assess and evaluate the ideas of innovators and entrepreneurs.
WET Incubator	Water & Energy Technology Incubator at Fresno State

Exhibit A

Scope of Work

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

A. Purpose of Agreement

The purpose of this agreement is to further advance the Regional Energy Innovation Cluster in the Central Valley Region. The Recipient, through the Central Valley Energy Innovation Cluster, will provide and coordinate key services, assistance, resources, and infrastructure needed by entrepreneurs and researchers in the region to successfully bring to market energy innovations that can benefit Investor Owned Utility (IOU) electric ratepayers.

B. Problem/ Solution Statement

Problem

California's forward-thinking energy policies are spurring a new wave of entrepreneurs and researchers to conceptualize and develop innovative new solutions for a cleaner, safer, more affordable, more reliable, and more resilient electric grid that benefits the ratepayer. However, the path-to-market for energy entrepreneurs can be long and full of numerous technical and non-technical barriers. Many entrepreneurs lack viable market strategies, grant application experience, business expertise and connections, and full understanding of the needs of potential customers. In addition, many if not all are under financial and time constraints and do not have the means to purchase and permit the equipment and facilities needed to develop, test, and provide proof-of-concept of their technologies.

Solution

The Recipient will provide and coordinate key services, assistance, resources, and infrastructure needed by entrepreneurs and researchers throughout the Central Valley Innovation Cluster Region to successfully bring to market energy innovations that can benefit IOU electric ratepayers.

C. Goals and Objectives of the Agreement

Agreement Goals

The goals of this Agreement are to carry out the following in the Central Valley Cluster Region:

- Dramatically accelerate the rate of innovation and growth of innovation-oriented companies in the energy field.
- Provide key services, infrastructure, expertise, and resources to energy and water entrepreneurs to successfully deploy and commercialize their innovations.
- Catalyze effective regional planning, collaboration, and coordination around energy and water innovation that will benefit IOU ratepayers.
- Connect emerging energy and water technologies to region-specific needs, opportunities, and assets including within Disadvantaged Communities (DACs).
- Accelerate the commercialization of technically promising innovations.
- Create a regional "culture" that attracts local, regional, national, and worldwide entrepreneurs whose ideas and technologies provide solutions to improve energy and water use efficiencies.
- Create a sustainable model for water and energy entrepreneurial incubation that can be duplicated elsewhere in the region.

Exhibit A Scope of Work

Ratepayer Benefits:² This Agreement will result in the ratepayer benefits of greater electricity reliability, lower costs and increased safety by spurring investment, leveraging public and private investment, and accelerating the growth of startup and innovation companies that are developing new technologies for efficiency in the water-energy nexus. Additionally, improved data and information provided through this Agreement will help increase market adoption of new technologies.

Technological Advancement and Breakthroughs:³ This Agreement will support the development and commercialization of technological advancements and breakthroughs that overcome barriers to the achievement of the State of California's statutory energy goals by accelerating the rate of technology innovation by California innovators and entrepreneurs and linking innovators with utilities and end users, while lowering costs and risks associated with deployment.

Agreement Objectives

The objectives of this Agreement are to:

- Expand existing facilities, including doubling the dedicated office space at the Central Valley Business Incubator (CVBI) at California State University, Fresno's Water & Energy Technology Incubator (WET Incubator), from six to twelve companies, as well as expanding the "plug and play" space available to all participating energy entrepreneurs at the WET Incubator; and increasing testing and application facilities, and conference and classroom space throughout the Cluster region.
- Coordinate efforts with partners throughout the Central Valley Region, including 5 California State University campuses at Bakersfield, Chico, Humboldt, Monterey Bay, and Sacramento, and the Sierra Business Council's Small Business Development Center (SBDC), where each will form a Cluster Hub.
- Extend the Technology Innovation Evaluation (TIE) program and incubation, acceleration, outreach, and funding services to over 100 startup companies throughout the Central Valley Innovation Cluster region, including presenting up to 74 business incubation/acceleration workshops and webinars. The TIE program is housed at the International Center for Water Technology at Fresno State (ICWT).
- Produce between 10 and 14 outreach events, and conferences to publicize energy and water entrepreneurs and innovations, including outreach to DACs throughout the Region.
- Deploy between 50 and 70 interns throughout the Central Valley Innovation Cluster region to assist in furthering Project goals.

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.

Exhibit A

Scope of Work

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:

Exhibit A Scope of Work

- 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);
- 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.

Exhibit A Scope of Work

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

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

The CAM shall:

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

Recipient Products:

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

CAM Product:

- Kick-off Meeting Agenda

Subtask 1.3 Critical Project Review (CPR) Meetings

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

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

The Recipient shall:

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

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- 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.

Exhibit A Scope of Work

- 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.

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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.
 - 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.

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- 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 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

Exhibit A Scope of Work

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

Products:

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

Subtask 1.8 Permits

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

The Recipient shall:

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

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

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

Products:

- Permit Status Letter

Exhibit A Scope of Work

- 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.
- Provide recommendations regarding information dissemination, market pathways, or commercialization strategies relevant to the project products.

Exhibit A Scope of Work

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.

Exhibit A Scope of Work

Products:

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

IV. TECHNICAL TASKS

TASK 2: EXPAND CLUSTER FACILITIES TO INNOVATORS AND ENTREPRENEURS

The goal of this task is to expand existing facilities at the WET Incubator campus to energy innovators in the Central Valley Region, including more plug-and-play and short-term office space, conference facilities, and significantly expanded laboratory bench- and pilot-testing capabilities.

The Recipient shall:

- Purchase and receive equipment.
- Retrofit an existing 2,700 sq. ft. facility to double the number of office space available for startups from six to twelve companies, and increase the amount of “plug-and-play” space for all participating entrepreneurs. Changes to existing facility are non-structural and include the following upgrades: restricted access, windows, carpets, etc.
- Expand dedicated available conference room and classroom facilities at the existing 2,700 sq. ft. facility by 600 sq. ft.
- Provide CAM with a *Construction Report* containing a summary of the changes and photographic documentation of remodel process.
- Expand bench- and pilot-scale capabilities at the ICWT Test Lab Facilities over the term of the agreement by installing new equipment and software and procuring new office supplies.
- Produce annual *Central Valley Energy Innovation Cluster Annual Report* to include chapters on all tasks and activities in the Project, including Task 2 facility expansion activities and photos. The Annual Report will be used as an outreach and recruitment tool, explaining and showcasing Project activities, impacts, energy innovators, and technologies.

Products:

- Construction Report
- Central Valley Energy Innovation Cluster Annual Report (draft and final)

Subtask 2.1: PROVIDE CLUSTER FACILITIES TO INNOVATORS AND ENTREPRENEURS

The goal of this task is to make available existing and expanded facilities to energy innovators in the Central Valley Region.

The Recipient shall:

- Provide day-use educational space to the expanded incubator membership of more than 100 new companies (see Task 5) at the WET Incubator.
- Work with Sierra Business Council to make available existing space to four (4) rural energy startups (1 per year x 4 years) at the Sierra SBDC in Truckee. Physical building modification will not be required to existing space.

Exhibit A Scope of Work

- Work with the Schatz Energy Research Center (SERC) at Humboldt State to provide testing and evaluation of energy system hardware to entrepreneurs throughout the project region.
- Provide technical advice to the engineering staff in the design and development stages of the Energy-Water Computer Modeling Laboratory at the Fresno State Jordan Agricultural Research Center to ensure it meets the needs of entrepreneurs and early stage companies commercializing energy-efficient technologies.
- Provide 3D Printing services to entrepreneurs.
- Publish a *Facilities Directory*, identifying all energy and water research facilities located at each Cluster Hub that could be available to innovators and startup companies for bench- and pilot-scale testing and validation.

Products:

- Facilities Directory

TASK 3: CLUSTER HUB INCUBATION EXPANSION

The goal of this task is to expand incubation and acceleration activities to service the extensive Central Valley Region.

The Recipient shall:

- CSU, Fresno Foundation will coordinate activities and provide support through technical advice, and funding to the other six(6) Cluster Hubs.
- In collaboration with ICWT, establish a Steering Committee made up of all Cluster Hubs. Convene an initial kick-off meeting and team-building activities through the first 60 days of this Agreement. Team-building efforts will include discussions about each Cluster Hub's staffing capabilities, resources, programs and areas of common and specialized skills. Steering committee meeting agendas, minutes and rosters will be attached to required progress reports (see Task 1).
- With ICWT, hold regular meetings throughout the life of the project to discuss key issues.
Assess existing services at each Cluster Hub and produce Cluster Hub Expansion Plans with each Cluster Hub to create sustainable, energy innovation centers at each location. The Cluster Hub Expansion Plans will highlight staffing resources needed at each Cluster Hub to carry out the goals of this Agreement.
- Develop a Cluster Hub Outreach Plan with each Cluster Hub, to recruit innovators and entrepreneurs within their sub-regions. Plan will be for outreach efforts only and will not include physical building modifications.
- Submit a *Cluster Hub Outreach Plan Report* to the CAM for comment and approval.
- Deploy at least one (1) intern each year at each of the five California State University campus Cluster Hubs.
- Deploy an additional 4 to 8 interns per year at Fresno State to support Agreement goals
- Write *Annual Cluster Hub Expansion Chapter* for each year's Central Valley energy Innovation Cluster Annual Report (see Task 2) documenting Cluster Hub expansion activities including Steering Committee activities and outreach program implementation at each Cluster Hub.
- Prepare *CPR Report* and participate in a CPR meeting per subtask 1.3.

Products:

Exhibit A Scope of Work

- Cluster Hub Expansion Plans
- Cluster Hub Outreach Plan Report (draft and final)
- Annual Cluster Hub Expansion Chapter
- CPR Report

Subtask 3.1: CLUSTER HUB WEBSITES

The goal of this task is to create a website with each Cluster Hub listing available resources and promoting the Central Valley Energy Innovation Cluster.

The Recipient shall:

- Build a website with each Cluster Hub to be used for outreach and information about the Central Valley Energy Innovation Cluster and that also links innovators and entrepreneurs to resources, training materials, and support services (e.g. technical advice, financial assistance).
- Submit a *Cluster Hub Website Memo* to the CAM containing access information and a description of the website.

Products:

- Cluster Hub Website Memo

Subtask 3.2: CENTRAL VALLEY ENERGY INNOVATION WORKSHOPS

The goal of this task is to host workshops at each Cluster Hub to promote available resources, potential partnerships and available sources of public and private funding.

The Recipient shall:

- Produce two (2) Central Valley Energy Innovation Workshops at each Cluster Hub location (14 total) to connect academics, investors, entrepreneurs, and innovators; showcase emerging technologies in each sub-region; expose entrepreneurs and innovators to Cluster Hub resources; and educate innovators and entrepreneurs about sources of public and private finance.
- Submit prior to each workshop, schedules, agendas, topics and rosters via a *Central Valley Energy Innovation Workshop Memo*.

Products:

- Central Valley Energy Innovation Workshop Memo

TASK 4: Technology Innovation Evaluation (TIE): Recruitment and Evaluation

The goals of this task are to identify, solicit, select and manage at least 100 startup companies, innovators and entrepreneurs through the ICWT's already-established TIE process and to establish a TIE Committee of investors, commercial business development professionals, and professionals with extensive experience in water and energy to assist in evaluating new technologies.

The Recipient shall:

Exhibit A Scope of Work

- Expand established TIE Committee, select subject matter experts in coordination with ICWT and the WET Incubator. Committee members must be able to provide the technical expertise required to evaluate a wide range of energy technologies.
- Produce a *TIE Committee Membership List* detailing members' areas of expertise and interests to enable easy matching of committee members' skills to particular technologies.
- Advance the existing TIE process by developing and implementing selection of energy technologies (including initial screening based on online-application and full application package), intake, case management, and evaluation procedures suitable for energy innovators and technologies.
- Create formal *Vetting and Screening Procedure Documentation* to ensure innovators and technologies are aligned with this Agreement's overall goals and objectives.
- Prior to development of the Ratepayer Benefits Quantification Tool, set up a conference call with the CAM to review and discuss the tool.
- Produce a comprehensive Ratepayer Benefits Quantification Tool to offer a standardized approach to evaluating potential ratepayer benefits for each incubator venture along with defined ratepayer benefits evaluation metrics. Access to the tool and a tutorial will be provided to the CAM in the *Ratepayer Benefits Quantification Tool Presentation*. The tutorial may be, but is not limited to, a PowerPoint presentation, a video presentation, or another format approved by the CAM.
- Conduct technology innovation evaluations for up to 100 selected entrepreneurs. The selection criteria include entrepreneurs with technology innovations that are beneficial to IOU ratepayers, stage of technology development, team, and market potential. The evaluations will include a confidential, independent review of the technology, an assessment of the ratepayer benefits, commercial feasibility of the technology, and proposed follow up actions for validation and commercialization.
- Train staff at the Cluster Hub located at CSU, Fresno to develop a replicable model for a regional Technology Innovation Evaluation process to vet and connect innovators and entrepreneurs in that sub-region and support their progress toward commercialization. Develop additional materials to support TIE programs at other Cluster Hubs, and to share best practices, screening and evaluation processes and TIE Committee roster access.
- Produce *Model TIE Process Guide* to distribute to Cluster Hubs as a roadmap for developing and implementing the TIE process at their Hub.
- Produce a *Central Valley Technology Map* highlighting geographical dispersion of entrepreneurs and technology companies throughout the Central Valley Region.
- Write *Annual TIE Expansion Chapter* for each year's Central Valley Energy Innovation Cluster Annual Report (see Task 2). The chapter will document all activities and progress including energy technologies selection procedures, committee activities, TIE evaluation summaries, innovators and success stories.

Products:

- TIE Committee Membership List
- Vetting and Screening Procedure Documentation
- Ratepayer Benefits Quantification Tool Presentation
- Model TIE Process Guide
- Central Valley Technology Map
- Annual TIE Expansion Chapter

Exhibit A

Scope of Work

Subtask 4.1: D COMMUNITIES

The goals of this subtask are to ensure a robust pool of energy and water innovators from Disadvantaged Communities (DAC's) in the region and to ensure deployment of innovative technologies in DACs.

The Recipient shall:

- Develop and distribute *DAC Outreach Materials* offering Cluster Hub services to DACs in the region, including rural communities and veterans. Provide Spanish translation of website and targeted outreach materials when appropriate. Copies of materials will be attached to required Progress Reports.
- Identify up to fifteen (15) Disadvantaged Communities in the Central Valley Region that will benefit from the proposed services and work with local Economic Development agencies to offer DAC energy and water innovators fund-development assistance and personal introductions to appropriate incubator and accelerator programs, as well as focused matchmaking for research, development, and technical feasibility support.
- Ensure DAC representation on TIE and TAC committees.
- Apply the TIE process to evaluate and promote to businesses relevant energy innovation technologies originating in DACs throughout the region.
- Produce *DAC Innovation Deployment Map* showing energy and water innovation targets in the Central Valley Region.
- Provide support to innovators who are veterans and disabled veterans and assist these innovators with business plan development support and matchmaking for finance, research, development, and technical feasibility evaluation.
- Recruit student interns from DACs wherever possible. (see Task 3)
- Coordinate with a community development organization working with low-income families, such as Self-Help Enterprises, and deploy at least one student intern per year (4 total) o evaluate energy needs in Tulare County DACs.
- Write *Annual DAC Assistance Chapter* for each year's Central Valley Energy Innovation Cluster Annual Report (see Task 2) documenting all DAC outreach and innovator assistance activities including:
 - A list of identified DACs as defined by a CalEnviroScreen 2.0 in the 75 or greater percentile range.
 - DAC innovators
 - Work done with Economic Development agencies
 - Innovation testing and deployment in DACs
 - Veterans' assistance

Products:

- DAC Outreach Materials
- DAC Innovation Deployment Map
- Annual DAC Assistance Chapter

TASK 5: INCUBATION AND SUPPORT FOR ENTREPRENEURS AND INNOVATORS

The goal of this task is to provide technical assistance, training, education and support for the startups and innovation companies (recruited in Task 4 and Subtask 4.1) through the WET Incubator and in collaboration with the Lyles Center for Innovation and Entrepreneurship.

The Recipient shall:

Exhibit A

Scope of Work

- Coordinate and create working relationships with financial and investment communities, legal associations, local and private consultants, and business groups in the Central Valley Energy Innovation Cluster Region and beyond, to highlight the potential and needs of energy and water innovators and technologies and to connect innovators to potential sources of assistance.
- Provide one-on-one technical assistance to entrepreneurs and ventures selected in Task 4, by providing consultation in business development, market analysis and entry, strategy marketing and more, as relevant.
- Assist entrepreneurs by providing them with a virtual classroom for the purpose of acquiring and refining skill sets required for operating a business including but not limited to:
 - Business Readiness Review
 - Business Feasibility Assessment
 - Business Planning
 - Video On-Demand content including investor interviews and business presentations
 - Office Hours for Real-Time Chat
 - Scheduled face-to-face counseling via Skype or similar technology
- Provide general and individualized legal assistance to startup entrepreneurs including entity formation, capitalization, contracts, risk management, IP protection and regulatory compliance.
- Using the TIE method select high-growth-potential entrepreneurs and ventures (2-5 per year) for accelerated growth and commercialization.
- Prepare and submit to the CAM an *Accelerated Entrepreneur Report*, which describes the selection process and the selected entrepreneurs.
- Manage two (2) “Voice of the Customer” workshops per year to introduce technology companies to prospective customers. Offer customer outreach opportunities through the Irrigation Tech Seminar Series, an existing series of seminars hosted by the Center for Irrigation Technology at CSU, Fresno. The seminars are centered on teaching how to take advantage of a variety of irrigation technology developments to make the most out of available water, targeting up to 500 farm and irrigation managers in the region.
- Submit to the CAM, prior to each workshop, schedules, agendas, topics and rosters via a *Voice of the Customer Workshop Memo*.
- Offer services to the Cluster Hubs by providing qualified companies with product, marketing, financial and leadership training and support. Offered services will also include investment pitch training and introduction to investment opportunities as well as expertise about commercializing technology by getting ideas and products out of the labs and into the marketplace.
- Provide Business Plans to twelve (12) energy innovators (3 per year X 4 years).
- Provide professional support, including business advice, to twelve (12) energy innovators to create Commercialization Plans (3 per year X 4 years).
- Create Business Plan Videos for twelve (12) energy innovators (3 per year X 4 years), to expand their media presence and serve as a marketing tool to potential buyers and investors.
- Write *Annual Incubation Activities Chapter* for each year’s Central Valley Energy Innovation Cluster Annual Report (see Task 2) documenting all incubation and support activities including virtual classroom activities, legal services provided, and mentoring efforts (see subtask 5.1 and 5.2). The chapter will list Business and Commercialization Plans produced and also include links to Business Plan videos and summaries of “Voice of the Customer” workshops.

Exhibit A Scope of Work

Products:

- Accelerated Entrepreneur Report
- Voice of the Customer Workshop Memo
- Annual Incubation Activities Chapter

Subtask 5.1: Business Plan Competition

The goal of this subtask is to develop an annual Business Plan Competition for energy innovators that will guide early-stage companies/teams through the fundamentals of business planning in order to deliver quality results for gaining visibility and maximizing impact with investors.

The Recipient shall:

- Produce ten (10) Business Planning Web-based Workshops annually. The workshops are focused on preparing the start-ups for participating in the Business Plan Competition. The workshops will key in on subjects such as building the team, financing, validating the business model, and developing a compelling pitch.
- Submit prior to each workshop, schedules, agendas and topics via a *Business Plan Workshop Memo*.
- Promote and conduct a comprehensive three-part business competition, to guide early-stage companies/teams through the fundamentals of business planning, including a first round, semi-final and final round of competition.
 - Round one - Participants submit an executive summary of their business plan.
 - Round two (semi-finals) – Participants develop a concept deck and a pitch video.
 - Round three (final) – Participants rehearse and refine their in-person presentations and provide a summary report of target customers.
- Provide five (5) hours of mentoring per team, per round of the business competition.
- Provide a list of resources for mentorship for the early-stage companies participating in the Business Plan Competition. The resources referenced are the skills, knowledge and experience the mentors are providing to the early-stage companies. The *Network Resources Memo* will list a description of each mentor's skill set and can be used to pair the entrepreneur with the mentor best meeting the start-ups needs.
- Produce four (4) *Business Plan Competition Annual Reports* including competition entrants, innovations, results, and winning business plan examples.

Products:

- Business Plan Workshop Memo
- Network Resources Memo
- Business Plan Competition Annual Reports

Subtask 5.2: Cluster Hub Metro Teams

The goal of this subtask is to set up Cleantech Open Metro Teams to provide services such as, mentorship, webinars and showcases to accelerate business development at each Cluster Hub.

The Recipient shall:

- The Cleantech Open program, which includes a network of volunteer professionals who lend their time and expertise to entrepreneurs, will work with 4-8 energy and water entrepreneurs at each Cluster Hub annually.

Exhibit A Scope of Work

- Create an ambassador program and recruit 1 to 3 Ambassadors per Cluster Hub to act as community representatives and assist with connecting entrepreneurs to the Central Valley Energy Innovation Cluster and also to local industry and resources.
- Hold three-day Annual Bootcamp for energy innovators to jump-start accelerated mentoring and skills development, and provide an *Annual Bootcamp Agenda* in advance to the CAM. The Bootcamp will be a three-day onsite program for entrepreneurs to participate in. The event will focus on assessment (value proposition team building) feasibility (market competitor analysis, business model) and execution (financing and customers).
- Hold an Annual Business Clinic consisting of one day round robin interviews by experts in multiple fields including finance, marketability, intellectual property and corporate structure.
- Hold regular webinars for energy and water entrepreneurs on topics including building resources and team capacity and customer outreach.
- Submit a *Quarterly Webinar Plan* containing a schedule, agendas and topics for the quarter's upcoming webinars (includes webinars in Task 6 and Task 7, and in this Task).
- Submit a *Quarterly Webinar Report* containing a summary, including a list of participants and a link to slides/recordings and any other presentation materials (includes webinars in Task 6 and Task 7 and in this Task).
- Hold meet and greet meetings for companies, entrepreneurs, mentors and industry experts to discuss relevant topics regarding the industry, challenges and opportunities. Entrepreneurs will be assigned mentors and regular meetings will be encouraged.
- Hold Regional Showcase on Metro energy and water innovators from each Cluster Hub, to promote energy and water innovations to investors and industry leaders.
- Produce *Metro Team Annual Reports* documenting Metro Team establishment, team membership and activities in each Cluster Hub region.

Products:

- Annual Bootcamp Agenda
- Metro Team Annual Reports
- Quarterly Webinar Plan
- Quarterly Webinar Report

Exhibit A Scope of Work

TASK 6: MARKET FEASIBILITY AND COMMERCIALIZATION RESEARCH AND SERVICES

The goals of this task are to acquire and provide access to energy and water industry and research information, and to provide development support services for commercialization of energy and water innovations in the Central Valley Region.

The Recipient shall:

- Give entrepreneurs access to energy and water industry data and relevant other software and subscription services. For example, Industrygrants.com, navigantresearch.com and basecamp.com. Progress will be presented in required progress reports (see Task 1.5).
- Host eight (8) webinars, open to the public, on cutting edge topics to promote Cluster Hub facilities, finance programs, and technology opportunities, including:
 - Pathway to Finance
 - Angels and VC to IPO
 - Customer Research and Evaluation
 - California Grant and Incentive Programs
 - Critical Business Partnerships
 - Export Technology Pathways
 - Equity Crowdfunding
 - Technology Transfer and Licensing
- Produce Advanced Resource Webinar Webpages for all Cluster Hubs with compilation of slides and supporting materials for innovators throughout the Cluster Region.
- Submit to the CAM an *Advanced Resource Webinar Webpages Memo* with access to the webpages.

Products:

- Advanced Resource Webinar Webpages Memo

Subtask 6.1: Customer Base Expansion Assistance

The goal of this subtask is to provide advisory support to entrepreneurs who have internationally exportable products by connecting them to the information and contacts they need to expand their customer base and compete successfully in international trading of energy and water technologies.

The Recipient shall:

- Identify prospective global partners working to support innovation at the water-energy nexus to participate in relevant existing conferences, such as the BlueTechValley Water-Energy Technology Conference.
- Include conference activities in relevant existing websites, such as the BlueTechValley website. Access to the websites and descriptions will be provided in the *Website Memo*.
- Coordinate with the California Center for International Trade Development funded by the State Center Community College District (SCCCD) Chancellor's Office to promote California's international trade and competitiveness, and to provide resources, such as expert advice, to Central Valley companies that can benefit from import and export plans.
- Host eight (8) bi-annual (2 per year x 4 years) International Trade Webinars for entrepreneurs. The webinars will include information on selected high demand Key Technologies and Supply Chain (KTS) topics. The Recipient will provide customized and culturally sensitive outreach to communities of color and disadvantaged business

Exhibit A Scope of Work

enterprises (DBEs) in the Central Valley. These efforts will facilitate export promotion and expand markets, for a greater number of KTS businesses.

- Include entrepreneurs located in rural areas of the Central Valley with businesses involved in exporting and government procurement.
- Produce an *International Trade Guide* as a reference guide for Central Valley Region innovators with information gathered and used in the above activities.

Exhibit A Scope of Work

Products:

- Website Memo
- International Trade Guide

TASK 7: FUNDING AND RESOURCE ADVISORY SUPPORT

The goal of this task is to provide advisory support to entrepreneurs seeking to fund their enterprise through grants. Services will include workshops on grant writing and direct grant writing assistance. Special emphasis will be placed on entrepreneurs in DACs and veterans.

The Recipient shall:

- Host ten (10) to fifteen (15) Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) grant application workshops (at least 2 per year X 4 years) in different locations throughout the Central Valley Region to promote federal research funds. Increase the number of SBIR/STTR applications submitted throughout the Central Valley Region.
- Provide fourteen (14) to eighteen (18) introductory-level grant writing workshops (at least 3 per year X 4 years) in different locations throughout the region to promote grant opportunities; particularly to DACs and small business owners.
- Provide to the CAM, prior to each workshop, workshop schedules, agendas, topics and rosters in a *Grant Writing Workshop Memo*.
- Provide thirty (30) to thirty-five (35) fund workshops (at least 7 per year X 4 years) via webinar to present upcoming and existing state and federal grants and incentive programs to build and support partnering agreements for these solicitations.
- Manage grant funding application processes for fourteen (14) to eighteen (18) Cluster Innovators (at least 3 per year X 4 years).
- Write *Annual Funding and Resources Chapter* for each year's Central Valley Energy Innovation Cluster Annual Report (see Task 2) documenting all activities including funding workshop outlines, attendee roster, and materials and details of successfully submitted proposals. Materials and details submitted as a part of a proposal will not include confidential information and/or trade secrets. The chapter will also document activities for Tasks 7.1 and 7.2 below.

Products:

- Grant Writing Workshop Memo
- Annual Funding and Resources Chapter

Subtask 7.1: Sustainable Energy Entrepreneur Development (SEED), Accelerator and Incubator Match-Making

The goal of this subtask is to serve as an outreach and development mechanism for regional innovators and startup applicants to the California SEED Initiative funding program as well as to the Los Angeles, San Diego, and Bay Area Regional Clusters and other appropriate incubators and accelerators in California.

Exhibit A Scope of Work

The Recipient shall:

- Provide referrals for innovation companies in the Central Valley Cluster region to other Regional Clusters, the California SEED Initiative Program, Energy Excelsior, and other California Incubation and Acceleration programs.
- Appoint a representative to serve on the Technical Advisory Committee for the SEED Initiative (SEED-TAC), which provides Series A and Series B grant funding to energy entrepreneurs and researchers to establish the feasibility of their promising energy technology concepts. SEED-TAC is expected to meet up to four times per year. Progress will be presented in required Reports. See Task 1.6 of RFP-15-304: Sustainable Energy Entrepreneur Development Initiative for the roles and responsibilities of the SEED-TAC.

Subtask 7.2: Investment Readiness and Networking

The goal of this subtask is to provide opportunities for water and energy efficiency technology companies and partners to meet and present to regional, state, and national investors in the clean energy technology industry.

The Recipient shall:

- Hold up to ten (10) Investor Networking Sessions (at least 2 per year X 4 years) that include angel, venture and early-stage fund investors that are interested in funding emerging technologies at the water-energy nexus. The networking sessions will include start-ups as well as investors, and will be a venue for cultivating relations between the two parties and potentially result in investment opportunities.
- Submit prior to each session, schedules; agendas; topics; and rosters via an *Investor Networking Sessions Memo*.
- Conduct at least one (1) Equity Capital Workshop per year for four years focusing on equity capital and readiness for investment. This curriculum includes the following topics: Private Equity Investment Process, Presenting to Investors, Due Diligence, Valuation, and Structuring the Deal. The workshops will take place at Fresno State. Entrepreneurs, early stage companies and other technology companies that are part of the Central Valley Energy Innovation Cluster can attend the workshops. The purpose of the workshops is to educate entrepreneurs about different types of funding available.
- Submit, prior to each workshop, schedules; agendas; topics; and rosters via an *Equity Capital Workshop Memo*.
- Provide one-on-one counseling to assist with securing equity financing. One-on-one counseling will be provided to entrepreneurs ready to actively pursue funding to support growth and who are likely prospects to receive funding.

Products:

- Investor Networking Sessions Memo
- Equity Capital Workshop Memo

TASK 8: OUTREACH, MARKETING AND SUSTAINABILITY

The goal of this task is to brand the Central Valley Energy Innovation Cluster as a long-term and sustainable global leader in incubating, accelerating and commercializing innovative technologies at the water-energy nexus.

The Recipient shall:

Exhibit A Scope of Work

- Develop and implement *Central Valley Sustainability Plan* to catalyze effective regional planning, collaboration, and coordination around energy/water innovation that will benefit IOU electric ratepayers beyond the six years of this grant funding.
- Develop a *Central Valley Marketing and Outreach Plan* for the promotion of the Central Valley Energy Innovation Cluster to attract entrepreneurs and innovators and to promote outcomes and successes. Progress on each element will be documented in appropriate monthly Reports and in a Central Valley Energy Innovation Cluster Annual Report.
- Rebuild and expand existing websites that may support the full array of Cluster activities.
- Release 10-12 press notifications per year announcing new ventures and partners and advising on major company and technology milestones. Copies will be included in appropriate monthly report, and as addenda in each year's Central Valley Energy Innovation Cluster Annual Report.
- Create and support active social and professional media presence— such as, Facebook, LinkedIn, social media advertisements—that communicate the opportunities of the Central Valley Energy Innovation Cluster to state, national and global audiences.
- Create a LinkedIn networking site to support innovative partnerships by and amongst companies and agencies throughout the Central Valley Region.
- Develop a *Central Valley Annual Fact Sheet* highlighting technology companies, economic development outcomes, and investments for use at conferences and outreach events.
- Attend eight (8) conferences (2 per year X 4 years) to promote the Central Valley Energy Innovation Cluster to entrepreneurs, investors, industry and other target audiences. A brief summary of each conference will be submitted to the CAM in a *Conference Networking Documentation*.
- Collaborate annually with the Kern Economic Development Corporation to host their annual Kern County Energy Summit to showcase Central Valley Region innovators and technologies.
- Create up to eight (8) short Video Commercials of entrepreneurs and ventures, which highlight successes, for use on web, social media and at conferences.
- Submit *Video Commercial Use Plan* to CAM with the first draft video commercial. The Video Commercial Use Plan will contain information of where all of the videos may be used (e.g. company LinkedIn page, company website, advertisement space).
- Submit *Video Commercials* to the CAM for comment and approval.
- Write the *Annual Outreach, Marketing and Sustainability Chapter* for each year's Central Valley Energy Innovation Cluster Annual Report (see Task 2), documenting marketing activities and impacts including social media statistics and demographics, Kern Economic Summit summary and links to video commercials.

Products:

- Central Valley Sustainability Plan
- Central Valley Marketing and Outreach Plan (draft and final)
- Central Valley Annual Fact Sheet
- Conference Networking Documentation
- Video Commercial Use Plan
- Video Commercials (draft and final)
- Annual Outreach, Marketing and Sustainability Chapter

Subtask 8.1: Annual Water-Energy Conference

Exhibit A Scope of Work

The goal of this subtask is to organize, manage and convene the Central Valley Water-Energy Conference, an annual forum to share best practices, present a Technology Plan Pitch to include innovative companies from throughout the Central Valley Region, document lessons learned, and present cluster results from activities with stakeholders and the broader public.

The Recipient shall:

- Convene up to four (4) annual Central Valley Water-Energy Conferences that feature at least 40 innovation companies with individual tabletop presentations. The annual forum will share best practices and lessons learned and introduce private investors to highlighted companies.
- Manage the annual Central Valley Technology Pitch Competition at the Central Valley Water-Energy Conference.
-
- Submit to the CAM prior to each conference a *Central Valley Water-Energy Conference Memo* containing schedule, location, topics and agendas.
- After each conference, provide survey to all participants to evaluate satisfaction with conference contents and logistics, knowledge gained and to gather suggestions and comments to improve future conferences.
- Produce and submit for CAM's review a *Central Valley Water-Energy Conference Annual Report*, which will include a summary of the event, attendee lists, registration materials, Pitch Competition materials and results, and conference participant survey evaluations.

Products:

- Central Valley Water-Energy Conference Memo
- Central Valley Water-Energy Conference Annual Report (draft and final)

Subtask 8.2: Outreach to Policy-Makers

The goal of this subtask is to support outreach and education to policy-makers, regulators and public funding agencies, including the Energy Commission, CalRecycle, California Department of Food and Agriculture, California State Treasurer, Governor's Office of Business Development and the United States Department of Agricultural, as well as to regional business and policy-making organizations.

The Recipient shall:

- Host and manage two (2) Bi-Annual Technology Showcase events opened to the public in the Sacramento area to introduce companies and partners in the Central Valley Region to policy-makers, regulators, funders and investors.
- Submit to the CAM a *Showcase Agenda* prior to each Bi-Annual Technology Showcase.
- A full report including an agenda, event summary and a description of participation will be provided in a *Bi-Annual Technology Showcase Report*.
- Develop a *Central Valley Energy Innovation Cluster Funding Plan* for presentation to agencies and legislators to expand funding for emerging technologies and innovation companies in the Central Valley Region.

Products:

- Showcase Agenda
- Bi-Annual Technology Showcase Report
- Central Valley Energy Innovation Cluster Funding Plan (draft and final)

Exhibit A Scope of Work

TASK 9: REPORTS AND FORUMS

The goal of this task is to prepare, print, distribute, and disseminate online Central Valley Energy Innovation Cluster Annual Impact Report that documents the services provided by the Cluster to each entrepreneur, innovator and researcher and the results and outcomes for each.

The Recipient shall:

- Prepare a *Central Valley Annual Impact Report* to include the following for each supported organization:
 - Name, location and organization.
 - Description of the innovation and how it will benefit electric ratepayers in California IOU service territories and lead to technological advancement or breakthroughs to overcome barriers to achieving the state's statutory energy goals.
 - Description of the services provided by Recipient.
 - Technical and commercialization milestones achieved.
 - For companies the Cluster has stopped providing services to, an explanation for the decision.

Products:

- Central Valley Energy Innovation Cluster Annual Impact Report (draft and final)

TASK 10: EVALUATION OF PROJECT BENEFITS

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

The Recipient shall:

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

Exhibit A Scope of Work

- 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 as 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 and jobs retained as a result of the demonstration.
- 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

Exhibit A Scope of Work

TASK 11: 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 Recipient shall:

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

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-15-038 from GFO-15-306 with California State University, Fresno Foundation for a \$5,000,000 grant to significantly expand and improve incubator-type services and facilities in the Central Valley and North State regions. The Central Valley Regional Energy Innovation Cluster will primarily focus on incubation services for entrepreneurs developing energy technologies for the water and agriculture sectors and connecting them with businesses and economic development organizations in the Central Valley and North State; 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 April 13, 2016.

AYE: [List of Commissioners]

NAY: [List of Commissioners]

ABSENT: [List of Commissioners]

ABSTAIN: [List of Commissioners]

Cody Goldthrite,
Secretariat