



**CALIFORNIA  
ENERGY COMMISSION**



**California Energy Commission  
July 10, 2025 Business Meeting  
Backup Materials for Regents of the University of California, on behalf of the  
Davis Campus**

The following backup materials for the above-referenced agenda item are available in this PDF packet as listed below:

1. Proposed Resolution
2. Grant Request Form
3. Scope of Work

**[PROPOSED]**

**RESOLUTION NO: 25-0710-09b**

**STATE OF CALIFORNIA**

**STATE ENERGY RESOURCES  
CONSERVATION AND DEVELOPMENT COMMISSION**

**RESOLUTION: Regents of the University of California, on behalf of the Davis  
Campus**

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

**RESOLVED**, that the CEC approves agreement EPC-25-003 with the Regents of the University of California, on behalf of the Davis Campus for a \$599,812 grant. This project will research how ground photovoltaic infrastructure influences below-ground processes, particularly soil carbon sequestration, and its relationship with native plant productivity and fossorial animal habitat utilization. By informing land management and integrating ecological restoration, this work aims to enhance soil health, biodiversity, and sustainable energy production for mutual ecosystem and climate benefits; 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 July 10, 2025.

AYE:

NAY:

ABSENT:

ABSTAIN:

Dated:

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Kim Todd  
Secretariat



## GRANT REQUEST FORM (GRF)

### A. New Agreement Number

**IMPORTANT:** New Agreement # to be completed by Contracts, Grants, and Loans Office.

**New Agreement Number:** EPC-25-003

### B. Division Information

1. Division Name: ERDD
2. Agreement Manager: Julia Harnad
3. MS-:43
4. Phone Number: 916-477-1302

### C. Recipient's Information

1. Recipient's Legal Name: The Regents of the University of California, on behalf of the Davis campus
2. Federal ID Number: 94-6036494

### D. Title of Project

Title of project: Stacking Ecological and Technological Benefits at Large, Ground-Mounted Photovoltaic Solar Parks: Enhancing Soil Carbon Sequestration, Biodiversity, and Photovoltaic Panel Performance

### E. Term and Amount

1. Start Date: 9/29/2025 08/14/2025
2. End Date: 5/29/2028 12/14/2028
3. Amount: \$599,812.00

### F. Business Meeting Information

1. Are the ARFVTP agreements \$75K and under delegated to Executive Director? No
2. The Proposed Business Meeting Date: 7/10/2025 .
3. Consent or Discussion? Discussion
4. Business Meeting Presenter Name: Julia Harnad
5. Time Needed for Business Meeting: 5 minutes.
6. The email subscription topic is: Enter the email subscription topic name.

#### **Agenda Item Subject and Description:**

**The Regents of the University of California, on behalf of the Davis campus.** Proposed resolution approving agreement EPC-25-003 with the Regents of the University of California, on behalf of the Davis campus for a \$599,812 grant and adopting staff's recommendation that this action is exempt from CEQA. This project will research how ground photovoltaic infrastructure influences below-ground processes, particularly soil carbon sequestration, and its relationship with native plant productivity and fossorial animal habitat utilization. By informing land management and integrating ecological restoration, this work aims to enhance soil health, biodiversity, and sustainable energy production for mutual ecosystem and climate benefits. (EPIC funding) Contact: Julia Harnad



## G. California Environmental Quality Act (CEQA) Compliance

### 1. Is Agreement considered a “Project” under CEQA?

Yes

If yes, skip to question 2.

If no, complete the following (PRC 21065 and 14 CCR 15378) and explain why Agreement is not considered a “Project”:

Agreement will not cause direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment because:

### 2. If Agreement is considered a “Project” under CEQA answer the following questions.

#### a) Agreement **IS** exempt?

Yes

Statutory Exemption?

No

If yes, list PRC and/or CCR section number(s) and separate each with a comma. If no, enter “None” and go to the next question.

PRC section number: None

CCR section number: None

Categorical Exemption?

Yes

If yes, list CCR section number(s) and separate each with a comma. If no, enter “None” and go to the next question.

CCR section number: Cal. Code Regs., tit. 14, § 15306 ;

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

No

If yes, explain reason why Agreement is exempt under the above section. If no, enter “Not applicable” and go to the next section.

California Code of Regulations, title 14, section 15306, provides that projects which consists of basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource are categorically exempt from the provisions of CEQA. The purpose of this Agreement is to research how ground photovoltaic (GPV) infrastructure influences below-ground processes, particularly soil carbon sequestration, and its relationship with native plant productivity and fossorial animal habitat utilization. Thus, this project involves basic data collection, research, experimental management, and resource evaluation activities which do not result in serious or major disturbance to an environmental source, and therefore, the project is exempt from CEQA under section 15306.

Additionally, this project does not involve impacts on any particularly sensitive environment; does not involve any cumulative impacts of successive projects of the same type in the same place that might be considered significant; does not involve unusual circumstances that might have a significant effect on the environment; will



not result in damage to scenic resources within a highway officially designated as a state scenic highway; the project site is not included on any list compiled pursuant to Government Code section 65962.5; and the project will not cause a substantial adverse change in the significance of a historical resource. Therefore, none of the exceptions to categorical exemptions listed in CEQA Guidelines section 15300.2.

b) Agreement **IS NOT** exempt.

**IMPORTANT:** consult with the legal office to determine next steps.

No

If yes, answer yes or no to all that applies. If no, list all as “no” and “None” as “yes”.

| Additional Documents                   | Applies |
|--|---------|
| Initial Study                          | No      |
| Negative Declaration                   | No      |
| Mitigated Negative Declaration         | No      |
| Environmental Impact Report            | No      |
| Statement of Overriding Considerations | No      |
| None                                   | Yes     |

#### H. Is this project considered “Infrastructure”?

No

#### I. Subcontractors

List all Subcontractors listed in the Budget (s) (major and minor). Insert additional rows if needed. If no subcontractors to report, enter “No subcontractors to report” and “0” to funds.

**Delete** any unused rows from the table.

| Subcontractor Legal Company Name | CEC Funds | Match Funds |
|----------------------------------|-----------|-------------|
| No subcontractors to report      | \$        | \$          |

#### J. Vendors and Sellers for Equipment and Materials/Miscellaneous

List all Vendors and Sellers listed in Budget(s) for Equipment and Materials/Miscellaneous. Insert additional rows if needed. If no vendors or sellers to report, enter “No vendors or sellers to report” and “0” to funds. **Delete** any unused rows from the table.

| Vendor/Seller Legal Company Name | CEC Funds | Match Funds |
|----------------------------------|-----------|-------------|
| No vendors to report             | \$        | \$          |

#### K. Key Partners

List all key partner(s). Insert additional rows if needed. If no key partners to report, enter “No key partners to report.” **Delete** any unused rows from the table.



**Key Partner Legal Company Name**

No key partners to report

**L. Budget Information**

Include all budget information. Insert additional rows if needed. If no budget information to report, enter "N/A" for "Not Applicable" and "0" to Amount. **Delete** any unused rows from the table.

| Funding Source | Funding Year of Appropriation | Budget List Number | Amount     |
|----------------|-------------------------------|--------------------|------------|
| EPIC           | 24-25                         | 301.001L           | \$ 599,812 |

**TOTAL Amount:** \$ 599,812

R&D Program Area: ESB: EA

Explanation for "Other" selection Not applicable

Reimbursement Contract #: Not applicable

Federal Agreement #: 101

**M. Recipient's Contact Information**

**1. Recipient's Administrator/Officer**

Name: Assigned SPO Awards Analyst

Address: 1 Shields Ave

City, State, Zip: Davis, CA 95616-5270

Phone: 530-754-7700

E-Mail: awards@ucdavis.edu

**2. Recipient's Project Manager**

Name: Rebecca Hernandez

Address: 1 Shields Ave

City, State, Zip: Davis, CA 95616-5270

Phone: 650-681-7457

E-Mail: rrhernandez@ucdavis.edu

**N. Selection Process Used**

There are three types of selection process. List the one used for this GRF.

| Selection Process                      | Additional Information |
|--|------------------------|
| Competitive Solicitation #             | GFO-24-301             |
| First Come First Served Solicitation # | Not applicable         |
| Other                                  | Not applicable         |



## O. Attached Items

1. List all items that should be attached to this GRF by entering "Yes" or "No".

| Item Number | Item Name  | Attached |
|-------------|--|----------|
| 1           | Exhibit A, Scope of Work/Schedule                | Yes      |
| 2           | Exhibit B, Budget Detail                         | Yes      |
| 3           | CEC 105, Questionnaire for Identifying Conflicts | Yes      |
| 4           | Recipient Resolution                             | No       |
| 5           | Awardee CEQA Documentation                       | Yes      |

### Approved By

Individuals who approve this form must enter their full name and approval date in the MS Word version.

**Agreement Manager:** Julia Harnad

**Approval Date:** 05/30/2025

**Branch Manager:** Alex Horangic

**Approval Date:** 5/30/2025

**Director:** Alex Horangic for Jonah Steinbuck

**Approval Date:** 5/30/2025

## EXHIBIT A SCOPE OF WORK

### I. TASK ACRONYM/TERM LISTS

#### A. Task List

| Task # | CPR <sup>1</sup> | Task Name                        |
|--------|------------------|----------------------------------|
| 1      |                  | General Project Tasks            |
| 2      | X                | Soil & Carbon Assessment         |
| 3      | X                | Vegetation & Performance Studies |
| 4      | X                | Wildlife Studies                 |
| 5      |                  | Evaluation of Project Benefits   |
| 6      |                  | Knowledge Transfer Activities    |

#### B. Acronym/Term List

| Acronym/Term | Meaning   |
|--------------|---|
| CAM          | Commission Agreement Manager  |
| CAO          | Commission Agreement Officer  |
| CEC          | California Energy Commission  |
| CPR          | Critical Project Review   |
| GPR          | Ground-Penetrating Radar  |
| GPV          | Large, Ground-Mounted Photovoltaic Solar Energy Project                   |
| LAI          | Leaf Area Index   |
| MAOM         | Mineral-Associated Organic Matter   |
| NEE          | Net Ecosystem Exchange  |
| POM          | Particulate Organic Matter  |
| POXC         | Permanganate Oxidizable Carbon  |
| PV           | Photovoltaic  |
| RF           | Root Fineness   |
| RTD          | Root Tissue Density   |
| SMF          | Shoot Mass Fraction   |
| SRL          | Specific Root Length  |
| TAC          | Technical Advisory Committee  |
| TC           | Total (Soil) Carbon   |
| TN           | Total (Soil) Nitrogen   |
| TOC          | Total (Soil) Organic Carbon   |
| UC Davis     | The Regents of The University of California on Behalf of the Davis campus |

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

#### A. Purpose of Agreement

The purpose of this Agreement is to fund research on how ground photovoltaic (GPV) infrastructure influences below-ground processes, particularly soil carbon sequestration, and its relationship with native plant productivity and fossorial animal habitat utilization. By informing

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<sup>1</sup> 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

land management and integrating ecological restoration, this work aims to enhance soil health, biodiversity, and sustainable energy production for mutual ecosystem and climate benefits.

#### B. Problem/ Solution Statement

##### **Problem**

Microclimatic variations caused by ground-mounted photovoltaic installations may significantly influence belowground processes such as soil carbon sequestration, native plant productivity, and habitat utilization by fossorial animals. Conventional land management practices around energy facilities often take a generalized approach and may overlook how ecological responses change over the variation in microenvironmental conditions induced by GPV infrastructure. Moreover, there are information gaps on how different restoration strategies may influence soil health and biodiversity in these modified landscapes.

##### **Solution**

This research will use field experiments and statistical models to investigate how GPV infrastructure impacts soil carbon sequestration, native plant communities, and fossorial animal habitat use across different microsites within solar installations. This study will also quantify effects on soil carbon storage potential by measuring soil carbon, carbon fluxes, and related soil properties across conventional GPV, restored GPV, and adjacent non-GPV sites. Concurrent monitoring of vegetation dynamics will compare the establishment success of prairie seed mixes across GPV sites and microsites—focusing on the sun and shade areas created by panel arrangements—to assess plant productivity response to GPV microclimatic variation. The research will also determine how this productivity influences PV performance properties such as panel temperature cooling by emphasizing root production and morphology. Additionally, the wildlife component will evaluate fossorial animal habitat utilization by tracking changes in community composition, spatial distribution, and rewilding success in restored GPV areas compared to non-GPV areas. Together, research outcomes will be disseminated to solar energy stakeholders, including developers and operators and managers, through engagement emphasizing cost-effective recommendations that also confer benefits for biodiversity and ecosystems.

#### C. Goals and Objectives of the Agreement

##### **Agreement Goals**

The goals of this Agreement are to:

- **Evaluate** relationships and beneficial interactions of GPV infrastructure and soil quality, plant growth, and fossorial animals to balance energy production with conservation goals.
- **Improve** soil health through native grassland species restoration to increase carbon sequestration and reduce erosion, leading to more sustainable solar facility operations.
- **Fill** critical knowledge gaps regarding the behavior of fossorial animals within GPV installations, providing insights into how soil conditions and microclimate variations influence resident animal habitat use.
- **Provide** recommendations to guide future solar park designs that enhance soil health, boost biodiversity, and minimize habitat fragmentation.

## EXHIBIT A SCOPE OF WORK

**Ratepayer Benefits:**<sup>2</sup> This Agreement will benefit ratepayers by identifying options to reduce operational and maintenance costs of GPV projects through advanced ecological land management. By integrating technological solutions with ecological restoration, address climate challenges while improving soil health and reducing the environmental costs of renewable energy development. Research GPV infrastructure's effects on soil, plants, and fossorial animals will guide improvements in energy and ecological performance. Integrating restoration with solar operations reduces maintenance costs and improves soil carbon sequestration. These advancements minimize long-term environmental impacts while delivering cost savings for ratepayers. By combining natural solutions with renewable energy, the Recipient will reduce costly mitigation needs, helping solar parks operate more efficiently for California's energy future.

**Technological Advancement and Breakthroughs:**<sup>3</sup> This Agreement will advance technology to overcome barriers to California's statutory energy goals by optimizing solar facility design. Research on GPV infrastructure's impacts on soil health, plants, and fossorial animals will provide practical operational guidance. Studying plant productivity responses to GPV-induced microclimatic variations will show how this productivity influences photovoltaic (PV) performance (ex. temperature cooling). This research guides invasive species management and soil quality enhancement, supporting better solar installation design. Improved ecosystem function helps meet climate targets while lowering energy costs. These advances overcome facility siting barriers, supporting California's environmental goals through enhanced carbon sequestration in restored grasslands.

### **Agreement Objectives**

The objectives of this Agreement are to:

- **Measure** soil carbon, carbon fluxes, and related soil properties across conventional GPV, restored GPV, and adjacent non-GPV sites to establish baseline carbon storage potential.
  - **Examine** vegetation dynamics and their relationship to PV performance by comparing the establishment success of prairie seed mixes across GPV sites and microsites.
  - **Assess** plant productivity response to GPV microclimatic variation, with an emphasis on root production and morphology, and determine how this productivity influences PV performance properties such as panel temperature cooling.
- Evaluate** fossorial animal habitat utilization by tracking changes in community composition, spatial distribution, and rewilding success in restored GPV areas compared to non-GPV areas.

### III. TASK 1: GENERAL PROJECT TASKS

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<sup>2</sup> 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](http://docs.cpuc.ca.gov/PublishedDocs/WORD_PDF/FINAL_DECISION/167664.PDF)).

<sup>3</sup> 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

#### 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)**. All products submitted which will be viewed by the public, must comply with the accessibility requirements of Section 508 of the federal Rehabilitation Act of 1973, as amended (29 U.S.C. Sec. 794d), and regulations implementing that act as set forth in Part 1194 of Title 36 of the Federal Code of Regulations. All technical tasks should include product(s). 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 California Energy Commission’s (CEC) 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.

The following describes the accepted formats for electronic data and documents provided to the CEC 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.
- 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 CEC'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, and other CEC staff relevant to the Agreement. The Recipient's Project Manager and any other individuals deemed necessary by the CAM or the Project Manager shall participate in 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., Teams, Zoom), with approval of the CAM.

The Kick-off meeting will include discussion of the following:

- The CAM's expectations for accomplishing tasks described in the Scope of Work;
- An updated Project Schedule;
- Terms and conditions of the Agreement;
- Invoicing and auditing procedures;
- Travel;
- Equipment purchases;
- Administrative and Technical products (subtask 1.1);
- CPR meetings (subtask 1.3);
- Monthly Calls (subtask 1.5)

## **EXHIBIT A SCOPE OF WORK**

- Quarterly Progress reports (subtask 1.6)
  - Final Report (subtask 1.7)
  - Match funds (subtask 1.8);
  - Permit documentation (subtask 1.9);
  - Subawards(subtask 1.10);
  - Technical Advisory Committee meetings (subtasks 1.11 and 1.12);
  - Agreement changes;
  - Performance Evaluations; and
  - Any other relevant topics.
- Provide *Kick-off Meeting Presentation* to include but not limited to:
    - Project overview (i.e. project description, goals and objectives, technical tasks, expected benefits, etc.)
    - Project schedule that identifies milestones
    - List of potential risk factors and hurdles, and mitigation strategy
  - Provide an *Updated Project Schedule, Match Funds Status Letter, and Permit Status Letter*, 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:**

- Kick-off Meeting Presentation
- Updated Project Schedule (*if applicable*)
- Match Funds Status Letter (subtask 1.7) (*if applicable*)
- Permit Status Letter (subtask 1.8) (*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 CEC 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 CEC 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 CEC.

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 may 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 CEC, but they may take place at another location, or may be conducted via electronic conferencing (e.g., WebEx) as determined by the CAM.

## **EXHIBIT A SCOPE OF WORK**

### **The Recipient shall:**

- Prepare and submit 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.
- 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* with a list of expected CPR participants in advance of the CPR meeting. If applicable, the agenda may 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. A determination of unsatisfactory progress This may result in project delays, including a potential Stop Work Order, while the CEC determines whether the project should continue.
- 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)

### **CAM Products:**

- CPR Agenda(s)
- 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 CEC 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 of the following Agreement closeout items:
  - Disposition of any procured equipment.
  - The CEC's request for specific "generated" data (not already provided in Agreement products).

## **EXHIBIT A SCOPE OF WORK**

- 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 copies of *All Final Products* organized by the tasks in the Agreement.

### **Products:**

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

## **MONTHLY CALLS, REPORTS AND INVOICES**

### **Subtask 1.5 Monthly Calls**

The goal of this task is to have calls at least monthly between the CAM and Recipient to verify that satisfactory and continued progress is made towards achieving the objectives of this Agreement on time and within budget.

The objectives of this task are to verbally summarize activities performed during the reporting period, to identify activities planned for the next reporting period, to identify issues that may affect performance and expenditures, to verify match funds are being proportionally spent concurrently or in advance of CEC funds or are being spent in accordance with an approved Match Funding Spending Plan, to form the basis for determining whether invoices are consistent with work performed, and to answer any other questions from the CAM. Monthly calls might not be held on those months when a quarterly progress report is submitted or the CAM determines that a monthly call is unnecessary.

#### **The CAM shall:**

- Schedule monthly calls.
- Provide questions to the Recipient prior to the monthly call.
- Provide call summary notes to Recipient of items discussed during call.

#### **The Recipient shall:**

- Review the questions provided by CAM prior to the monthly call
- Provide verbal answers to the CAM during the call.

#### **Product:**

- Email to CAM concurring with call summary notes.

### **Subtask 1.6 Quarterly 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 *Quarterly 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 reporting period, including accomplishments, problems,

## EXHIBIT A SCOPE OF WORK

milestones, products, schedule, fiscal status, and an assessment of the ability to complete the Agreement within the current budget and any anticipated cost overruns. Progress reports are due to the CAM the 10th day of each January, April, July, and October. The Quarterly Progress Report template can be found on the ECAMS Resources webpage available at:  
<https://www.energy.ca.gov/media/4691>

- Submit a monthly or quarterly *Invoice* on the invoice template(s) provided by the CAM.

### Recipient Products:

- Quarterly Progress Reports
- Invoices

### CAM Product:

- Invoice template

### Subtask 1.7 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.

When creating the Final Report Outline and the Final Report, the Recipient must use the CEC Style Manual provided by the CAM.

#### Subtask 1.7.1 Final Report Outline

##### The Recipient shall:

- Prepare a *Final Report Outline* in accordance with the *Energy Commission Style Manual* provided by the CAM.

### Recipient Products:

- Final Report Outline (draft and final)

### CAM Products:

- Energy Commission Style Manual
- Comments on Draft Final Report Outline
- Acceptance of Final Report Outline

### Subtask 1.7.2 Final Report

##### The Recipient shall:

- Prepare a *Final Report* for this Agreement in accordance with the approved Final Report Outline, Energy Commission 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**)



## EXHIBIT A SCOPE OF WORK

- 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)
- Submit a draft of the Executive Summary to the TAC for review and comment.
- Develop and submit a *Summary of TAC Comments on Draft Final Report* received on the Executive Summary. For each comment received, the Recipient will identify in the summary the following:
  - Comments the Recipient proposes to incorporate.
  - Comments the Recipient does propose to incorporate and an explanation for why.
- 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.
- Incorporate all CAM comments into the *Final Report*. If the Recipient disagrees with any comment, provide a *Written Responses to Comments* explaining why the comments were not incorporated into the final product.
- Submit the revised *Final Report* electronically with any Written Responses to Comments within 10 days of receipt of CAM's Written Comments on the Draft Final Report, unless the CAM specifies a longer time period or approves a request for additional time.

### Products:

- Summary of TAC Comments on Draft Final Report
- Draft Final Report
- Written Responses to Comments (*if applicable*)
- Final Report

### CAM Product:

- Written Comments on the Draft Final Report

## **MATCH FUNDS, PERMITS, AND SUBAWARDS**

### **Subtask 1.8 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. 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 application that led to the CEC 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 application that led to the CEC awarding this Agreement, then provide in the letter:

## EXHIBIT A SCOPE OF WORK

- 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.
  - If different from the solicitation application, provide a letter of commitment from an authorized representative of each source of match funding that the funds or contributions have been secured.
- At the Kick-off meeting, discuss match funds and the impact on the project if they are significantly reduced or not obtained as committed. If applicable, match funds will be included as a line item in the progress reports and will be a topic at CPR meetings.
- Provide a *Supplemental Match Funds Notification Letter* to the CAM of receipt of additional match funds.
- Provide a *Match Funds Reduction Notification Letter* to the CAM if existing match funds are reduced during the course of the Agreement. Reduction of match funds may trigger a CPR meeting.

### Products:

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

### Subtask 1.9 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.

## **EXHIBIT A SCOPE OF WORK**

- 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 1.10 Obtain and Execute Subawards and Agreements with Site Hosts**

The goals of this subtask are to: (1) procure and execute subrecipients and site host agreements, as applicable, required to carry out the tasks under this Agreement; and (2) ensure that the subrecipients and site host agreements are consistent with the Agreement terms and conditions and the Recipient's own contracting policies and procedures.

### **The Recipient shall:**

- Execute and manage subawards and coordinate subrecipients activities in accordance with the requirements of this Agreement.
- Incorporate this Agreement by reference into each subaward.
- Include any required Energy Commission flow-down provisions in each subaward, in addition to a statement that the terms of this Agreement will prevail if they conflict with the subaward terms.
- Submit a *Subaward and Site Letter* to the CAM describing the subawards and any site host agreement needed or stating that no subawards or site host agreements are required.
- If requested by the CAM, submit a draft of each *Subaward* and any *Site Host Agreement* required to conduct the work under this Agreement.
- If requested by the CAM, submit a final copy of each executed *Subaward* and any *Site Host Agreement*.
- Notify and receive written approval from the CAM prior to adding any new subrecipient (see the terms regarding subrecipient additions in the terms and conditions).

### **Products:**

- Subaward and Site Letter
- Draft Subawards (*if requested by the CAM*)
- Draft Site Host Agreement (*if requested by the CAM*)
- Final Subawards (*if requested by the CAM*)
- Final Site Host Agreement (*if requested by the CAM*)

## **TECHNICAL ADVISORY COMMITTEE**

### **Subtask 1.11 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:

## EXHIBIT A SCOPE OF WORK

- 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.
- Help set the project team's goals and contribute to the development and evaluation of its statement of proposed objectives as the project evolves.
- Provide a credible and objective sounding board on the wide range of technical and financial barriers and opportunities.
- Help identify key areas where the project has a competitive advantage, value proposition, or strength upon which to build.
- Advocate, to the extent the TAC members feel is appropriate, on behalf of the project in its effort to build partnerships, governmental support, and relationships with a national spectrum of influential leaders.
- Ask probing questions that insure a long-term perspective on decision-making and progress toward the project's strategic goals.

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 1.12.
- 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.

## EXHIBIT A SCOPE OF WORK

### Products:

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

### Subtask 1.12 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.

#### The TAC shall:

- Help set the project team's goals and contribute to the development and evaluation of its statement of proposed objectives as the project evolves.
- Provide a credible and objective sounding board on the wide range of technical and financial barriers and opportunities.
- Help identify key areas where the project has a competitive advantage, value proposition, or strength upon which to build.
- Advocate on behalf of the project in its effort to build partnerships, governmental support and relationships with a national spectrum of influential leaders.
- Ask probing questions that insure a long-term perspective on decision-making and progress toward the project's strategic goals.
- Review and provide comments to proposed project performance metrics.
- Review and provide comments to proposed project Draft Knowledge Transfer Plan.

### Products:

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

### Subtask 1.13 Project Performance Metrics

The goal of this subtask is to finalize key performance targets for the project, incorporating TAC feedback. We will then report on final results in achieving these targets. The performance targets should encompass a mix of scientific, engineering, techno-economic, and programmatic metrics, providing the most significant indicators of the research or technology's potential success.

## EXHIBIT A

### SCOPE OF WORK

#### The Recipient shall:

- Complete and submit the project performance metrics section of the *Initial Project Benefits Questionnaire*, developed in the Evaluation of Project Benefits task, to the CAM.
- Present the draft project performance metrics at the first TAC meeting to solicit input and comments from the TAC members.
- Develop and submit a *TAC Performance Metrics Summary* that summarizes comments received from the TAC members on the proposed project performance metrics. The *TAC Performance Metrics Summary* will identify:
  - TAC comments the Recipient proposes to incorporate into the *Initial Project Benefits Questionnaire*, developed in the Evaluation of Project Benefits task.
  - TAC comments the Recipient does not propose to incorporate with and explanation why.
- Develop and submit a *Project Performance Metrics Results* document describing the extent to which the Recipient met each of the performance metrics in the *Final Project Benefits Questionnaire*, developed in the Evaluation of Project Benefits task.
- Discuss the *Project Performance Metrics Results* at the Final Meeting.

#### Products:

- TAC Performance Metrics Summary
- Project Performance Metrics Results

## IV. TECHNICAL TASKS

### TASK 2: SOIL CARBON ASSESSMENT

The goal of this study is to investigate the viability of numerous vegetation communities for ecovoltic soil carbon management. Specifically, measuring different fractions of soil carbon and gas fluxes to evaluate carbon sequestration rates, carbon stocks over time, and overall recalcitrance of stocks. Measurements will occur across the footprint of the UC Davis Experimental Ecovoltic Park (57-acre PV footprint area, single-axis tracking; Davis, CA), specifically in the restoration treatment blocks and control blocks (i.e., no treatment, soil amendment only, tilled only). Additional comparative measurements will occur in an adjacent agricultural parcel to the west of the UC DEEP (UC Davis owned land, winter wheat, 20 acres).

#### The Recipient shall:

- Synthesize a unified, high-throughput *Protocol for Soil Carbon Sampling* from previously published methodologies
  - Field methods on soil coring and bulk density probing
  - Sample management (i.e., storage, dividing, and preprocessing)
  - Chemical analysis
    - UC Davis Analytical Lab for Total (Soil) Carbon (TC), Total (Soil) Organic Carbon (TOC), and Total (Soil) Nitrogen (TN)
    - Simultaneous in-house chemical analyses for Particulate Organic Matter (POM), Mineral-Associated Organic Matter (MAOM), and Permanganate Oxidizable Carbon (POXC)
- Develop a companion *Protocol for Gas Flux Measurements* in conjunction with the *Protocol for Soil Carbon Sampling*

## EXHIBIT A SCOPE OF WORK

- Concerns frequency, time of day, duration, and placement of semi-permanent sampling points
- Install semi-permanent gas flux chamber seals at UC Davis Experimental Ecovoltaic Park (standard ~4 weeks prior to first sampling to let soil settle)
- Measure and record soil characteristics regularly (TBD, every 4-8 weeks, ), such as TC, TOC, TN, POM, MAOM, and POXC
- Measure and record soil gas fluxes regularly (TBD, at least monthly), such as NEE and respiration
- Develop a *Data Cleaning and Analysis Script* in R (after first wave of data comes in) to handle data cleaning, statistical analysis, and visualization
  - To be continuously updated throughout data collection phase
- Prepare an *Interim Soil Carbon and Fluxes Research Summary Report* following the 2025-2026 wet season, detailing methodological success, summarizing data, and planning for continued sampling
- Prepare a *Final Soil Carbon and Fluxes Research Summary Report* following the 2026-2027 wet season, detailing methodological success, summarizing data, and reflecting on methods to share with the broader ecovoltaics research community
- Prepare a *CPR Report #1* in accordance with subtask 1.3.

### Products:

- Protocol for Soil Carbon Sampling
- Protocol for Gas Flux Measurements
- Data Cleaning and Analysis Script
- Interim Soil Carbon and Fluxes Research Summary Report
- Final Soil Carbon and Fluxes Research Summary Report
- CPR Report #1

### TASK 3: VEGETATION & PERFORMANCE STUDIES

The goal of this task is to Investigate how microclimatic conditions, particularly in restored versus non-restored solar installations, influence the composition, productivity, and ecological dynamics of native and invasive vegetation communities. Measurements will occur across the footprint of the UC Davis Experimental Ecovoltaic Park (57-acre PV footprint area, single-axis tracking; Davis, CA), specifically in the restoration treatment blocks and control blocks (i.e., no treatment, soil amendment only, tilled only). Additional comparative measurements will occur in an adjacent agricultural parcel to the west the UC DEEP (UC Davis owned land; winter wheat, 20 acres). The research seeks to determine how GPs impact plant growth, competitive dynamics, and restoration success, ultimately guiding best practices for sustainable vegetation management in solar environments.

### The Recipient shall:

- Measure and record vegetation characteristics seasonally such as abundance, richness, diversity, evenness, height, coverage, biomass, and LAI.
- Collect soil samples seasonally to analyze root morphology metrics and evaluate root biomass and turnover rate.
- Monitor PV panel surface temperatures continuously.
- Prepare an *Interim Vegetation & Performance Studies Data Summary Report* following the 2026 field season, providing interim summary on vegetation and PV performances:
  - Seasonal data on aboveground vegetation composition and characteristics

## EXHIBIT A

### SCOPE OF WORK

- Seasonal data on belowground root dynamics and productivity
  - Continuous data on temperature variations of PV panels
- Prepare a *Final Vegetation & Performance Studies Data Summary Report* following the 2027 field season, providing comprehensive analysis on vegetation and PV interactions:
  - Detailing plant community composition, microclimatic influences, restoration success, and linking cooling effects of vegetation to energy efficiency metrics.
  - Synthesized findings to create tailored recommendations for optimizing plant community structure and best management practices on GPVs, focusing on balancing energy production with ecological resilience.
- Prepare a *CPR Report #2* in accordance with subtask 1.3.

#### Products:

- Interim Vegetation & Performance Studies Data Summary Report
- Final Vegetation & Performance Studies Data Summary Report
- CPR Report #2

#### TASK 4: WILDLIFE STUDIES

The goal of this task is to investigate how GPV microclimatic variations affect fossorial and semi-fossorial animals, such as California ground squirrels and California voles. Specifically, to test how GPV infrastructure impacts fossorial animal diversity, distribution, and habitat utilization. Measurements will occur across the (1) footprint of the UC Davis Experimental Ecovoltaic Park (57-acre PV footprint area, single-axis tracking; Davis, CA), specifically in the restoration treatment blocks and control blocks (i.e., no treatment, soil amendment only, tilled only), and (2) Grasslands Regional Park Solar Energy Project (21-acre PV footprint area, single-axis tracking; Davis, CA). Additional comparative measurements will occur in an adjacent agricultural parcel to the west the UC DEEP (UC Davis owned land; winter wheat, 20 acres). Overall, this task will evaluate the role of restoration in enhancing recruitment and biodiversity at the UC Davis Experimental Ecovoltaic Park.

#### The Recipient shall:

- Collect annual data on fossorial and semi-fossorial animal distribution and habitat use at GPV research site, including both restored and unrestored plots, as well as adjacent non-GPV grasslands;
- Collect continuous data on fossorial and semi-fossorial animal diversity;
- Collect continuous data on temperature and light levels;
- Collect annual data on soil composition and shear force;
- Collect annual data on plant cover, height, and composition;
- Prepare an *Interim Wildlife Studies Data Summary Report* following the 2026 field season including, but not limited to the following site-specific data:
  - annual data on fossorial and semi-fossorial animal signs of habitat utilization and distribution (i.e., burrows, tunnels, runways, and runway clusters)
  - continuous data of fossorial and semi-fossorial animal diversity via camera traps
  - continuous data of temperature and light levels at different microsites
  - annual data of soil particle size and shear force
  - annual data on plant cover, height, and composition
- Prepare a *Final Wildlife Studies Data Summary Report* following the 2027 field season including, but not limited to the following site-specific data:



## EXHIBIT A SCOPE OF WORK

- annual data on fossorial and semi-fossorial animal signs of habitat utilization and distribution (i.e., burrows, tunnels, runways, and runway clusters)
- continuous data of fossorial and semi-fossorial animal diversity via camera traps
- continuous data of temperature and light levels at different microsites
- annual data of soil particle size and shear force
- annual data on plant cover, height, and composition
- Prepare a *CPR Report #3* in accordance with subtask 1.3.

### Products:

- Interim Wildlife Studies Data Summary Report
- Final Wildlife Studies Data Summary Report
- CPR Report #3

### TASK 5: 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 'Kick-off' 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:
  - Technology commercialization progress
  - 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 \(www.energizeinnovation.fund\)](http://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 \(www.energizeinnovation.fund\)](http://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

### TASK 6: KNOWLEDGE TRANSFER ACTIVITIES

## **EXHIBIT A SCOPE OF WORK**

The goal of this task is to ensure the scientific and techno-economic analysis, and tools developed under this agreement are utilized in the energy policy, and/or planning decisions at the state and/or local levels, academic community and/or commercial sector.

### **The Recipient Shall:**

- Develop and submit a *Knowledge Transfer Plan* that identifies the proposed activities the recipient will conduct to meet the goal of the task. The *Knowledge Transfer Plan* should include at a minimum:
  - Specific policy and planning efforts this project is expected to inform.
  - Specific stakeholder groups and energy policy and planning practitioners who will utilize the results of this project.
  - Proposed activities the Recipient will conduct to ensure the tools and results from this project will be utilized and adopted by the groups identified above.
- Present the *Draft Knowledge Transfer Plan* to the TAC for feedback and comments.
- Develop and submit a *Summary of TAC Comments* that summarizes comments received from the TAC members on the *Draft Knowledge Transfer Plan*. This document will identify:
  - TAC comments the Recipient proposes to incorporate into the *Final Knowledge Transfer Plan*.
  - TAC comments the Recipient does not propose to incorporate with and explanation why.
- Submit the *Final Knowledge Transfer Plan* to the CAM for approval.
- Implement the activities as described in the *Final Knowledge Transfer Plan*.
- Develop a *Knowledge Transfer Summary Report* that includes high level summaries of the activities, results, and lessons learned of tasks performed relating to implementing the Final Knowledge Transfer Plan. This report should not include any proprietary information.
- When directed by the CAM, develop presentation materials for an CEC- sponsored conference/workshop(s) on the project.
- When directed by the CAM, participate in annual EPIC symposium(s) sponsored by the California CEC.
- 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.

### **Products:**

- Knowledge Transfer Plan (draft and final)
- Summary of TAC Comments
- Knowledge Transfer Summary Report (draft and final)
- High Quality Digital Photographs

## **V. PROJECT SCHEDULE**

Please see the attached Excel spreadsheet.