



**California Energy Commission  
June 22, 2026 Business Meeting  
Backup Materials Lawrence Livermore National Security, LLC**

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

**CALIFORNIA ENERGY COMMISSION**

**PROPOSED RESOLUTION: Lawrence Livermore National Security, LLC**

**RESOLUTION NO: 26-0622-XX**

**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 PIR-25-006 with Lawrence Livermore National Security, LLC for a \$600,000 grant. This project will develop community-led techno-economic analyses, planning tools, and outreach activities that enable rural and tribal partners to retire or decarbonize gas-dependent infrastructure through cost-effective, reliable, and equitable clean-energy alternatives; and

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

**APPROVED AND ADOPTED this 22 day of June 2026, by the following vote:**

AYE:

NAY:

ABSENT:

ABSTAIN:

**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 approved and adopted by affirmative vote of the CEC at a meeting held on June 22, 2026.

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:** PIR-25-006

### B. Division Information

1. Division Name: ERDD
2. Agreement Manager: Emily Field
3. MS-:43
4. Phone Number: 916-258-2983

### C. Recipient's Information

1. Recipient's Legal Name: Lawrence Livermore National Security, LLC

### D. Title of Project

Title of project: Rural and Indigenous Solutions for an Inclusive Natural Gas Transition (RISING)

### E. Term and Amount

1. Start Date: 6/24/2026
2. End Date: 11/30/2028
3. Amount: \$600,000.00

### F. Business Meeting Information

1. Are the ARFVTP agreements \$75K and under delegated to Executive Director? No
2. The Proposed Business Meeting Date: 6/22/2026
3. Consent or Discussion? Consent
4. Business Meeting Presenter Name: Mithra Moezzi
5. Time Needed for Business Meeting: 5 minutes.
6. The email subscription topic is: General Natural Gas and LNG Issues.

#### Project Description:

**Lawrence Livermore National Security, LLC.** Proposed resolution approving agreement PIR-25-006 with Lawrence Livermore National Security, LLC for a \$600,000 grant, and adopting staff's recommendation that this action is exempt from CEQA. This project will develop community-led techno-economic analyses, planning tools, and outreach activities that enable rural and tribal partners to retire or decarbonize gas-dependent infrastructure through cost-effective, reliable, and equitable clean-energy alternatives.  
(PIER NG funding) Contact: Mithra Moezzi

### 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":



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

a) Agreement **IS** exempt?

Yes or No

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?

No

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, section 15306

Cal. Code Regs., tit. 14, section 15306 provides that projects that consist of basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource are exempt from CEQA. This project is a computer-based and field-based research project to identify high-leverage strategies to support fossil gas end-use conversion in California’s residential and commercial sectors and will only be comprised of basic data collection, research, and experimental management. This project will result in no disturbances to any environmental resources and therefore it is exempt from CEQA pursuant to Cal. Code Regs., tit. 14, section 15306.

The project does not involve impacts on any particularly sensitive environment; will not impact an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies; 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 apply to this project, and this project will not have a significant effect on the environment.

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.

Not applicable

b) Agreement **IS NOT** exempt.

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

Not applicable

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
Livermore Lab Foundation	\$ 13,333	\$40,000
Allensworth Progressive Association	\$ 13,333	\$0
Colusa Indian Energy LLC	\$ 13,334	\$0

**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
NG Subaccount, PIERDD	21-22	501.001	\$ 600,000

**TOTAL Amount:** \$ 600,000

R&D Program Area: ESB: EA

Explanation for "Other" selection Not applicable

Reimbursement Contract #: Not applicable

Federal Agreement #: 601 Program Continuous Appropriation

**M. Recipient's Contact Information**

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

Name: Kimberley Mayfield

Address: 7000 East Ave # L-103

City, State, Zip: Livermore, CA 94550-9698

Phone: 808-651-6458

E-Mail: mayfield8@linc.gov

**2. Recipient's Project Manager**

Name: Kimberley Mayfield

Address: 7000 East Ave # L-103

City, State, Zip: Livermore, CA 94550-9698

Phone: 808-651-6458

E-Mail: mayfield8@linc.gov

**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-24-501
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”.

<b>Item Number</b>	<b>Item Name</b>	<b>Attached</b>
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	No

**Approved By**

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

**Agreement Manager:** Emily Field

**Approval Date:** 3/30/2026

**Branch Manager:** Alexandra Horangic

**Approval Date:** 3/30/2026

**Director:** Jonah Steinbuck delegated to Branch Manager

**Approval Date:** 3/30/2026

**Exhibit A**  
**Scope of Work**  
**Lawrence Livermore National Security, LLC**

**I. TASK ACRONYM/TERM LISTS**

**A. Task List**

<b>Task #</b>	<b>CPR<sup>1</sup></b>	<b>Task Name</b>
1		General Project Tasks
2	X	Utility-Scale Clean Power Analysis
3		Karuk Tribe – Mobile Biomass System Evaluation
4		Allensworth – Agricultural Waste-to-energy Solutions
5		Central Valley Farm Engagement – Gas-dependent Infrastructure Alternatives
6		Evaluation of Project Benefits
7		Technology/Knowledge Transfer Activities

**B. Acronym/Term List**

<b>Acronym/Term</b>	<b>Meaning</b>
AI	Artificial Intelligence
APA	Allensworth Progressive Association, governing body for Allensworth, CA
CAM	Commission Agreement Manager
CA	California
CAO	Commission Agreement Officer
CAPEX	Capital expenditures
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CIE	Colusa Indian Energy
CCS	Carbon Capture and Storage
CPR	Critical Project Review
CPUC	California Public Utilities Commission
GHG	Greenhouse gas
GW	Gigawatt
IOU	Investor-Owned Utility
LCFS	Low carbon fuel standards
LCOE	Levelized Cost of Energy
LLNL	Lawrence Livermore National Lab
OPEX	Operating expenses
PSPS	Public Safety Power Shutoffs
SMRs	Small Modular Reactors
TEAs	Techno-economic assessments
TAC	Technical Advisory Committee

<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**  
**Lawrence Livermore National Security, LLC**

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

**A. Purpose of Agreement**

The purpose of this project is to develop and deploy community-led location-specific techno-economic analyses, planning tools, and outreach activities that enable rural and tribal partners to retire or decarbonize gas-dependent infrastructure through cost-effective, reliable, and equitable clean-energy alternatives.

**B. Problem/ Solution Statement**

**Problem**

This project addresses four related problems.

- Colusa Indian Energy (CIE) has been fielding requests for >1GW of firm power for AI and cloud campuses. Vendors pitch unabated gas for such power because no alternatives are clearly available for tribal grids. Absent comparative analyses of decarbonized alternatives, this pattern risks locking in new fossil plants to meet energy demands.
- Incentive programs are often designed for urban customers with stable grids, professional contractors, and access to capital. Rural towns, tribes, and farms face different resource profiles and permitting pathways than urban areas do, but no rural- or tribal-specific gas transition roadmaps exist.
- Public Safety Power Shutoffs (PSPS), wildfire outages, and thin distribution feeders make electricity appear less dependable than diesel or propane in rural and tribal areas, leading to reliance on gas-fired generators. Existing reliability studies focus on investor-owned utility (IOU) service territories, not edge-of-grid microgrids. Without a resilience solution, electrification targets will face local resistance, and IOUs will incur higher wildfire mitigation costs.
- Open burning of agricultural waste is now banned and prescribed-burn windows in forests are shrinking. Piled biomass becomes wildfire fuel and a methane source, and disposal costs soar for farmers. Small-scale pyrolysis/gasification could mitigate the wildfire risk that these biomass piles pose, but communities lack comparative data to facilitate their adoption. Delay exacerbates PM2.5 exceedances and wildfire liabilities for IOUs.

**Solution**

- Compare technoeconomic assessments for three firm, zero- or low-carbon sources: (1) gas + carbon capture and storage (CCS), (2) small modular reactors (SMRs), and (3) enhanced geothermal at 1 GW scale, modeled under tribal sovereignty. Results equip CIE to determine the least-cost decarbonized option.
- Co-produce place-based gas decommissioning roadmaps via techno-economic assessments (TEAs) with cost curves, California Environmental Quality Act (CEQA) readiness matrices, and financing options tailored to tribal sovereignty and rural land-use rules.
- Evaluate trailerable distributed energy generation options for their ability to provide island-able firm capacity, and the extent to which they can outperform fossil generators during avoided outage scenarios (\$/kWh).
- Assess commercially available mobile/small-scale biomass system to deliver cost of ownership models, emissions factors, and revenue stacks, alongside CEQA-readiness

## **Exhibit A**

### **Scope of Work**

#### **Lawrence Livermore National Security, LLC**

briefs and siting templates thereby cutting deployment time and demonstrating a waste-to-energy alternative to gas and diesel.

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

##### **Agreement Goals**

The goals of this Agreement are to

- Develop location-specific techno-economic analyses (TEAs) that identify the lowest-cost, lowest-risk pathways for rural and tribal communities to retire or decarbonize gas-dependent assets;
- Assess effectiveness of distributed, mobile clean-energy solutions at strengthening local grid reliability and displacing diesel/propane generation during outages;
- Evaluate potential and financial feasibility for under-utilized forest and agricultural biomass to be transformed into carbon-negative electricity and biochar, thereby reducing wildfire fuel loads and open-burn emissions; and
- Produce a replicable knowledge-transfer toolkit—including CEQA-readiness matrices, financing guides, and rate-impact calculators—to accelerate statewide adoption of gas-transition strategies in hard-to-serve regions.

Ratepayer Benefits: This Agreement will result in the ratepayer benefits of greater electricity reliability, lower costs, and increased safety. The project assesses deployment of mobile biomass-to-energy units, solar-plus-storage, and other distributed resources at rural edge-of-grid locations, and their ability to supply firm, island-able capacity that keeps critical loads online during Public Safety Power Shutoffs and wildfire outages—directly improving reliability for IOU customers. Early, location-specific planning tools help communities adopt the lowest-cost decarbonization pathway before assets reach end of life, avoiding stranded-asset write-offs that would otherwise flow into revenue requirements and raise rates. Finally, converting hazardous forest and agricultural biomass into electricity reduces local wildfire-fuel loads, lowering ignition risk near IOU infrastructure and, with it, the safety-related costs and liabilities that are ultimately borne by ratepayers.

Technological Advancement and Breakthroughs: This Agreement will advance technology and overcome barriers to California’s statutory gas-transition goals by pairing Recipient’s state-of-the-art techno-economic modeling platforms (GEOS, ORION, Advanced Grid Modeling) with field demonstrations of CEQA-exempt, mobile clean-energy systems—an integration not yet applied in rural or tribal settings. The project delivers the first tribal-sovereign, apples-to-apples comparison of 1 GW firm, zero- or low-carbon options (gas + CCS, SMRs, enhanced geothermal), creating a template for large-scale gas replacement without new fossil lock-in. Open-source cost curves, CEQA decision trees, and financing playbooks generated through the work remove key knowledge and permitting obstacles, accelerating statewide replication and helping the state meet its 2030 to 2045 clean-energy and equity mandates more quickly and at lower cost.

##### **Agreement Objectives**

The objectives of this Agreement are to:

- **Produce five place-based techno-economic assessment (TEA) reports**—one each for Colusa Indian Energy, the Karuk Tribe, Allensworth/Tachi Yokut, and Central-Valley farmer cohorts—quantifying levelized cost of energy (LCOE), capital/operating costs,

**Exhibit A**  
**Scope of Work**  
**Lawrence Livermore National Security, LLC**

emissions reductions, and CEQA status for at least three gas-transition options per site.

- **Complete a 1 GW firm-power comparison for Colusa Indian Energy** (gas + CCS vs. SMRs vs. enhanced geothermal) with cost, water-use, and permitting timelines modeled to  $\pm 20$  % uncertainty, ready for tribal board action.
- **Assessing at least two mobile biomass-to-energy systems** ( $\geq 75$  kW net output each), comparing feasibility for  $\geq 90$  % generator uptime during the length of one typical PSPS event and evaluating its potential (in diesel/propane gallons) to displace fossil fuel use during these events.
- **Evaluate costs and feasible timelines for mobile/small-scale biomass-to-energy systems to reduce wildfire-fuel or agricultural-waste piles on 50 acres** through conversion to biochar, verified by a combination of technoeconomic assessments and interviews with current technology users.
- **Deliver an open-access knowledge transfer toolkit**—CEQA-readiness matrices, rate-impact calculators, and financing guides—and train  $\geq 20$  rural/tribal stakeholders via workshops and webinars, with participant satisfaction  $\geq 80$  % “useful” rating.

•  
**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)**. 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.

**Exhibit A**  
**Scope of Work**  
**Lawrence Livermore National Security, LLC**

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 pro. 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:

- 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, the Commission Agreement Officer (CAO), and any other CEC staff relevant to the Agreement. The Recipient will bring its Project Manager and any other individuals designated by the CAM to this meeting. The

**Exhibit A**  
**Scope of Work**  
**Lawrence Livermore National Security, LLC**

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;
- Invoicing and auditing procedures;
- Administrative products (subtask 1.1);
- CPR meetings (subtask 1.3);
- Match fund documentation (subtask 1.7);
- Permit documentation (subtask 1.8);
- Subcontracts (subtask 1.9); and
- Any other relevant topics.

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

- The CAM's expectations for accomplishing tasks described in the Scope of Work;
  - An updated Project Schedule;
  - Technical products (subtask 1.1);
  - Progress reports (subtask 1.5);
  - Final Report (subtask 1.6);
  - Technical Advisory Committee meetings (subtasks 1.10 and 1.11); 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

**Exhibit A**  
**Scope of Work**  
**Lawrence Livermore National Security, LLC**

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 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 CEC, 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 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 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)

**CAM Products:**

- CPR Agenda
- 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.

**Exhibit A**  
**Scope of Work**  
**Lawrence Livermore National Security, LLC**

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 procured equipment.
  - The CEC'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 copies of *All Final Products* on a USB memory stick, organized by the tasks in the Agreement.

**Products:**

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

**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

**Exhibit A**  
**Scope of Work**  
**Lawrence Livermore National Security, LLC**

- 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, 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

**Exhibit A**  
**Scope of Work**  
**Lawrence Livermore National Security, LLC**

**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**)
  - 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

**Exhibit A**  
**Scope of Work**  
**Lawrence Livermore National Security, LLC**

**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. The Recipient may only spend match funds during the Agreement term, either concurrently or prior to the use of CEC 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 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 proposal that led to the CEC awarding this Agreement, then provide in the letter:

- A list of the match funds that identifies:
  - The amount of cash match funds, their source(s) (including a contact name, address, and telephone number), and the task(s) to which the match funds will be applied.
  - The amount of each in-kind contribution, a description of the contribution type (e.g., property, services), the documented market or book value, the source (including a contact name, address, and telephone number), and the task(s) to which the match funds will be applied. If the in-kind contribution is equipment or other tangible or real property, the Recipient must identify its owner and provide a contact name, address, telephone number, and the address where the property is located.
  - 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,

**Exhibit A**  
**Scope of Work**  
**Lawrence Livermore National Security, LLC**

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
- 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 Subcontracts 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 subrecipient 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.
- 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 required 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*.

**Exhibit A**  
**Scope of Work**  
**Lawrence Livermore National Security, LLC**

- Notify and receive written approval from the CAM prior to adding any new subrecipient (see the discussion 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:

- 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 ensure 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;

**Exhibit A**  
**Scope of Work**  
**Lawrence Livermore National Security, LLC**

- 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 1.12 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.

**Exhibit A**  
**Scope of Work**  
**Lawrence Livermore National Security, LLC**

- Ask probing questions that ensure 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 Technology 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 based on feedback from the TAC and report on final results in achieving those targets. The performance targets should be a combination of scientific, engineering, techno-economic, and/or programmatic metrics that provide the most significant indicator of the research or technology's potential success.

**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: UTILITY-SCALE CLEAN POWER ANALYSIS**

The goals of this task are to evaluate carbon-managed retrofit and zero-carbon firm-power options for Colusa Indian Energy (CIE) and deliver decision-ready data for a 1 GW build.

**The Recipient shall:**

- Construct an engagement plan and host a kickoff meeting with CIE, producing a *CIE Engagement Plan and Kickoff Summary*
- Collect operating data, load forecasts, and site constraints from CIE and prepare a *CIE*

**Exhibit A**  
**Scope of Work**  
**Lawrence Livermore National Security, LLC**

*Data Collection Summary.*

- Financial model for a CCS retrofit on existing 6 MW cogeneration plant, as well as a 1 GW new-build natural gas power plant with CCS, alongside feasibility assessment for local geologic carbon storage, based on data from CIE’s existing 6 MW cogeneration plant, in addition to techno-economic modeling of three other 1 GW scenarios—enhanced geothermal and small modular reactors—using Recipient’s grid capacity expansion modeling platform, resulting in a *Utility-Scale Technoeconomic Assessment (TEA)* for decarbonized power that meets CIE needs
- Present findings to CIE and regional stakeholders and provide *CIE Stakeholder Presentation Materials*, as well as *CIE Implementation Toolkit* to attendees and CEC, which will include feedback from stakeholders on their perceptions of ‘advantages’ and ‘hesitancies.’
- Prepare a *CIE Lessons Learned memo* to CEC regarding reflections on how future engagements could be improved.
- Prepare and submit a CPR Report #1.
- Attend the CPR meeting per subtask 1.3.

**Products:**

- CIE Engagement Plan and Kickoff Summary
- CIE Data Collection Summary
- Utility-Scale Technoeconomic Assessment (draft & final)
- CIE Stakeholder Presentation Materials
- CIE Implementation Toolkit
- CIE Lessons Learned Memo
- CPR Report

**TASK 3: KARUK TRIBE – MOBILE BIOMASS SYSTEM EVALUATION**

The goals of this task are to evaluate mobile/small-scale biomass-to-energy technologies that are commercially available for the Karuk tribe to utilize for wildfire fuel reduction and energy resilience.

**The Recipient shall:**

- Construct an engagement plan and host a kickoff meeting with Karuk Tribe stakeholders, producing a *Karuk Engagement Plan and Kickoff Summary*
- Collect data on forest management goals and work scope, lists of gas-dependent infrastructure, and site constraints from Karuk Tribe and prepare a *Karuk Data Collection Summary*.
- Construct a *Karuk Technoeconomic Assessment (TEA) Report* for at least 2 commercially available, mobile/small-scale biomass-to-energy units that meet Karuk Tribe’s needs, as well as an assessment of how electricity generation/storage for these units compares to gas-dependent infrastructure in-use currently.
- Present findings to Karuk and regional stakeholders and provide *Karuk Stakeholder Presentation Materials*, as well as *Karuk Implementation Toolkit* to attendees and CEC, which will include feedback from stakeholders on their perceptions of ‘advantages’ and ‘hesitancies.’
- Prepare a Lessons Learned Memo to CEC regarding reflections on how future engagements could be improved.

**Products:**

- Karuk Engagement Plan and Kickoff Summary
- Karuk Data Collection Summary
- Karuk Technoeconomic Assessment Report (draft & final)

**Exhibit A**  
**Scope of Work**  
**Lawrence Livermore National Security, LLC**

- Karuk Stakeholder Presentation Materials
- Karuk Implementation Toolkit
- Karuk Lessons Learned Memo

**TASK 4: Allensworth – Agricultural waste-to-energy solutions**

The goals of this task are to evaluate mobile/small-scale biomass-to-energy technologies that are commercially available for the Allensworth and the neighboring stakeholders (e.g. Tachi Yokut tribe) to utilize for agricultural waste management and energy resilience.

**The Recipient shall:**

- Construct an engagement plan and host a kickoff meeting with Allensworth stakeholders, who shall serve as liaisons for neighboring stakeholders (e.g. Tachi Yokut tribe), producing an *Allensworth Engagement Plan and Kickoff Summary*
- Collect data on agricultural management goals, lists of gas-dependent infrastructure, and site constraints from Allensworth stakeholders and prepare a *Allensworth Data Collection Summary*.
- Construct a *Allensworth Technoeconomic Assessment (TEA) Report* for at least 2 commercially available, mobile/small-scale biomass-to-energy units that meet Allensworth's needs, as well as an assessment of how electricity generation/storage for these units compares to gas-dependent infrastructure in-use currently.
- Present findings to Allensworth and regional stakeholders (e.g. Tachi Yokut tribe) and provide *Allensworth Stakeholder Presentation Materials*, as well as *Allensworth Implementation Toolkit* to attendees and CEC, which will include feedback from stakeholders on their perceptions of 'advantages' and 'hesitancies.'
- Prepare a *Allensworth Lessons Learned Memo* to CEC regarding reflections on how future engagements could be improved.

**Products:**

- Allensworth Engagement Plan & Kickoff Summary
- Allensworth Data Collection Summary
- Allensworth Technoeconomic Assessment Report (draft & final)
- Allensworth Stakeholder Presentation Materials
- Allensworth Implementation Toolkit
- Allensworth Lessons Learned Memo

**TASK 5: Central Valley Farm Engagement – Gas-dependent infrastructure alternatives**

The goals of this task are to evaluate decarbonized energy technologies (e.g. mobile biomass-to-energy and solar + storage) that are commercially available for farmers in the Central Valley to utilize for energy affordability and resilience.

**The Recipient shall:**

- Construct an engagement plan and host a kickoff meeting with Central Valley farmer stakeholders, producing a *Central Valley Farm Engagement Plan and Kickoff Summary*
- Collect data on gas-dependent infrastructure from Central Valley farmers, perceived benefits of gas, and their hesitancies toward decarbonized options, collected in a *Central Valley Farm Data Collection Summary*.
- Construct a *Central Valley Farm technoeconomic assessment (TEA) report* for at least 2 commercially available, decarbonized energy generation options that meet Central Valley farmer needs and place-based constraints.
- Present findings to Central Valley farmers and regional stakeholders and provide *Central Valley Farm Stakeholder Presentation Materials*, as well as *Central Valley Farm*

**Exhibit A**  
**Scope of Work**  
**Lawrence Livermore National Security, LLC**

*Implementation Toolkit* to attendees and CEC, which will include feedback from stakeholders on their perceptions of ‘advantages’ and ‘hesitancies.’

- Prepare a ‘*Central Valley Farm* Lessons Learned Memo to CEC regarding reflections on how future engagements could be improved.

**Products:**

- Central Valley Farm Engagement Plan & Kickoff Summary
- Central Valley Farm Data Collection Summary
- Central Valley Farm Technoeconomic Assessment Report (draft & final)
- Central Valley Farm Stakeholder Presentation Materials
- Central Valley Farm Implementation Toolkit
- Central Valley Farm Lessons Learned Memo

**TASK 6: 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 July 15th 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 Energize Innovation.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 Energize Innovation.fund*, including the profile link.

**Products:**

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

**TASK 7 KNOWLEDGE TRANSFER ACTIVITIES**

**Exhibit A**  
**Scope of Work**  
**Lawrence Livermore National Security, LLC**

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.
- Provide at least (6) six *High Quality Digital Photographs* (minimum resolution of 1300x500 pixels in landscape ratio) of active engagement (e.g. workshops, talks, data collection activities, site visits) 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.

**Exhibit A**  
**Scope of Work**  
**Lawrence Livermore National Security, LLC**

pixels in landscape ratio) of active engagement (e.g. workshops, talks, data collection activities, site visits) 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.