



**CALIFORNIA
ENERGY COMMISSION**



**California Energy Commission
March 12, 2026 Business Meeting
Backup Materials for Electric Power Research Institute, Inc.**

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: Electric Power Research Institute, Inc.

RESOLUTION NO: 26-0312-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 EPC-25-048 with Electric Power Research Institute, Inc. for a \$1,780,779 grant. This project will evaluate, deploy, and demonstrate a high-performance aerogel fiber mat insulation that is easy-to-install, environmentally friendly, non-flammable, and non-toxic. The insulation will be installed in low-income residential retrofits in a range of California climate zones, aiming to reduce space conditioning loads, lower energy bills, and increase building resilience, occupant comfort, health and safety, while supporting California's broader decarbonization efforts; 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 12th day of March 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 March 12, 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: EPC-25-048

B. Division Information

1. Division Name: ERDD
2. Agreement Manager: Jackson Thach
3. MS-:51
4. Phone Number: N/A

C. Recipient's Information

1. Recipient's Legal Name: Electric Power Research Institute, Inc.

D. Title of Project

Title of project: Future Proof: Scalable, Fire-Resistant Title 24 Opaque Envelope Retrofits for Energy-Efficient Homes

E. Term and Amount

1. Start Date: 03/23/2026
2. End Date: 09/30/2030
3. Amount: \$1,780,779.00

F. Business Meeting Information

1. Are the ARFVTP agreements \$75K and under delegated to Executive Director? No
2. The Proposed Business Meeting Date: 03/12/2026
3. Consent or Discussion? Discussion
4. Business Meeting Presenter Name: Jeanie Mar
5. Time Needed for Business Meeting: 10 minutes.
6. The email subscription topic is: Electric Program Investment Charge (EPIC)

Project Description:

Electric Power Research Institute, Inc. Proposed resolution approving agreement EPC-25-048 with Electric Power Research Institute, Inc. for a \$1,780,779 grant and adopting staff's recommendation that this action is exempt from CEQA. This project will evaluate, deploy, and demonstrate a high-performance aerogel fiber mat insulation in cooling-dominant California climate zones that is easy-to-install, environmentally friendly, non-flammable, and non-toxic. The insulation will be installed in low-income residential retrofits, aiming to reduce space conditioning loads, lower energy bills, and increase building resilience, occupant comfort, health and safety, while supporting California's broader decarbonization efforts.

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, § 15301, § 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.

This project fits within Cal. Code Regs. tit. 14, sect. 15301, Existing Facilities, because it involves simple insulation retrofits and alterations of interior/exterior walls in existing residential structures to improve building performance. The retrofits involve no expansion of existing use.

Additionally, Cal. Code Regs. tit. 14, sect. 15306, Information Collection, applies because this project also involves basic data collection, research, experimental management, and resource evaluation activities which do not result in serious or major disturbance to an environmental resource.

This project does not involve impacts on any particularly sensitive environment; 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 sites are 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.



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
Augusta Communities	\$92,500	\$0
Liatrix Inc.	\$177,876	\$0
Southern California Edison Company	\$0	\$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
TBD - Lab Testing	\$0	\$20,000
TBD - Installer	\$102,040	\$0
Kliewer and Associates LLC	\$94,000	\$0

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	25-26	301.001M	\$1,780,779

TOTAL Amount: \$1,780,779

R&D Program Area: ICMB: Buildings

Explanation for "Other" selection Not applicable

Reimbursement Contract #: Not applicable

Federal Agreement #: 101 Local Assistance

M. Recipient's Contact Information

1. Recipient's Administrator/Officer

Name: Erin Jones

Address: 3420 Hillview Ave

City, State, Zip: Palo Alto, CA 94304-1355

Phone: 415-416-0678

E-Mail: ejones@epri.com

2. Recipient's Project Manager

Name: Agatha Kazdan

Address: 3420 Hillview Ave

City, State, Zip: Palo Alto, CA 94304-1355

Phone: 415-416-0678

E-Mail: akazdan@epri.com

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-24-310
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: Jackson Thach

Approval Date: 01/26/2026

Branch Manager: Anthony Ng

Approval Date: 01/29/2026

Director: Anthony Ng for Jonah Steinbuck

Approval Date: 01/29/2026

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SCOPE OF WORK
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I. TASK AND ACRONYM/TERM LISTS

A. Task List

Task #	CPR ¹	Task Name
1		General Project Tasks
2		Lab Testing
3	X	Site Assessment and Field Testing
4	X	Installer Training and Field Deployment
5		Performance Modeling
6		Market Deployment Plan
7		Evaluation of Project Benefits
8		Technology/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
TAC	Technical Advisory Committee

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

A. Purpose of Agreement

This Agreement supports the demonstration, evaluation and advancement of high-performance, non-combustible aerogel-fiber insulation in low-income residential retrofits, aiming to reduce space conditioning loads, lower energy bills, and increase building resilience, occupant comfort, health and safety, while supporting California’s broader decarbonization efforts.

B. Problem/ Solution Statement

Problem

According to the 2021 American Community Survey, the median vintage of owner-occupied homes is 40 years.¹ About 90% of existing US homes are under-insulated, based on recent research by the North American Insulation Manufacturers Association².

The most common insulation materials on the market are fiberglass and mineral wool, but they are difficult and costly to install, typically by loosely fitting batts or rolls into wall cavities, which often result in issues with precise cutting and fitting. Achieving high thermal performance requires more material, driving up cost and complexity. Meanwhile, low-income households

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

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spend about 17.8% of their income on energy bills, compared to only 3.5% of non-low income households³. The installation difficulties and high cost to achieve better thermal performance lead to low motivation by homeowners to consider insulation retrofits.

Solution

The Recipient and partners will deploy, validate and advance the market readiness of a thin-profile, aerogel-based insulation with high R-value per inch (R-10/in) that is easy to install, fire- and moisture-resistant, and capable of delivering Title 24 performance in residential retrofit applications—particularly relevant in challenging sectors like existing manufactured and multifamily housing. The product delivers equivalent thermal performance with 50% less material than traditional insulation and can be retrofitted with minimal occupant disruption.

C. Goals and Objectives of the Agreement

Agreement Goals

The goals of this Agreement are to:

- Validate thermal resistance, durability, indoor air quality, moisture resistance and fire safety of the aerogel-fiber insulation in a lab setting, including verifying minimum solicitation performance targets of R-8/ to R-14/in and 40-year longevity are met
- Advance commercial readiness of aerogel insulation in California by addressing technical and cost challenges
- Field-demonstrate and test aerogel-based insulation retrofit performance in ten homes located in low-income communities across multiple cooling-dominant climate zones in California
- Reduce HVAC energy consumption and peak loads by at least 10 percent
- Reduce occupant disruption, installation time and installation complexity

Ratepayer Benefits:² This Agreement will result in lower costs, greater electricity reliability, and increased safety for California ratepayers by reducing energy demand and improving building resilience in a traditionally underserved housing sector. By retrofitting manufactured homes with thin, high-performance aerogel insulation, the project delivers substantial heating and cooling energy savings—with modeled reductions of up to 73% in natural gas use and 32–33% in electricity use in targeted climate zones, leading to estimated annual bill savings of \$522 to \$3,036 per household across climate zones.

In addition to lowering utility costs, the project enhances grid reliability by reducing residential peak loads during critical summer and winter demand periods. This eases stress on California's electricity system and reduces reliance on natural gas peaker plants, which are disproportionately located in disadvantaged communities. By improving indoor air quality and supporting fire-resilient upgrades, the project also promotes occupant health and safety, making it a triple win for ratepayers across economic, environmental, and public health dimensions.

² California Public Resources Code, Section 25711.5(a) requires projects funded by the Electric Program Investment Charge (EPIC) to result in ratepayer benefits. The California Public Utilities Commission, which established the EPIC in 2011, defines ratepayer benefits as greater reliability, lower costs, and increased safety (See CPUC “Phase 2” Decision 12-05-037 at page 19, May 24, 2012, http://docs.cpuc.ca.gov/PublishedDocs/WORD_PDF/FINAL_DECISION/167664.PDF).

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Technological Advancement and Breakthroughs:³

This Agreement will drive technological advancement by validating and advancing a novel aerogel-based insulation that delivers R-10 per inch, more than 70% higher thermal performance than typical retrofit materials. The technology's ultra-thin profile enables code-compliant insulation levels in space-constrained wall, roof, and floor cavities—a major barrier in California's aging manufactured and multifamily housing stock. By enabling deep envelope retrofits with minimal disruption, the project delivers immediate reductions in heating and cooling demand, helping meet near-term goals under SB 32 and the 2022 CARB Scoping Plan.

Agreement Objectives

The objectives of this Agreement are to:

- Independent lab test to compare the performance of Title 24 compliant requirements and the aerogel-based technology prior to field installation to verify that it can meet the thermal resistance target of R-8/ to R-14/inch solicitation requirement in addition to relevant industry standards for durability, fire safety, moisture resistance and indoor air quality.
- Independently field test and demonstrate how aerogel-based insulation retrofit of the walls and roofs at 10 existing pre-2000 homes can lower heating and cooling building energy consumption compared to existing conditions and the Title 24 compliant requirements (minimum 12 months pre- and post- installation, including summer, winter, and shoulder seasons).
- Evaluate strategies that improve costs, including installation, labor, and materials relative to current T24 compliant technologies, and conduct life cycle cost analysis to document the improved cost effectiveness associated with those strategies.
- Model performance of both the standard Title 24 compliant building and the retrofitted building in all climate zones using CEC approved modeling software.
- Measure and assess the impacts of the retrofit on thermal comfort, noise, building resilience, and HVAC sizing needs, both pre- and post-retrofit.
- Prepare a Market Deployment Plan informed by objective analysis and expert feedback to address market penetration barriers and to support broader customer adoption and workforce readiness around non-combustible aerogel-based insulation retrofits

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

³ California Public Resources Code, Section 25711.5(a) also requires EPIC-funded projects to lead to technological advancement and breakthroughs to overcome barriers that prevent the achievement of the state's statutory and energy goals.

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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:

- 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**

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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)
- 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);

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- 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.

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.

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- Attend the CPR meeting.
- Present the CPR Report and any other required information at each CPR meeting.

The CAM shall:

- Determine the location, date, and time of each CPR meeting with the Recipient's input.
- Send the Recipient a *CPR Agenda* 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).
 - Need to document the Recipient's disclosure of "subject inventions" developed under the Agreement.

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- “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, milestones,

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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)

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- 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

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.

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If match funds were a part of the application 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, 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

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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 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.
- Execute and manage site host agreements and ensure the right to use the project site throughout the term of the Agreement, as applicable. A site host agreement is not required if the Recipient is the site host. CAMs delete this bullet-point and the one below if there is no site host. Note that these bullet-points can also be edited for unique agreements such as projects with dozens of sites where it may be administratively burdensome to require site agreements for all sites. Please work with CCO on any edits.
- Notify the CEC in writing immediately, but no later than five calendar days, if there is a reasonable likelihood the project site cannot be acquired or can no longer be used for the project.
- 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:

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- 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;
- Public interest environmental groups;
- Utility representatives;

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- 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.

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* for each TAC Meeting 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.

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- 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

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III. TECHNICAL TASKS

TASK 2: LABORATORY TESTING

The goal of this task is to conduct a series of standardized laboratory tests by recognized industry testing standards to validate the thermal performance properties required to confirm the product is capable of meeting the thermal and longevity requirements of the solicitation. Additionally, the insulation's fire safety, indoor air quality, and moisture resistance characteristics will be tested. A Lab Testing Report will be delivered at the conclusion of testing.

The Recipient shall:

- Ship product samples to independent laboratory
- Establish a matrix of tests to be conducted and methodology for assessing performance based on industry standards:
 - Thermal Conductivity (ASTM C518) – Measuring heat transfer resistance to assess energy efficiency improvements and validate Title 24 performance and target R-value of 8-14 per inch.
 - Durability/Long-Term Thermal Performance (ASTM C1303) - Measures long-term thermal resistance (LTTR) of rigid closed-cell foam insulation through an accelerated aging process
 - Fire Safety (ASTM E84) – Determining flame spread and smoke generation to ensure compliance with fire safety standards.
 - Indoor Air Quality (ASTM D5116-related / California Department of Public Health standard) – Evaluating emissions from the insulation material to assess potential impacts on indoor air quality.
 - Moisture Resistance (ASTM E96) – Testing durability under humidity exposure to verify long-term performance.
- Identify instrumentation required to verify product performance and procure components
- Install and commission the product samples, performing shakedown testing as necessary
- Perform the independent laboratory testing as indicated by subtasks above
- Compile results and summary into *Lab Testing Report*

Products:

- Lab Testing Report

TASK 3: SITE ASSESSMENT AND FIELD TESTING

The goal of this task is to assess at least ten pre-2000 vintage manufactured homes and two back up single-family homes owned and operated by Augusta Communities to determine baseline metrics, materials and quantities required for the insulation retrofit as well as wildfire hardening as well as addressing customer health and safety risks.

The Recipient shall:

- Conduct an initial assessment at 10 homes that will include analysis of existing building envelope through blower door testing and thermal imaging as well as inspection of the HVAC and existing building conditions (construction, moisture, structural issues), decibel

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rating, wildfire exposure through ember entry paths or presence of flammable materials and health and safety risks through detection of toxic gases

- Develop a *Site Assessment Memo* that documents existing conditions and vulnerabilities along with a product deployment and wildfire protection and health and safety strategy at each individual home
- Develop an *M&V plan* detailing the project's performance targets, measurement and verification approach and instrumentation for field installations for 12 months pre- and 12 months post-retrofit, or shorter subject to written CAM approval. The plan will include:
 - Identifying instrumentation required to verify HVAC system capacity and efficiency, similar to instruments used in laboratory but without creating burden for host participants
 - Data transfer protocol to a database without personally identifiable information
 - Identifying key metrics as required by solicitation and additional metrics as necessary based on laboratory testing results, including but not limited to:
 - Energy, emissions and cost changes based on reduced heating and cooling requirements
 - Thermal comfort and noise changes
 - Indoor air quality (temperature, relative humidity, barometric pressure and air particulate matter, gas/volatile organic compound) changes
- Draft and administer a *Customer Survey* that evaluates the occupants' perception of thermal comfort, noise and thermostat set point behavioral adjustments pre- and post-retrofit.
- Execute the M&V Plan and develop an *M&V Report* that presents the results, including a financial analysis capturing customer bill impacts, energy savings and peak load reduction for HVAC and non-HVAC loads, and non-energy benefits, including quantified changes in indoor air quality, GHG emissions, thermal and acoustic changes and occupant satisfaction
- Install field systems along with M&V install instrumentation as identified in the field data collection plan (concurrent with Task 4)
 - Commission field systems to verify performance
 - Verify data transmission from instrumentation through the data acquisition system
- Prepare a *CPR Report #1* in accordance with subtask 1.3 (CPR Meetings).
- Participate in a CPR meeting.

Products:

- Site Assessment Memo
- M&V Plan (draft, final)
- M&V Report (draft, final)
- Customer Survey (draft, final)
- CPR Report #1

TASK 4: INSTALLER TRAINING AND FIELD DEPLOYMENT

The goal of this task is to train installers and install the insulation retrofit and ember-blocking materials on air supplies as determined necessary from the site assessment, and to conduct a third-party commissioning inspection and follow through on corrective actions to ensure

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performance targets are met and prioritize customer health and safety and overall quality assurance.

The Recipient shall:

- Obtain permits from the Authority Having Jurisdiction for the insulation retrofit
- Prepare *Installer Training Video* and train installers on how to properly install the insulation retrofit
- Conduct community engagement activities to the community to raise awareness of the project, technology and benefits and make training available to the public, including builders and contractors in the surrounding region
- Prepare *Installation Plan and Schedule*
- Install the insulation in walls, roof decks and floors and ember-blocking materials in 10 homes based on strategies informed by the Site Assessment
- Document installation process in an *Installation Report* with particular emphasis on:
 - Length of time for installation
 - Extent of occupant disturbance
 - Any lessons learned or improvements to installation technique or strategy across the 10 deployments
 - Comparison of the installation with a similar project using standard insulation materials/techniques.
 - Occupant feedback about the installation process
- Have third party commissioning agent conduct inspection immediately following retrofit to perform another blower door test, thermal imaging and visual inspection of the building system and retrofit quality as well as functionality of HVAC power and indoor air quality monitoring systems. Have insulation contractor correct issues identified. Document test results and provide photos and list of corrective actions needed to ensure performance targets are met and to prioritize customer health, safety and quality assurance in *Commissioning Report*.
- Prepare a *CPR Report #2* in accordance with subtask 1.3 (CPR Meetings).
- Participate in a CPR meeting.

Products:

- Installer Training Video
- Installation Plan and Schedule
- Installation Report
- Commissioning Report
- CPR Report #2

TASK 5: PERFORMANCE MODELING

The goal of this task is to undertake advanced modeling techniques to simulate expected insulation performance including energy and non-energy benefits in retrofitted homes and a Title 24-compliant home across California's 16 diverse climate zones using CBECC software.

The Recipient shall:

- Conduct advanced modeling to simulate expected insulation performance including energy and non-energy benefits on the system's installed costs, simple payback and

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further qualify non-energy benefits from retrofitted homes as well as for Title 24-compliant homes across California's 16 climate zones, examining:

- HVAC electrical and gas load reduction
- Other non-energy benefits including HVAC system sizing impacts and resilience benefits, including the ability to maintain comfortable indoor temperatures during power outages or extreme seasonal conditions.
- Inform the Market Deployment Plan efforts to identify optimal candidates or approaches for maximizing energy savings and non-energy benefits and state-wide energy efficiency measure development approaches, supporting broader adoption of the technology.
- Conduct life cycle cost effectiveness analysis to compare the improved cost effectiveness associated with strategies identified as part of the Market Deployment Plan to reduce installation, labor, and material costs relative to current T24 compliant technologies.
- Reconcile models and life cycle cost effectiveness analysis based on project-derived data results from lab and field testing.
- Prepare a *Modeling and Lifecycle Cost Analysis Report* that summarizes the Task 5 activities and findings.

Products:

- Modeling and Lifecycle Cost Analysis Report (draft, final)

TASK 6: MARKET DEPLOYMENT PLAN

The goal of this task is to develop a scaling roadmap to address market penetration barriers and to support broader customer adoption and workforce readiness of non-combustible aerogel-based insulation retrofits in California's residential sector, with a focus on optimizing affordability and ease of use in existing residential construction.

The Recipient shall:

- Interview key market actors, including manufacturers, builders, insulation contractors, energy efficiency program implementers and homeowners and manufactured home park owner/operators with a focus on optimizing affordability and ease of implementation that could inform and potentially participate in a California scale-up plan, should the technology demonstration prove successful, seeking guidance on:
 - Key barriers and opportunities for adoption
 - Customer decision-making processes and price sensitivity
 - Cost-reduction strategies and potential for manufacturing scale
 - Best practices for validating performance metrics and interpreting non-energy benefits like resilience, thermal comfort, and acoustic performance
 - Deployment strategies tailored for manufactured housing and other residential segments, including delivery models for energy programs, financing, and workforce development, which address capital and labor availability bottlenecks
- Use insights from stakeholder interviews and publicly available sources—like the Residential Energy Consumption Survey (RECS)—to estimate the potential retrofit market for aerogel-based insulation in California. This analysis will be shaped by findings from the Performance Modeling and Field Assessment tasks, along with expert input on

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target customer segments and effective delivery strategies to support statewide market development.

- Articulate recommendations and strategies in the *Market Deployment Plan* addressing:
 - Manufacturing and commercialization opportunities to streamline production and market readiness.
 - Program delivery and incentive alignment to support accessibility.
 - Financing models for market acceleration to enhance affordability.
 - Workforce strategies for training and engagement across trades and communities

Products:

- Market Deployment Plan

TASK 7: EVALUATION OF PROJECT BENEFITS

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

The Recipient shall:

- Complete the *Initial Project Benefits Questionnaire*. The Initial Project Benefits Questionnaire shall be initially completed by the Recipient with '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), and provide *Documentation of Project Profile on EnergizeInnovation.fund*, including the profile link.
- If the Prime Recipient is an Innovation Partner on the project, complete and update the organizational profile on the CEC's public online project and recipient directory on the Energize Innovation website (www.energizeinnovation.fund), and provide *Documentation of Organization Profile on EnergizeInnovation.fund*, including the profile link.

Products:

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

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TASK 8: Technology/Knowledge Transfer Activities

The goal of this task is to ensure the technological learning that resulted from the demonstration(s) is captured and disseminated to the range of professions that will be responsible for future deployments of this technology or similar technologies.

The Recipient Shall:

- Develop and submit a *Project Case Study Plan* that outlines how the Recipient will document the planning, construction, commissioning, and operation of the technology or system being demonstrated. The Project Case Study Plan should include:
 - An outline of the objectives, goals, and activities of the case study.
 - The organization that will be conducting the case study and the plan for conducting it.
 - A list of professions and practitioners involved in the technology's deployment.
 - Specific activities the recipient will take to ensure the learning that results from the project is disseminated to those professions and practitioners.
 - Presentations/webinars/training events to disseminate the results of the case study.
- Present the draft *Project Case Study Plan* to the TAC for review and comment.
- Develop and submit a *Summary of TAC Comments* that summarizes comments received from the TAC members on the draft *Project Case Study Plan*. This document will identify:
 - TAC comments the Recipient proposes to incorporate into the final *Technology Transfer Plan*.
 - TAC comments the Recipient does not propose to incorporate with and explanation why.
- Submit the final *Project Case Study Plan* to the CAM for approval.
- Execute the final Project Case Study Plan and develop and submit a Project Case Study.
- When directed by the CAM, develop presentation materials for a 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:

- Project Case Study Plan (draft and final)
- Summary of TAC Comments
- Project Case Study (draft and final)
- High Quality Digital Photographs

IV. PROJECT SCHEDULE

Please see the attached Excel spreadsheet.