



STATE OF CALIFORNIA

GRANT REQUEST FORM (GRF)

CEC-270 (Revised 12/2019)

CALIFORNIA ENERGY COMMISSION

A) New Agreement # EPC-19-006 (to be completed by CGL office)

B) Division	Agreement Manager:	MS-	Phone
ERDD	Michael Ferreira	51	916-445-5281

C) Recipient's Legal Name	Federal ID Number
The Energy Coalition	20-0943616

D) Title of Project
Basset-Avocado Advanced Energy Community

E) Term and Amount

Start Date	End Date	Amount
6/1/2020	3/31/2025	\$ 9,093,833

F) Business Meeting Information

ARFVTP agreements \$75K and under delegated to Executive Director

Proposed Business Meeting Date 5/13/2020 Consent Discussion

Business Meeting Presenter Michael Ferreira Time Needed: 5 minutes

Please select one list serve.

Agenda Item Subject and Description:

Proposed resolution approving Agreement EPC-19-006 with The Energy Coalition for a \$9,093,833 grant to build-out and demonstrate the Basset-Avocado Advanced Energy Community (BAAEC), and adopting staff's determination that this action is exempt from CEQA. The BAAEC is a new model for providing affordable, locally produced renewable energy and energy services at scale within a disadvantaged community. The BAAEC will include: 1) a Smart Community Solar and Storage system to offset the annual electricity load of low-income enrolled participants; 2) a Microgrid Resiliency Hub to provide clean back-up power to the community in emergencies, severe heat days or blackouts; 3) a Prosumer Network consisting of 50 single family homes equipped with solar photovoltaic and battery storage that will be integrated with a Blockchain Community Network Pilot; and 4) a Mobile Grid of electric vehicle charging stations and shared electric mobility options to reduce greenhouse gases and improve air quality. (EPIC funding) Contact: Michael Ferreira. (Staff presentation: 5 minutes)

G) California Environmental Quality Act (CEQA) Compliance

1. Is Agreement considered a "Project" under CEQA?

- Yes (skip to question 2)
- No (complete the following (PRC 21065 and 14 CCR 15378)):

Explain why Agreement is not considered a "Project":

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

a) Agreement **IS** exempt.

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



Resources Code section 21080.35

Categorical Exemption. List CCR section number: Cal. Code Regs., tit. 14, § 15301; Cal. Code Regs., tit. 14, § 15303

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

Explain reason why Agreement is exempt under the above section: The solar photovoltaic panels on the rooftop of the Evergreen Baptist Church and on new parking canopies over part of the church's parking lot are exempt under California Public Resources Code section 21080.35. This statute exempts from CEQA "the installation of a solar energy system on the roof of an existing building or at an existing parking lot" fitting certain characteristics.

Regarding all the other physical components of the project, CEQA exemptions under California Code of Regulations, title 14, section 15301 and 15303 apply. Section 15301, "Existing Buildings," covers the operation, maintenance, or minor alteration of existing public or private structures, facilities, mechanical equipment, involving negligible or no expansion of existing or former use. Section 15303, "New Construction or Conversion of Small Structures," covers construction and location of limited numbers of new, small facilities or structures; and installation of small new equipment and facilities in small structures. The additions of solar PV panels, storage batteries, ancillary equipment, electrical connections, and electric vehicle charging stations under the grant project fall within these parameters.

Regarding local government review, staff of the Department of Regional Planning (Land Development Coordinating Center) of Los Angeles County indicated that only a ministerial review from Los Angeles County would be required (communication dated 4/23/2020), not a discretionary review. Also, County staff stated that the ground-mounted solar would only require a ministerial site plan review under the County's land use regulations (22.16.030) and the County's Renewable Energy Ordinance (22.140.510), as it would be a small-scale solar energy system.

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

Check all that apply

Initial Study

Negative Declaration

Mitigated Negative Declaration

Environmental Impact Report

Statement of Overriding Considerations

H) List all subcontractors (major and minor) and equipment vendors: (attach additional



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sheets as necessary)

Legal Company Name:	Budget
Day One	\$ 325,900
The Regents of the University of California, on behalf of the Los Angeles Campus	\$ 1,398,789
Enel X North America, Inc.	\$ 789,354
TBD - Labor of Solar and Battery Storage Installation	\$ 852,113
TBD - Project Management for Solar and Battery Storage Installation	\$ 185,941
sSonnen Inc.	\$ 99,000
Green Commuter, Inc.	\$ 492,847
Community Electricity.io, Inc.	\$ 347,600
Pylon AI, Inc.	\$ 90,000
Community Partners	\$ 389,891

I) List all key partners: (attach additional sheets as necessary)

Legal Company Name:

J.) Budget Information

Funding Source	Funding Year of Appropriation	Budget List Number	Amount
EPIC	18-19	301.001F	\$7,275,067
EPIC	19-20	301.001G	\$1,818,766
			\$

R&D Program Area: EDMFO: EDMF

TOTAL: \$ 9,093,833

Explanation for "Other" selection

Reimbursement Contract #: Federal Agreement #:

K) Recipient's Contact Information

1. Recipient's Administrator/Officer

Name: Craig Perkins

Address: 47 Discovery

City, State, Zip: Irvine, CA 92618-3701

Phone: 949-732-1070

E-Mail: cperkins@energycoalition.org

2. Recipient's Project Manager

Name: Craig Perkins

Address: 47 Discovery



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City, State, Zip: Irvine, CA 92618-3701

Phone: 949-732-1070

E-Mail: cperkins@energycoalition.org

L) Selection Process Used

Competitive Solicitation Solicitation #: GFO-15-312p3

First Come First Served Solicitation Solicitation #:



M) The following items should be attached to this GRF

- 1. Exhibit A, Scope of Work Attached
- 2. Exhibit B, Budget Detail Attached
- 3. CEC 105, Questionnaire for Identifying Conflicts Attached
- 4. Recipient Resolution N/A Attached
- 5. CEQA Documentation N/A Attached

Agreement Manager Date

Office Manager Date

Deputy Director Date

Subcontractor Legal Company Name:	Budget
Aclima, Inc.	\$99,000
Zeco Systems, Inc.	\$88,100
Green Convergence	\$491,844
Grid Alternatives Greater Los Angeles, Inc.	\$1,212,377
SensorComm Technology, Inc.	\$99,000
Space AI, Inc.	\$43,242
DoubleMap Inc.	Match only \$5,000
ABM Industries Incorporated	\$92,000
TBD Customer Service	Match only \$30,000

EXHIBIT A

Scope of Work

The Energy Coalition

I. TASK ACRONYM/TERM LISTS

A. Task List

Task #	CPR ¹	Task Name
1		General Project Tasks
2	X	Engagement, Enrollment and Workforce Development
3	X	Smart Community Solar Design and System Engineering
4	X	Microgrid Resiliency Hub Design and System Engineering
5		Develop Prosumer Network
6		Implement Mobile Grid and EV Mobility Services
7		Project Review
8		Evaluation of Project Benefits
9		Technology/Knowledge Transfer Activities

B. Acronym/Term List

Acronym/Term	Meaning
AEC	Advanced Energy Community
BAAEC	Basset Avocado Advanced Energy Community
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CPR	Critical Project Review
DAC	Disadvantaged Community
EM&V	Evaluation, Measurement & Verification
EV	Electric Vehicle
GHG	Greenhouse Gas
PV	Photovoltaic
TAC	Technical Advisory Committee
TEC	The Energy Coalition
UCLA	University of California, Los Angeles

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

A. Purpose of Agreement

The purpose of this Agreement is to fund the implementation of an Advanced Energy Community (AEC) in a disadvantaged community that provides more efficient, reliable, resilient, cost-effective and clean energy that is produced locally.

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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B. Problem/ Solution Statement

Problem

Disadvantaged communities (DACs) suffer from a combination of economic, health, and environmental burdens² and relatively few resources are utilized on retrofits and clean energy developments, despite the fact that these communities are home to low performing buildings and little resources to complete the retrofits. Two major factors that contribute to DACs being left behind are a lack of community engagement and education and inadequate business and financial models. The wide array and disaggregated nature of financing programs, energy products, and service providers creates a confusing array of choices and potential risks. This is amplified in disadvantaged communities, where financial risks have more impact, a greater portion of residents are renters, and education and/or language barriers inhibit knowledge transfer.

Solution

The Basset Avocado Advanced Energy Community (BAAEC) will demonstrate how renewable and affordable energy can be deployed within disadvantaged communities. The project will supply the electricity needs of up to 235 mostly low-income enrolled households from local solar and storage resources through a Community Solar Green Tariff offered in partnership with the Clean Power Alliance. The BAAEC will also entail extensive outreach and engagement activities, Electric Vehicle (EV) charging infrastructure, a microtransit program, and an innovative residential Prosumer Network, all managed by an experienced team led by the recipient.

Community solar photovoltaic (PV) and battery storage systems will be installed on private deployment sites, funded and managed by a private solar developer, to provide enough electricity to offset the annual electricity consumption of enrolled BAAEC participants, at least 50% of whom will be low-income. The project will also implement a Prosumer Network of income-qualified single family homes equipped with solar PV and battery storage that will demonstrate how residents can both produce and sell electricity. A microgrid resiliency hub will be created at a strategic, central location within the community to provide a self-powered and islanded energy refuge for various types of emergencies, including power outages and extreme heat days. The community will have access to lower emission transportation options through development of a mobile grid consisting of EV chargers and an EV microtransit and vanpooling program. A blockchain community network will also be established to simulate and test the verification and tracking of carbon emission credits and electricity production from the renewable energy assets of the Prosumer Network. Finally, a comprehensive community action strategy will be pursued to inform and educate the community and inspire local action.

² www.cpuc.ca.gov/discom

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C. Goals and Objectives of the Agreement

Agreement Goals

The goal of the BAAEC are to:

- Create a Zero Net Electric (ZNElec) community by providing local renewable electricity generation and battery storage to offset the annual electricity consumption of mostly low-income participants within a DAC.
- Generate more efficient, resilient and lower cost energy within the community.
- Enable DAC residents to access cost-effective renewable generation.
- Demonstrate that locally produced renewable energy reduces costs for the utility grid.
- Reduce greenhouse gas (GHG) emissions and improve air quality in alignment with state and local goals.
- Promote social equity, environmental justice and a more livable community.
- Demonstrate a successful model of integrated decentralized energy systems that can be replicated by other DACs.

Ratepayer Benefits:³ This Agreement will result in the ratepayer benefits of greater electricity reliability, lower costs, and increased safety.

The BAAEC project will provide ratepayer benefits in the form of lower energy bills, reduced GHG emissions, and reduced energy consumption. It will also increase local reliability by pairing battery storage and solar PV within the community in a way that allows for constant power supply and the option of multiple hours of autonomy. It is anticipated, over the life of the project that carbon emissions will be reduced by 64% along with a 100% renewable generation of participant electricity consumption.

The implementation of the BAAEC design will provide a DAC with more efficient, reliable, resilient, and cost-effective clean energy that is produced locally. Further, this project will test the concept of a market based, clean energy design approach that can address the energy challenges that DACs face in an effective manner.

A summary of benefits to ratepayers include:

- Substantial energy cost savings through community scale solar and battery storage systems and lower electricity rates;
- Improved standard of living in households by providing lower cost energy services;
- Reduced health risks and reduced local pollutants through adoption of clean energy generation and zero emission vehicles;
- Increased resiliency during utility system power outages, natural disasters, weather events, severe heat days and other emergencies;
- Increased community safety through a more resilient and reliable energy system; and
- Alleviation of local energy grid constraints with locally produced clean energy and dispatchable battery storage.

³ 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:⁴ This Agreement will support the development and commercialization of technological advancements and breakthroughs that overcome barriers to the achievement of the State of California's statutory energy goals by implementing a comprehensive design approach to provide a disadvantaged community with local, clean energy generation.

Further, the project will feature innovative approaches that can be replicated and scaled to other DACs.

- **Smart community solar system**, that optimize the operation of an electricity distribution network by integrating local generation from solar photovoltaics, and using electricity storage in stationary electric batteries at a central community location.
- **A microgrid resiliency hub**, that creates a central area isolated from the main network and with its own means of photovoltaic generation and storage.
- **Prosumer Network**, that will provide solar PV and dispatchable battery storage to residential participants while monitoring community energy assets and simulating carbon credits and smart contract PPAs.
- **Mobile grid**, that increases EV charging options and offers vanpooling and microtransit services to the community.

Agreement Objectives

The objectives of this Agreement are to:

- Achieve ZNElec status by offsetting 100% of the annual electricity consumption of up to 235 enrolled BAAEC participants over a 25-year period through successful implementation of 1.2 MW of Smart Community Solar.
- Implement a Prosumer Network in up to 50 selected households where participants install rooftop solar and battery storage to produce renewable electricity through an integrated solar PV, battery storage and energy management system that interfaces with the grid.
- Create a Blockchain Network pilot as part of the Prosumer Network that simulates the verification and tracking of carbon credits and "smart contract PPAs" for the renewable energy systems installed within the BAAEC.
- Create a strategically located Microgrid Resiliency Hub, with up to 250 kW of rooftop solar PV and 464 kWh battery storage system, as an emergency refuge option for the community that can be islanded from the power grid during emergencies, including extreme heat days that can provide up to 4 hours of emergency electricity.
- Increase the availability of EV charging and zero emission mobility options through the implementation of a Mobile Grid and deploy air quality monitoring technology to better inform the community about air quality.
- Reduce natural gas consumption through cost-effective electrification of selected water heating systems for up to 20 single family homes.
- Inspire, educate, engage and enroll community members through targeted community action strategies that include education, workforce development, and dissemination of energy saving tips and conservation tools.
- Implement a cost-effective evaluation, measurement and verification (EM&V) process to track, analyze and report on the performance of the overall project and individual project

⁴ 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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components, and quantify outcomes, including an estimated 64% reduction of local GHG emissions and air quality improvements.

- Complete a case study report that documents the implementation experience, identifies lessons learned, and evaluates the potential replicability and scalability of the BAAEC.

III. TASK 1 GENERAL PROJECT TASKS

PRODUCTS

Subtask 1.1 Products

The goal of this subtask is to establish the requirements for submitting project products (e.g., reports, summaries, plans, and presentation materials). Unless otherwise specified by the Commission Agreement Manager (CAM), the Recipient must deliver products as required below by the dates listed in the **Project Schedule (Part V)**. Products that require a draft version are indicated by marking “**(draft and final)**” after the product name in the “Products” section of the task/subtask. If “(draft and final)” does not appear after the product name, only a final version of the product is required. With respect to due dates within this Scope of Work, “**days**” means working days.

The Recipient shall:

For products that require a draft version

- Submit all draft products to the CAM for review and comment in accordance with the Project Schedule (Part V). The CAM will provide written comments to the Recipient on the draft product within 15 days of receipt, unless otherwise specified in the task/subtask for which the product is required.
- Consider incorporating all CAM comments into the final product. If the Recipient disagrees with any comment, provide a written response explaining why the comment was not incorporated into the final product.
- Submit the revised product and responses to comments within 10 days of notice by the CAM, unless the CAM specifies a longer time period, or approves a request for additional time.

For products that require a final version only

- Submit the product to the CAM for acceptance. The CAM may request minor revisions or explanations prior to acceptance.

For all products

- Submit all data and documents required as products in accordance with the following Instructions for Submitting Electronic Files and Developing Software:

Electronic File Format

Submit all data and documents required as products under this Agreement in an electronic file format that is fully editable and compatible with the Energy Commission’s software and Microsoft (MS)-operating computing platforms, or with any other format approved by the CAM. Deliver an electronic copy of the full text of any Agreement data and documents in a format specified by the CAM, such as a memory stick or CD-ROM.

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The following describes the accepted formats for electronic data and documents provided to the Energy Commission as products under this Agreement, and establishes the software versions that will be required to review and approve all software products:

- Data sets will be in MS Access or MS Excel file format (version 2007 or later), or any other format approved by the CAM.
- Text documents will be in MS Word file format, version 2007 or later.
- Documents intended for public distribution will be in PDF file format.
- The Recipient must also provide the native Microsoft file format.
- Project management documents will be in Microsoft Project file format, version 2007 or later.

Software Application Development

Use the following standard Application Architecture components in compatible versions for any software application development required by this Agreement (e.g., databases, models, modeling tools), unless the CAM approves other software applications such as open source programs:

- Microsoft ASP.NET framework (version 3.5 and up). Recommend 4.0.
- Microsoft Internet Information Services (IIS), (version 6 and up). Recommend 7.5.
- Visual Studio.NET (version 2008 and up). Recommend 2010.
- C# Programming Language with Presentation (UI), Business Object and Data Layers.
- SQL (Structured Query Language).
- Microsoft SQL Server 2008, Stored Procedures. Recommend 2008 R2.
- Microsoft SQL Reporting Services. Recommend 2008 R2.
- XML (external interfaces).

Any exceptions to the Electronic File Format requirements above must be approved in writing by the CAM. The CAM will consult with the Energy Commission's Information Technology Services Branch to determine whether the exceptions are allowable.

MEETINGS

Subtask 1.2 Kick-off Meeting

The goal of this subtask is to establish the lines of communication and procedures for implementing this Agreement.

The Recipient shall:

- Attend a "Kick-off" meeting with the CAM, the Commission Agreement Officer (CAO), and any other Energy Commission staff relevant to the Agreement. The Recipient will bring its Project Manager and any other individuals designated by the CAM to this meeting. The administrative and technical aspects of the Agreement will be discussed at the meeting. Prior to the meeting, the CAM will provide an agenda to all potential meeting participants. The meeting may take place in person or by electronic conferencing (e.g., WebEx), with the approval of the CAM.

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

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- Terms and conditions of the Agreement;
- Administrative products (subtask 1.1);
- CPR meetings (subtask 1.3);
- Match fund documentation (subtask 1.7);
- Permit documentation (subtask 1.8);
- Subcontracts (subtask 1.9); and
- Any other relevant topics.

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

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

The CAM shall:

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

Recipient Products:

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

CAM Product:

- Kick-off Meeting Agenda.

Subtask 1.3 Critical Project Review (CPR) Meetings

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

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

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location, or may be conducted via electronic conferencing (e.g., WebEx) as determined by the CAM.

The Recipient shall:

- Prepare a *CPR Report* for each CPR meeting that: (1) discusses the progress of the Agreement toward achieving its goals and objectives; and (2) includes recommendations and conclusions regarding continued work on the project.
- Submit the CPR Report along with any other *Task Products* that correspond to the technical task for which the CPR meeting is required (i.e., if a CPR meeting is required for Task 2, submit the Task 2 products along with the CPR Report).
- Attend the CPR meeting.
- Present the CPR Report and any other required information at each CPR meeting.

The CAM shall:

- Determine the location, date, and time of each CPR meeting with the Recipient's input.
- Send the Recipient a *CPR Agenda* and a *List of Expected CPR Participants* in advance of the CPR meeting. If applicable, the agenda will include a discussion of match funding and permits.
- Conduct and make a record of each CPR meeting. Provide the Recipient with a *Schedule for Providing a Progress Determination* on continuation of the project.
- Determine whether to continue the project, and if so whether modifications are needed to the tasks, schedule, products, or budget for the remainder of the Agreement. If the CAM concludes that satisfactory progress is not being made, this conclusion will be referred to the Deputy Director of the Energy Research and Development Division.
- Provide the Recipient with a *Progress Determination* on continuation of the project, in accordance with the schedule. The Progress Determination may include a requirement that the Recipient revise one or more products.

Recipient Products:

- CPR Report(s)
- Task Products (draft and/or final as specified in the task)

CAM Products:

- CPR Agenda
- List of Expected CPR Participants
- Schedule for Providing a Progress Determination
- Progress Determination

Subtask 1.4 Final Meeting

The goal of this subtask is to complete the closeout of this Agreement.

The Recipient shall:

- Meet with Energy Commission staff to present project findings, conclusions, and recommendations. The final meeting must be completed during the closeout of this Agreement. This meeting will be attended by the Recipient and CAM, at a minimum. The meeting may occur in person or by electronic conferencing (e.g., WebEx), with the approval of the CAM.

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The technical and administrative aspects of Agreement closeout will be discussed at the meeting, which may be divided into two separate meetings at the CAM's discretion.

- The technical portion of the meeting will involve the presentation of findings, conclusions, and recommended next steps (if any) for the Agreement. The CAM will determine the appropriate meeting participants.
- The administrative portion of the meeting will involve a discussion with the CAM and the CAO of the following Agreement closeout items:
 - Disposition of any state-owned equipment.
 - Need to file a Uniform Commercial Code Financing Statement (Form UCC-1) regarding the Energy Commission's interest in patented technology.
 - The Energy Commission's request for specific "generated" data (not already provided in Agreement products).
 - Need to document the Recipient's disclosure of "subject inventions" developed under the Agreement.
 - "Surviving" Agreement provisions such as repayment provisions and confidential products.
 - Final invoicing and release of retention.
- Prepare a *Final Meeting Agreement Summary* that documents any agreement made between the Recipient and Commission staff during the meeting.
- Prepare a *Schedule for Completing Agreement Closeout Activities*.
- Provide *All Draft and Final Written Products* on a CD-ROM or USB memory stick, organized by the tasks in the Agreement.

Products:

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

REPORTS AND INVOICES

Subtask 1.5 Progress Reports and Invoices

The goals of this subtask are to: (1) periodically verify that satisfactory and continued progress is made towards achieving the project objectives of this Agreement; and (2) ensure that invoices contain all required information and are submitted in the appropriate format.

The Recipient shall:

- Submit a monthly *Progress Report* to the CAM. Each progress report must:
 - Summarize progress made on all Agreement activities as specified in the scope of work for the preceding month, including accomplishments, problems, milestones, products, schedule, fiscal status, and an assessment of the ability to complete the Agreement within the current budget and any anticipated cost overruns. See the Progress Report Format Attachment for the recommended specifications.
- Submit a monthly or quarterly *Invoice* that follows the instructions in the "Payment of Funds" section of the terms and conditions. In addition, each invoice must document and verify:
 - Energy Commission funds received by California-based entities;
 - Energy Commission funds spent in California (*if applicable*); and

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- Match fund expenditures.

Products:

- Progress Reports
- Invoices

Subtask 1.6 Final Report

The goal of this subtask is to prepare a comprehensive Final Report that describes the original purpose, approach, results, and conclusions of the work performed under this Agreement. The CAM will review the Final Report, which will be due at least **two months** before the Agreement end date. When creating the Final Report Outline and the Final Report, the Recipient must use a Style Manual provided by the CAM.

Subtask 1.6.1 Final Report Outline

The Recipient shall:

- Prepare a *Final Report Outline* in accordance with the *Style Manual* provided by the CAM.
- Submit a draft of the outline to the CAM for review and comment.
- Once agreement has been reached on the draft, submit the final outline to the CAM. The CAM will provide written approval of the final outline within 10 days of receipt.

Recipient Products:

- Final Report Outline (draft and final).

CAM Product:

- Style Manual.
- Comments on Draft Final Report Outline.
- Acceptance of Final Report Outline.

Subtask 1.6.2 Final Report

The Recipient shall:

- Prepare a *Final Report* for this Agreement in accordance with the approved Final Report Outline, Style Manual, and Final Report Template provided by the CAM with the following considerations:
 - Ensure that the report includes the following items, in the following order:
 - Cover page (required)
 - Credits page on the reverse side of cover with legal disclaimer (required)
 - Acknowledgements page (optional)
 - Preface (required)
 - Abstract, keywords, and citation page (required)
 - Table of Contents (required, followed by List of Figures and List of Tables, if needed)
 - Executive summary (required)
 - Body of the report (required)
 - References (if applicable)
 - Glossary/Acronyms (If more than 10 acronyms or abbreviations are used, it is required)

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- Bibliography (if applicable)
- Appendices (if applicable) (Create a separate volume if very large)
- Attachments (if applicable)
- Ensure that the document is written in the third person.
- Ensure that the Executive Summary is understandable to the lay public.
 - Briefly summarize the completed work. Succinctly describe the project results and whether or not the project goals were accomplished.
 - Identify which specific ratepayers can benefit from the project results and how they can achieve the benefits.
 - If it's necessary to use a technical term in the Executive Summary, provide a brief definition or explanation when the technical term is first used.
- Follow the Style Guide format requirements for headings, figures/tables, citations, and acronyms/abbreviations.
- Ensure that the document omits subjective comments and opinions. However, recommendations in the conclusion of the report are allowed.
- Include a brief description of the project results in the Abstract.
- Submit a draft of the report to the CAM for review and comment. The CAM will provide written comments to the Recipient on the draft product within 15 days of receipt.
- Submit one bound copy of the *Final Report* to the CAM along with *Written Responses to Comments on the Draft Final Report*.

Products:

- Final Report (draft and final).
- Written Responses to Comments on the Draft Final Report.

CAM Product:

- Written Comments on the Draft Final Report.

MATCH FUNDS, PERMITS, AND SUBCONTRACTS

Subtask 1.7 Match Funds

The goal of this subtask is to ensure that the Recipient obtains any match funds planned for this Agreement and applies them to the Agreement during the Agreement term.

While the costs to obtain and document match funds are not reimbursable under this Agreement, the Recipient may spend match funds for this task. The Recipient may only spend match funds during the Agreement term, either concurrently or prior to the use of Energy Commission funds. Match funds must be identified in writing, and the Recipient must obtain any associated commitments before incurring any costs for which the Recipient will request reimbursement.

The Recipient shall:

- Prepare a *Match Funds Status Letter* that documents the match funds committed to this Agreement. If no match funds were part of the proposal that led to the Energy Commission awarding this Agreement and none have been identified at the time this Agreement starts, then state this in the letter.

If match funds were a part of the proposal that led to the Energy Commission awarding

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

Products:

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

Subtask 1.8 Permits

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

The Recipient shall:

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

The list of permits and the schedule for obtaining them will be discussed at the Kick-off meeting (subtask 1.2), and a timetable for submitting the updated list, schedule, and copies of the permits will be developed. The impact on the project if the permits are not

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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 1.9 Subcontracts

The goals of this subtask are to: (1) procure subcontracts required to carry out the tasks under this Agreement; and (2) ensure that the subcontracts are consistent with the terms and conditions of this Agreement.

The Recipient shall:

- Manage and coordinate subcontractor activities in accordance with the requirements of this Agreement.
- Incorporate this Agreement by reference into each subcontract.
- Include any required Energy Commission flow-down provisions in each subcontract, in addition to a statement that the terms of this Agreement will prevail if they conflict with the subcontract terms.
- If required by the CAM, submit a draft of each *Subcontract* required to conduct the work under this Agreement.
- Submit a final copy of the executed subcontract.
- Notify and receive written approval from the CAM prior to adding any new subcontractors (see the discussion of subcontractor additions in the terms and conditions).

Products:

- Subcontracts (*draft if required by the CAM*)

TECHNICAL ADVISORY COMMITTEE

Subtask 1.10 Technical Advisory Committee (TAC)

The goal of this subtask is to create an advisory committee for this Agreement. The TAC should be composed of diverse professionals. The composition will vary depending on interest, availability, and need. TAC members will serve at the CAM's discretion. The purpose of the TAC is to:

- Provide guidance in project direction. The guidance may include scope and methodologies, timing, and coordination with other projects. The guidance may be based on:
 - Technical area expertise;

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- Knowledge of market applications; or
- Linkages between the agreement work and other past, present, or future projects (both public and private sectors) that TAC members are aware of in a particular area.
- Review products and provide recommendations for needed product adjustments, refinements, or enhancements.
- Evaluate the tangible benefits of the project to the state of California, and provide recommendations as needed to enhance the benefits.
- Provide recommendations regarding information dissemination, market pathways, or commercialization strategies relevant to the project products.

The TAC may be composed of qualified professionals spanning the following types of disciplines:

- Researchers knowledgeable about the project subject matter;
- Members of trades that will apply the results of the project (e.g., designers, engineers, architects, contractors, and trade representatives);
- Public interest market transformation implementers;
- Product developers relevant to the project;
- U.S. Department of Energy research managers, or experts from other federal or state agencies relevant to the project;
- Public interest environmental groups;
- Utility representatives;
- Air district staff; and
- Members of relevant technical society committees.

The Recipient shall:

- Prepare a *List of Potential TAC Members* that includes the names, companies, physical and electronic addresses, and phone numbers of potential members. The list will be discussed at the Kick-off meeting, and a schedule for recruiting members and holding the first TAC meeting will be developed.
- Recruit TAC members. Ensure that each individual understands member obligations and the TAC meeting schedule developed in subtask 1.11.
- Prepare a *List of TAC Members* once all TAC members have committed to serving on the TAC.
- Submit *Documentation of TAC Member Commitment* (such as Letters of Acceptance) from each TAC member.

Products:

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

Subtask 1.11 TAC Meetings

The goal of this subtask is for the TAC to provide strategic guidance for the project by participating in regular meetings, which may be held via teleconference.

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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 Material* for each TAC meeting.
- Organize and lead TAC meetings in accordance with the TAC Meeting Schedule. Changes to the schedule must be pre-approved in writing by the CAM.
- Prepare *TAC Meeting Summaries* that include any recommended resolutions of major TAC issues.

Products:

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

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IV. TECHNICAL TASKS

TASK 2 ENGAGEMENT, ENROLLMENT AND WORKFORCE DEVELOPMENT

The goal of this task is to inspire, educate and engage community members to actively take part in the implementation of their advanced energy community. Building on the Phase I outreach plan, will include (1) developing engagement, marketing and outreach materials and strategies, (2) conducting engagement activities to build community interest, and (3) enrolling single family residential, multifamily residential, and the school district community participants in the AEC program.

The Recipient shall:

- Develop engagement, marketing and outreach materials
- Conduct engagement activities
- Enroll residential participants in the AEC program
- Prepare an *Engagement, Enrollment and Workforce Development Plan*, that includes but is not limited to the following:
 - Strategy for engagement, enrollment and workforce development
 - Samples of engagement, marketing and outreach materials
- Prepare an *Engagement, Enrollment and Workforce Development Memo*, that summarizes and documents the completion of these efforts that includes but is not limited to the following:
 - Description of engagement activities held
 - Results from engagement and enrollment activities
 - Number of enrolled participants by building type
- Prepare *CPR Report #1* and participate in a CPR meeting in accordance with subtask 1.3

Products:

- Engagement, Enrollment and Workforce Development Plan (draft and final)
- Engagement, Enrollment and Workforce Development Memo (draft and final)
- CPR Report #1

TASK 3 SMART COMMUNITY SOLAR DESIGN AND SYSTEM ENGINEERING

The goal of this task is to engineer a design and finalize a Smart Community Solar.

The Recipient Shall:

- Finalize energy project and site use agreement with Community Solar site(s),
- Finalize Community Solar project plans, financials, and performance to ensure value optimization of energy storage, and acquire all necessary permits.
-
- Prepare *Smart Community Solar Design and Engineering Report*, describing finalized engineering plans, specifications, and cost estimates for the Smart Community Solar PV and energy storage systems.

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Products:

- Smart Community Solar Design and Engineering Report

Subtask 3.1: Procure and Deploy Smart Community Solar

The goal of this subtask is to complete installation and commissioning of the Smart Community Solar PV and energy storage systems located at the Evergreen Baptist Church.

The Recipient Shall:

- Procure and deploy:
 - Community Solar PV and storage system(s).
- Complete installation and commissioning of Smart Community Solar systems.
- Prepare *Smart Community Solar Construction Memo*, documenting the completion of the community solar PV and storage systems.

Products:

- Smart Community Solar Construction Memo (draft and final)

TASK 4 MICROGRID RESILIENCY HUB DESIGN AND SYSTEM ENGINEERING

The goals of this task are to design and document the deployment and operating strategies of the microgrid resiliency hub at the Evergreen Baptist Church based on “as built” site drawing and detailed configuration analysis.

The Recipient Shall:

- Review project plans, financials, and performance to ensure value optimization of energy storage.
- Collect and conduct final review of all available site-specific information for site through onsite inspection of site conditions such as potential locations for equipment and electrical service capacity.
- Finalize engineering audits of site conditions and electrical infrastructure for site.
- Finalize net metering credit opportunities.
- Scope interconnection cost estimates for site and finalize interconnection process.
- Confirm all applicable project approval and/or permit approval authorities for site, and their project review/approval requirements.
- Finalize financial model for proposed site, confirm economic viability.
- Prepare *Microgrid Resiliency Hub System Engineering Report*, a document describing overall technical design of the system, its operating parameters, and expected performance of the system once it is fully deployed.
- Prepare *CPR Report #2* and participate in a CPR meeting in accordance with subtask 1.3

Products:

- Microgrid Resiliency Hub System Engineering Report
- CPR Report #2

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Subtask 4.1: Procure and Deploy Microgrid Resiliency Hub

The goal of this subtask is to procure and deploy major equipment including solar PV, energy storage and microgrid controller and software in line with the Microgrid Resiliency System Report.

The Recipient Shall:

- Procure and deploy:
 - PV system
 - Battery Storage
 - Microgrid Controller and Software
- Complete installation and commissioning of microgrid.
- Prepare a *Microgrid Resiliency Hub Construction Memo* to document the completion of the microgrid resiliency hub.

Products:

- Microgrid Resiliency Hub Construction Memo (draft and final)

TASK 5 DEVELOP PROSUMER NETWORK

The goal of this task is to identify households and develop a Prosumer Network with 50 residential solar PV and battery storage and a blockchain based submetering system.

The Recipient Shall:

- Identify up to 50 single family homeowners to participate in prosumer network and PPA with CPA.
- Install rooftop solar PV for the selected single family homes using the DAC-SASH program.
- Install battery storage systems with management control systems for the selected 50 single family homes.
- Finalize and secure incentives for electric heat pumps.
- Convert up to 20 of participating homes from gas to electric heat pumps.
- Prepare *Residential Energy Systems Report* documenting the design, implementation, and commissioning of the solar PV, battery storage and electric heat pumps for the Prosumer Network.

Products:

- Residential Energy Systems Report (draft and final)

Subtask 5.1: Implement and Test Prosumer Network

The goal of this subtask is to implement the Prosumer Network to simulate and test the measurement and certification of system outputs.

The Recipient Shall:

- Create and launch a prosumer network pilot for up to 50 residential sites with solar PV and dispatchable battery storage while monitoring assets with a blockchain smart routing system.
- Prepare *Prosumer Network Report* documenting the design, implementation, and deployment of the Prosumer Network.

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Products:

- Prosumer Network Report (draft and final)

TASK 6 IMPLEMENT MOBILE GRID AND EV MOBILITY SERVICES

The goal of this task is to implement a Mobile Grid that will utilize electric vehicle charging systems, EV vanpooling and a microtransit service to increase clean mobility options and provide grid benefits through vehicle and charging station energy storage capabilities.

The Recipient Shall:

- Install DC fast charging EV chargers.
- Establish Zero Emission Vehicle program located at EV charging stations. Implement air quality monitoring measures.
- Prepare *EV Charging Stations Installation Memo* documenting the locations and capabilities of the installed EV charging stations.
- Prepare *Mobile Grid Report* documenting the design and implementation of the Mobile Grid.
- Prepare *Air Quality Monitoring Memo* documenting the air quality monitoring measures and resulting data.

Products:

- Mobile Grid Report (draft and final)
- EV Charging Stations Installation Memo (draft and final)
- Air Quality Monitoring Memo (draft and final)

TASK 7 PROJECT REVIEW

The goal of this task is to demonstrate the AEC concept and measure the performance of the program's energy systems. The Recipient will contract a third-party to conduct a detailed, independent evaluation, measurement and verification (EM&V) for a 12-month post installation period for each building, and extrapolation to annualize the data, including assumptions and inputs to be used for building simulation model. The Recipient will also review the replicability and scalability of the AEC design and perform a case study that documents and analyzes the AEC implementation process and highlights best practices. Finally, the Recipient will review the technical and financial performance of the project and develop a Project Benefits Assessment Report.

The Recipient shall:

- Develop approach for performing evaluation, measurement and verification for the AEC design
- Collect pre-installation energy data to establish a baseline
- Calculate and analyze the net energy generation and consumption of the AEC community, including but not limited to the following:
 - Solar generation and energy storage performance from the community and residential sites.
- Prepare an *EM&V Methodology Program Design* that describes the approaches and strategy for performing evaluation, measurement and verification.

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- Prepare an *EM&V Program Results Report* that includes but is not limited to the following:
 - Analysis of energy system production, community energy consumption, zero net energy status and environmental benefits.
 - Provide recommendations to the CEC on where additional AEC communities can be located under the project's model.
- Prepare a *Case Study Report* that includes but is not limited to the following:
 - Reviews and analyzes the AEC implementation process.
 - Highlight challenges, strategies and best practices.
 - Suggested policy improvements for future AEC deployment projects.
 - Feedback from AEC participants.
 - Summarizes community and State benefits.
- Prepare a *Project Benefits Assessment Report* that includes but is not limited to the following:
 - Technical and financial performance of the BAAEC project.
 - Project design suggestions and recommendations.
- Write Journal Articles and make Conference Presentations.
- Conduct regional and state-level collaboration Meeting Presentations to showcase the AEC project development.
- Organize and co-host with the CEC a Final Event showcasing the AEC project.
- Prepare *CPR Report #3* and participate in a CPR meeting in accordance with subtask 1.3

Products:

- EM&V Methodology Program Design
- EM&V Program Results Report (draft and final)
- Case Study Report (draft and final)
- Project Benefits Assessment Report (draft and final)
- Journal Articles
- Conference Presentations
- Meeting Presentations
-
- CPR Report #3

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TASK 8 EVALUATION OF PROJECT BENEFITS

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

The Recipient shall:

- Complete three Project Benefits Questionnaires that correspond to three main intervals in the Agreement: (1) *Kick-off Meeting Benefits Questionnaire*; (2) *Mid-term Benefits Questionnaire*; and (3) *Final Meeting Benefits Questionnaire*.
- Provide all key assumptions used to estimate projected benefits, including targeted market sector (e.g., population and geographic location), projected market penetration, baseline and projected energy use and cost, operating conditions, and emission reduction calculations. Examples of information that may be requested in the questionnaires include:
 - For Product Development Projects and Project Demonstrations:
 - Published documents, including date, title, and periodical name.
 - Estimated or actual energy and cost savings, and estimated statewide energy savings once market potential has been realized. Identify all assumptions used in the estimates.
 - Greenhouse gas and criteria emissions reductions.
 - Other non-energy benefits such as reliability, public safety, lower operational cost, environmental improvement, indoor environmental quality, and societal benefits.
 - Data on potential job creation, market potential, economic development, and increased state revenue as a result of the project.
 - A discussion of project product downloads from websites, and publications in technical journals.
 - A comparison of project expectations and performance. Discuss whether the goals and objectives of the Agreement have been met and what improvements are needed, if any.
 - Additional Information for Product Development Projects:
 - Outcome of product development efforts, such copyrights and license agreements.
 - Units sold or projected to be sold in California and outside of California.
 - Total annual sales or projected annual sales (in dollars) of products developed under the Agreement.
 - Investment dollars/follow-on private funding as a result of Energy Commission funding.
 - Patent numbers and applications, along with dates and brief descriptions.
 - Additional Information for Product Demonstrations:
 - Outcome of demonstrations and status of technology.
 - Number of similar installations.
 - Jobs created/retained as a result of the Agreement.
 - For Information/Tools and Other Research Studies:
 - Outcome of project.
 - Published documents, including date, title, and periodical name.

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- A discussion of policy development. State if the project has been cited in government policy publications or technical journals, or has been used to inform regulatory bodies.
 - The number of website downloads.
 - An estimate of how the project information has affected energy use and cost, or have resulted in other non-energy benefits.
 - An estimate of energy and non-energy benefits.
 - Data on potential job creation, market potential, economic development, and increased state revenue as a result of the project.
 - A discussion of project product downloads from websites, and publications in technical journals.
 - A comparison of project expectations and performance. Discuss whether the goals and objectives of the Agreement have been met and what improvements are needed, if any.
- Respond to CAM questions regarding responses to the questionnaires.

The Energy Commission may send the Recipient similar questionnaires after the Agreement term ends. Responses to these questionnaires will be voluntary.

Products:

- Kick-off Meeting Benefits Questionnaire.
- Mid-term Benefits Questionnaire.
- Final Meeting Benefits Questionnaire.

TASK 9 TECHNOLOGY/KNOWLEDGE TRANSFER ACTIVITIES

The goal of this task is to develop a plan to make the knowledge gained, experimental results, and lessons learned available to the public and key decision makers.

The Recipient shall:

- Prepare an *Initial Fact Sheet* at the start of the project that describes the project. Use the format provided by the CAM.
- Prepare a *Final Project Fact Sheet* at the project's conclusion that discusses results. Use the format provided by the CAM.
- Prepare a *Technology/Knowledge Transfer Plan* that includes:
 - An explanation of how the knowledge gained from the project will be made available to the public, including the targeted market sector and potential outreach to end users, utilities, regulatory agencies, and others.
 - A description of the intended use(s) for and users of the project results.
 - Published documents, including date, title, and periodical name.
 - Copies of documents, fact sheets, journal articles, press releases, and other documents prepared for public dissemination. These documents must include the Legal Notice required in the terms and conditions. Indicate where and when the documents were disseminated.
 - A discussion of policy development. State if project has been or will be cited in government policy publications, or used to inform regulatory bodies.
 - The number of website downloads or public requests for project results.

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- Additional areas as determined by the CAM.
- Conduct technology transfer activities in accordance with the Technology/Knowledge Transfer Plan. These activities will be reported in the Progress Reports.
- When directed by the CAM, develop *Presentation Materials* for an Energy Commission-sponsored conference/workshop on the results of the project.
- Prepare a *Technology/Knowledge Transfer Report* on technology transfer activities conducted during the project.
- 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.
- Create a *Scalability Toolkit for CCAs, Utilities and Local Governments*. This document will take learnings from the BAAEC and create a set of practical, useful tools for scaling up additional developments. Contents will include the full life cycle of the Microgrid Resiliency Hub and Community Solar deployments including: final design, interconnection, data integration and management, rate design, retail billing and settlement procedures, implementation, operation and maintenance, and performance validation and evaluation.

Products:

- Initial Fact Sheet (draft and final)
- Final Project Fact Sheet (draft and final)
- Presentation Materials (draft and final)
- Technology/Knowledge Transfer Plan (draft and final)
- Technology/Knowledge Transfer Report (draft and final)
- High Quality Digital Photographs
- Scalability Toolkit for CCA's, Utilities and Local Governments

V. PROJECT SCHEDULE

Please see the attached Excel spreadsheet.

Notice of Exemption

Form D

To: Office of Planning and Research
PO Box 3044
1400 Tenth Street, Room 113
Sacramento, CA 95812-3044

From: California Energy Commission
1516 Ninth Street, MS-48
Sacramento, CA 95814

Project Applicant: The Energy Coalition

Project Title: Basset-Avocado Advanced Energy Community

Project Location – Specific: Five Assessor's Parcels owned by the Evergreen Baptist Church having at least these addresses: 454 Coberta Avenue, 323 Workman Mill Road, and 319 Workman Mill Road, for the main solar photovoltaic energy and battery storage facilities and over 50 locations in the La Puente community to be identified (residences and electric vehicle charging station locations)

Project Location – City: La Puente (unincorporated), zip code 91746 **Project Location – County:** Los Angeles

Description of Nature, Purpose and Beneficiaries of Project:

Under grant Agreement EPC-19-006, the California Energy Commission will provide a grant of \$9,093,833 to The Energy Coalition to build-out and demonstrate the Basset-Avocado Advanced Energy Community (BAAEC). In the overview, the BAAEC is a new model for providing affordable, locally-produced renewable energy and energy services at scale within a disadvantaged community. The BAAEC will include: 1) a Smart Community Solar and Storage system to offset the annual electricity load of low-income enrolled participants; 2) a Microgrid Resiliency Hub to provide clean back-up power to the community in emergencies, severe heat days or blackouts; 3) a Prosumer Network consisting of 50 single family homes equipped with solar photovoltaic and battery storage that will be integrated with a Blockchain Community Network Pilot; and 4) a Mobile Grid of electric vehicle (EV) charging stations and shared electric mobility options (EV microtransit and vanpooling program) to reduce greenhouse gases and improve air quality.

The grant project's components affecting the physical environment will include:

- a) Smart Community Solar project: 1.2 megawatts (MW) of solar photovoltaic (PV) panels and 2,958 kWh of battery storage.
- b) Microgrid Resiliency Hub, consisting of 250 kilowatt (kW) of solar photovoltaic panels, and a 464 kilowatt-hour (kWh) battery storage system. (This will be on or near the main Evergreen Baptist Church building, 454 Coberta Avenue.)
- c) Trenching to connect various project facilities to the distribution-level electrical grid and to meters.
- d) Mobile Grid of electric vehicle (EV) charging stations built and shared transportation options at locations not yet identified, in the Bassett and Avocado Heights communities.
- e) Prosumer Network consisting of new, solar PV and battery storage systems at fifty (50) single family homes not yet identified in the Bassett and Avocado Heights communities. Twenty (20) of these homes will also have their water heating systems converted from natural gas to electric heat pumps.

For (a), (b), and part of (c), the solar photovoltaic panels will be on: a rooftop of the Evergreen Baptist Church (454 Coberta Avenue), new parking canopies over part of the church's parking lot (323 Workman Mill Road), and ground-mounted solar PV on undeveloped land owned the church, surrounding a house (319 Workman Mill Road). The facilities are to be built within lots having Assessor's Parcel Numbers 8112-015-013, 8112-008-053, 8112-012-041, 8112-001-060, and 8112-012-039. According to Los Angeles County staff, the parcels are zoned Light Agriculture (A-1).

The parking canopy solar PV will include drilled piers about 14 feet into the ground, and would stand about 14 feet high. The ground-mounted solar PV will rest on posts in the ground, and would stand about 8 feet high. The Energy Coalition plans to move two trees from the ground-mounted solar PV area to the parking lot area. There are also smaller trees on the undeveloped land.

Beneficiaries of demonstrating the BAAEC project should include the Bassett and Avocado Heights communities, 50 residential customers, the Evergreen Baptist Church, users of electric vehicles, California’s investor-owned electric utilities and their customers (i.e., ratepayers), along with the public at large and the environment.

Name of Public Agency Approving Project: California Energy Commission

Name of Person or Agency Carrying Out Project: The Energy Coalition

Exempt Status: *(check one)*

Ministerial Exemption (Pub. Resources Code § 21080(b)(1); Cal. Code Regs., tit 14, § 15268);

Declared Emergency (Pub. Resources Code § 21080(b)(3); Cal. Code Regs., tit 14, § 15269(a));

Emergency Project (Pub. Resources Code § 21080(b)(4); Cal. Code Regs., tit 14, § 15269(b)(c));

X Categorical Exemption. State type and section number

Cal. Code Regs., tit. 14, §§ 15301, 15303

X Statutory Exemptions. State code number. Cal. Public Resources Code section 21080.35

Common Sense Exemption. (Cal. Code Regs., tit 14, §15061(b)(3))

Reasons why project is exempt:

The solar photovoltaic panels on the rooftop of the Evergreen Baptist Church and on new parking canopies over part of the church’s parking lot are exempt under California Public Resources Code section 21080.35. This statute exempts from CEQA “the installation of a solar energy system on the roof of an existing building or at an existing parking lot” fitting certain characteristics.

Regarding all the other physical components of the project, CEQA exemptions under California Code of Regulations, title 14, section 15301 and 15303 apply. Section 15301, “Existing Buildings,” covers the operation, maintenance, permitting, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use. Section 15303, “New Construction or Conversion of Small Structures,” covers construction and location of limited numbers of new, small facilities or structures; and installation of small new equipment and facilities in small structures. The additions of solar PV panels, storage batteries, ancillary equipment, electrical connections, and electric vehicle charging stations under the grant project fall within these parameters.

Regarding local government review, staff of the Department of Regional Planning (Land Development Coordinating Center) of Los Angeles County indicated that only a ministerial review from Los Angeles County would be required (communication dated 4/23/2020), not a discretionary review. Also, County staff stated that the ground-mounted solar would only require a ministerial site plan review under the County’s land use regulations (22.16.030) and the County’s Renewable Energy Ordinance (22.140.510), as it would be a small-scale solar energy system.

Lead Agency

Contact Person: Michael Ferreira **Area code/Telephone/Ext:** 916-445-5281

If filed by applicant:

1. 1. Attach certified document of exemption finding.

2. 2.
 been filed by the public agency approving the project?

Has a Notice of Exemption
 Yes No

Signature:

Date:

Title:

Signed by Responsible Agency

X Signed by Lead Agency

Signed by Applicant

Date received for filing at OPR:

STATE OF CALIFORNIA

**STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION**

RESOLUTION - RE: THE ENERGY COALITION

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-19-006 with The Energy Coalition for a \$9,093,833 grant to build-out and demonstrate the Basset-Avocado Advanced Energy Community (BAAEC), and adopting staff's determination that this action is exempt from CEQA. The BAAEC is a new model for providing affordable, locally produced renewable energy and energy services at scale within a disadvantaged community. The BAAEC will include: 1) a Smart Community Solar and Storage system to offset the annual electricity load of low-income enrolled participants; 2) a Microgrid Resiliency Hub to provide clean back-up power to the community in emergencies, severe heat days or blackouts; 3) a Prosumer Network consisting of 50 single family homes equipped with solar photovoltaic and battery storage that will be integrated with a Blockchain Community Network Pilot; and 4) a Mobile Grid of electric vehicle charging stations and shared electric mobility options to reduce greenhouse gases and improve air quality; and

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

CERTIFICATION

The undersigned Secretariat to the Commission does hereby certify that the foregoing is a full, true, and correct copy of a Resolution duly and regularly adopted at a meeting of the CEC held on May 13, 2020.

AYE:

NAY:

ABSENT:

ABSTAIN:

Cody Goldthrite
Secretariat