



# GRANT REQUEST FORM (GRF)

## A) New Agreement # EPC-20-026 (to be completed by CGL office)

B) Division	Agreement Manager:	MS-	Phone
ERDD	Benson Gilbert	51	916-445-5406

C) Recipient's Legal Name	Federal ID Number
Caban Systems, Inc.	82-5024886

D) Title of Project
Advanced Energy Storage for California's Critical Infrastructure Project

## E) Term and Amount

Start Date	End Date	Amount
4/14/2021	3/31/2025	\$ 1,095,264

## F) Business Meeting Information

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

Proposed Business Meeting Date 4/14/2021  Consent  Discussion

Business Meeting Presenter Michael Ferreira Time Needed: 5 minutes

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

### Agenda Item Subject and Description:

#### Caban Systems, Inc.

CABAN SYSTEMS, INC. Proposed resolution approving agreement EPC-20-026 with Caban Systems, Inc. for a \$1,095,264 grant to develop a state-of-the-art clean energy storage backup system to serve critical infrastructure facilities to mitigate the health and safety risks from planned and unplanned power outages, and adopting staff's determination that this action is exempt from CEQA. The project will build upon Caban Systems, Inc.'s successful California Energy Commission-funded Modular Battery Platform Project by integrating a commercially available clean hydrogen (H2) fuel cell into its advanced modular lithium-ion battery pack to provide over 72 ours of clean back-up power. (EPIC funding) Contact: Michael Ferreira.

## 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:

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

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



# GRANT REQUEST FORM (GRF)

Explain reason why Agreement is exempt under the above section: The reason for the CEQA categorical exemptions is as follows:

For Cal. Code Regs. (CCR), Title 14, Section 15301: This project will involve design and development of system hardware, software development, and prototype construction of the battery storage system. The project will be carried out in the fully permitted, existing 10,000 square feet facility in Burlingame, California. No additional permits are required for installation of equipment or operation of the project. Specifically, the project includes operation of existing facilities, mechanical equipment, and no appreciable change of use for the area. Additionally, the project will not result in the addition to floorspace of the structure, and there will be no construction associated with the project. Any minor upgrades, if needed, will occur inside of the existing permitted facility. The building has a fire suppression system. The grant project does not involve a change in land use (i.e., light industrial). No rezoning will be required. The project does not involve any changes to, or expansion of, the exterior of the building. Therefore, this project is exempt under California Code of Regulations, title 14, section 15301, Existing Facilities (14 CCR § 15301).

- 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 sheets as necessary)

Legal Company Name:	Budget
Quanta Laboratories	\$ 50,000
National Technical Systems, Inc.	\$ 90,000

**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	19-20	301.001G	\$1,095,264

R&D Program Area: EDMFO: EDMF

TOTAL: \$ 1,095,264

Explanation for "Other" selection

Reimbursement Contract #: Federal Agreement #:



**GRANT REQUEST FORM (GRF)**

**K) Recipient's Contact Information**

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

Name: Thai Trinh  
Address: 858 Stanton Rd  
City, State, Zip: Burlingame, CA  
94010-1404  
Phone: 510-919 -1249  
E-Mail: thai@cabansystems.com

**2. Recipient's Project Manager**

Name: Leland Price  
Address: 858 Stanton Rd  
City, State, Zip: Burlingame, CA  
94010-1404  
Phone: 1 831-219-2345  
E-Mail: leland@cabansystems.com

**L) Selection Process Used**

- Competitive Solicitation      Solicitation #: GFO-20-301
- First Come First Served Solicitation Solicitation #:

**M) The following items should be attached to this GRF**

- |   |   |  |
|---|---|--|
| 1. Exhibit A, Scope of Work                         | <input checked="" type="checkbox"/>     | Attached                                     |
| 2. Exhibit B, Budget Detail                         | <input checked="" type="checkbox"/>     | Attached                                     |
| 3. CEC 105, Questionnaire for Identifying Conflicts | <input checked="" type="checkbox"/>     | Attached                                     |
| 4. Recipient Resolution                             | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> Attached            |
| 5. CEQA Documentation                               | <input type="checkbox"/> N/A            | <input checked="" type="checkbox"/> Attached |

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**Agreement Manager**

\_\_\_\_\_

**Date**

\_\_\_\_\_

**Office Manager**

\_\_\_\_\_

**Date**

\_\_\_\_\_

**Deputy Director**

\_\_\_\_\_

**Date**

**Exhibit A  
Scope of Work  
Caban Systems, Inc.**

**I. TASK ACRONYM/TERM LISTS**

**A. Task List**

<b>Task #</b>	<b>CPR<sub>1</sub></b>	<b>Task Name</b>
1		General Project Tasks
2		Fuel Cell Research and Initial Design
3	X	Develop Software and Controls
4		Initial Prototype Build
5	X	EnduroPlus Prototype Validation
6		Evaluation of Project Benefits
7		Technology/Knowledge Transfer Activities

**B. Acronym/Term List**

<b>Acronym/Term</b>	<b>Meaning</b>
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CEC	California Energy Commission
CPR	Critical Project Review
CPUC	California Public Utilities Commission
Enduro System	Recipient's existing energy storage system whose production is being scaled-up
EnduroPlus System	Recipient's new system that will be developed by integrating the existing Enduro System with a commercially available hydrogen fuel cell to provide onsite stored green energy for at least 72 hours
GHG	Greenhouse Gas
IOU	Investor-Owned Utility
PSPS	Public Safety Power Shutoff
TAC	Technical Advisory Committee

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

**A. Purpose of Agreement**

The purpose of this agreement is to fund the development of an advanced modular lithium-ion battery pack with an integrated commercially available fuel cell and a sophisticated software package that will serve as a 72-hour backup energy source for

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

## **Exhibit A Scope of Work Caban Systems, Inc.**

California's life-saving critical infrastructure. The energy storage solution will replace gas- and diesel-powered generators and significantly increase safety and reliability while producing cost savings for investor owned utility (IOU) ratepayers and helping the state achieve its statutory energy goals.

### **B. Problem/ Solution Statement**

#### **Problem**

The lack of a commercialized clean energy backup power system for a wide range of critical infrastructures, including cellular towers, telecommunication base stations, radio signal towers, public utility microgrid systems and many others, has left IOU ratepayers increasingly vulnerable during electrical power outages. Not only are thousands of Californians unable to communicate during emergencies, critical infrastructure facilities often are forced to rely on gas- and diesel-powered generators, which exacerbate wildfire risks and release greenhouse gas (GHG) emissions and harmful pollutants, impeding the state's energy goals. Finding a non-fossil fuel solution has become even more urgent, particularly for cell towers and individuals with no land lines, because in July 2020, the California Public Utilities Commission's (CPUC) ordered wireless carriers to have 72-hours of backup power in high fire threat districts within 12 months.<sup>2</sup> Due to the lack of long range commercialized clean energy technologies, this likely will lead to increased deployment of gas- and diesel-powered generators, which in turn, will increase GHG emissions and harmful pollutants and exacerbate wildfire risks. There is an immediate need to advance clean energy storage technologies that provide life-saving safety features, cost savings, emission reductions, and the reduction of wildfire risks.

#### **Solution**

The Advanced Energy Storage for California's Critical Infrastructure Project (Project) will address these growing needs and build upon the Recipient's successful Prototype to Production: Modular Battery Platform Project for California Critical Infrastructure project to develop a second-generation, best-of-class, 72-hour clean energy backup system to serve critical infrastructure facilities. With support from the California Energy Commission (CEC), the Recipient scaled its robust, modular high-energy density battery pack to be best-in-class for safety, emissions, and cost-effectiveness for critical infrastructure. The project's success is evidenced by the Recipient's deployment of more than 50 solar-plus-storage products – the Enduro System – to cell sites. The next phase is to develop an integrated hardware and software solution to extend the system to provide at least a 72-hour duty cycle of energy backup to eliminate the use of gas- and diesel-powered generators at critical infrastructure facilities throughout California and beyond, which will help the state overcome barriers to achieve its statutory energy goals.

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<sup>2</sup> <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M343/K979/343979403.PDF>

## **Exhibit A Scope of Work Caban Systems, Inc.**

The Recipient's applied research and development Project will focus on integrating a clean hydrogen (H<sub>2</sub>) fuel cell into its second-generation, modular advanced lithium-ion battery pack. Together the system, EnduroPlus, will supply at least 72 hours of backup energy for California's life-saving infrastructure in the electricity sector, including cellular towers, telecommunication base stations, radio signal towers, and public utility microgrid systems. The Project also will develop advanced software that will give critical infrastructure providers bi-directional controls to continuously manage energy consumption and demand response on a minute-by-minute basis. In emergencies, such as Public Safety Power Shutoffs (PSPS) and outages caused by wildfires, the advanced demand response software will allow critical infrastructure facilities, including cell-phone service, to tap into backup clean energy, thus significantly increasing safety and reducing emissions for IOU ratepayers. Support from the CEC will make possible the advancement of clean energy storage to support critical infrastructure facilities and continue the technology's development and path to market adoption.

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

#### **Agreement Goals**

The goals of this Agreement are to:

- Advance a promising and innovative clean energy storage solution that will provide an efficient, resilient, and reliable source of power to maintain critical infrastructure.
- Reduce the need for and cost of grid extensions through self-sustaining local renewable power generation and storage solutions.
- Improve public safety and societal benefits by maintaining power and vital communication during planned power outages, emergencies, and natural disasters.
- Build upon the Recipient's successful CEC-funded Modular Battery Platform Project to develop a 72-hour clean energy storage system to serve critical infrastructure facilities.
- Provide greater reliability, lower costs, and increased safety for IOU ratepayers.
- Enable technological advancement to overcome barriers to achieve the state's statutory energy goals, including in AB 32, SB X1-2, AB 2514, SB 350 and Executive Order B-30-15.
- Significantly reduce GHG and other harmful emissions by replacing fossil fuel powered generators used by critical infrastructure.

#### **Ratepayer Benefits:**<sup>3</sup>

This Agreement will result in ratepayer benefits of greater electricity reliability, lower costs, and increased safety by providing a safe, reliable long-duration clean energy

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<sup>3</sup> California Public Resources Code, Section 25711.5(a) requires projects funded by the Electric Program Investment Charge (EPIC) to result in ratepayer benefits. The California Public Utilities Commission,

## **Exhibit A Scope of Work Caban Systems, Inc.**

storage solution for critical infrastructure facilities. The 72-hour backup energy system, EnduroPlus, will significantly improve infrastructure resiliency and reliability for IOU ratepayers during PSPS events and unplanned power outages. The backup energy system will enable demand response functionality for PSPS and unplanned power outages. The network of stationary storage can isolate itself from the grid when grid operators request a reduction in power demand or an unplanned power outage, which will maintain electrical power for communication systems, water treatment plants, community health centers, and many other critical infrastructure facilities. IOU ratepayers will realize cost savings through utility company costs savings that will result from EnduroPlus providing demand response capacity to the grid as well as providing backup power. This capacity would improve grid resiliency and stability, lowering the cost of operating the grid for ratepayers. In addition, the modular system offers distributed power supply, which will remove the cost of extending transmissions lines to utilities and the growing risks and associated costs of maintaining distribution lines in fire-prone and other sensitive areas.

The clean energy EnduroPlus will improve public safety for ratepayers by replacing fossil-fuel backup generators that produce high levels of PM, VOC, CO<sub>2</sub>, SO<sub>x</sub>, NO<sub>x</sub>, and other particulate matter, which negatively impact air quality. The Project's reliable clean energy backup also will protect ratepayers by keeping critical infrastructure systems operational during electrical equipment/infrastructure failures, brownouts, wildfires, earthquakes, severe storms and landslides. These include cellular towers, telecommunication base stations, radio signal towers, public utility microgrid systems, healthcare community centers and water-treatment plants – the Recipient's initial target markets.

### Technological Advancement and Breakthroughs:<sup>4</sup>

This Agreement will lead to technology advancement and breakthroughs to overcome barriers to the achievement of the State of California's statutory energy goals by accelerating the production of an emerging best-of-class hybrid energy storage + clean fuel cell technology that will eliminate the use of gas- and diesel-powered generators at critical infrastructure facilities throughout California and beyond. This is particularly important as more critical infrastructure facilities in California deploy backup energy systems to mitigate the impacts from planned and unplanned power outages. In addition, the CPUC is requiring all cell towers to have 72-hour backup energy storage by July

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which established the EPIC in 2011, defines ratepayer benefits as greater reliability, lower costs, and increased safety (See CPUC "Phase 2" Decision 12-05-037 at page 19, May 24, 2012, [http://docs.cpuc.ca.gov/PublishedDocs/WORD\\_PDF/FINAL\\_DECISION/167664.PDF](http://docs.cpuc.ca.gov/PublishedDocs/WORD_PDF/FINAL_DECISION/167664.PDF)).

<sup>4</sup> California Public Resources Code, Section 25711.5(a) requires projects funded by the Electric Program Investment Charge (EPIC) to result in ratepayer benefits. The California Public Utilities Commission, which established the EPIC in 2011, defines ratepayer benefits as greater reliability, lower costs, and increased safety (See CPUC "Phase 2" Decision 12-05-037 at page 19, May 24, 2012, [http://docs.cpuc.ca.gov/PublishedDocs/WORD\\_PDF/FINAL\\_DECISION/167664.PDF](http://docs.cpuc.ca.gov/PublishedDocs/WORD_PDF/FINAL_DECISION/167664.PDF)).

## **Exhibit A Scope of Work Caban Systems, Inc.**

2021, which will likely lead to increased deployment of gas- and diesel-powered generators, which will increase GHG emissions and harmful pollutants and exacerbate wildfire risks — all counter to the achievement of the state’s energy goals.

Therefore, there is an immediate need to develop an alternative long-duration energy storage solution that improves safety, reduces infrastructure operational expenses, and eliminates criteria and other harmful pollutants by directly replacing the use of internal combustion generators. Building on the successful Enduro System architecture, the EnduroPlus will provide remote bi-directional power management that will actively communicate with the grid allowing for demand management control outside of PSPS events. EnduroPlus’ scalable and modular design will serve as a broad solution in the critical infrastructure sector that currently relies on diesel backup generators, including utilities, municipalities, first responders and security services, water systems, transportation systems, agriculture and many other energy-intensive applications, thus helping to achieve the State’s statutory energy goals. In addition to the applications and benefits mentioned above, the EnduroPlus will have analytical remote monitoring capabilities for increased connectivity during critical operation events.

### **Agreement Objectives**

The Objectives of the Project are to:

- To make the EnduroPlus System, integrate the Recipient’s existing modular advanced lithium-ion battery platform (Enduro System) with a commercially available hydrogen fuel cell to provide onsite stored green energy for at least 72 hours.
- Engineer a software tool that accurately and quickly estimates the optimal energy solution based on a customer’s site configuration to reduce costs and help accelerate commercial adoption.
- Develop intelligent software to optimally operate the hybrid battery and fuel cell solution’s hardware and employ cloud infrastructure to reduce onsite load and provide a minimum level of service for at least 72 hours.
- Create a needed software solution that allows on-demand responses to reduce load across a network of sites and employs grid-stability features, relieving stress on the grid, particularly during often-predictable PSPS.
- Employ a software feature that enables demand response management to alleviate demand on the grid during non-emergency events.
- Provide 72-hour backup power solution that can sustainably serve more than 90 percent of cell towers in California.



**Exhibit A**  
**Scope of Work**  
**Caban Systems, Inc.**

### III. TASK 1 GENERAL PROJECT TASKS

#### PRODUCTS

##### Subtask 1.1 Products

The goal of this subtask is to establish the requirements for submitting project products (e.g., reports, summaries, plans, and presentation materials). Unless otherwise specified by the Commission Agreement Manager (CAM), the Recipient must deliver products as required below by the dates listed in the **Project Schedule (Part V)**. All products submitted which will be viewed by the public, must comply with the accessibility requirements of Section 508 of the federal Rehabilitation Act of 1973, as amended (29 U.S.C. Sec. 794d), and regulations implementing that act as set forth in Part 1194 of Title 36 of the Federal Code of Regulations. All technical tasks should include product(s). Products that require a draft version are indicated by marking “**(draft and final)**” after the product name in the “Products” section of the task/subtask. If “(draft and final)” does not appear after the product name, only a final version of the product is required. With respect to due dates within this Scope of Work, “**days**” means working days.

##### The Recipient shall:

###### For products that require a draft version, including the Final Report Outline and Final Report

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

###### For products that require a final version only

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

###### For all products

- Submit all data and documents required as products in accordance with the following:

**Exhibit A**  
**Scope of Work**  
**Caban Systems, Inc.**

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**

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.

**Exhibit A**  
**Scope of Work**  
**Caban Systems, Inc.**

**MEETINGS**

**Subtask 1.2 Kick-off Meeting**

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

**The Recipient shall:**

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

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

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

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

- The CAM’s expectations for accomplishing tasks described in the Scope of Work;
  - An updated Project Schedule;
  - Technical products (subtask 1.1);
  - Progress reports (subtask 1.5);
  - Final Report (subtask 1.6);
  - Technical Advisory Committee meetings (subtasks 1.10 and 1.11); and
  - Any other relevant topics.
- Provide *Kick-off Meeting Presentation* to include but not limited to:
    - Project overview (i.e. project description, goals and objectives, technical tasks, expected benefits, etc.)
    - Project schedule that identifies milestones
    - List of potential risk factors and hurdles, and mitigation strategy
  - Provide an *Updated Project Schedule, Match Funds Status Letter, and Permit Status Letter*, as needed to reflect any changes in the documents.

**Exhibit A**  
**Scope of Work**  
**Caban Systems, Inc.**

**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 will be reallocated to cover the additional costs borne by the Recipient, but the overall Agreement amount will not increase. CPR meetings generally take place at the CEC, but they may take place at another location, or may be conducted via electronic conferencing (e.g., WebEx) as determined by the CAM.

**The Recipient shall:**

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

**The CAM shall:**

- Determine the location, date, and time of each CPR meeting with the Recipient's input.

**Exhibit A**  
**Scope of Work**  
**Caban Systems, Inc.**

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

**Recipient Products:**

- CPR Report(s)

**CAM Products:**

- CPR Agenda
- Progress Determination

**Subtask 1.4 Final Meeting**

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

**The Recipient shall:**

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

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

- The technical portion of the meeting will involve the presentation of findings, conclusions, and recommended next steps (if any) for the Agreement. The CAM will determine the appropriate meeting participants.
- The administrative portion of the meeting will involve a discussion with the CAM and the CAO of the following Agreement closeout items:
  - Disposition of any procured equipment.
  - The CEC's request for specific "generated" data (not already provided in Agreement products).
  - Need to document the Recipient's disclosure of "subject inventions" developed under the Agreement.

## **Exhibit A Scope of Work Caban Systems, Inc.**

- “Surviving” Agreement provisions such as repayment provisions and confidential products.
- Final invoicing and release of retention.
- Prepare a *Final Meeting Agreement Summary* that documents any agreement made between the Recipient and Commission staff during the meeting.
- Prepare a *Schedule for Completing Agreement Closeout Activities*.
- Provide copies of *All Final Products* on a USB memory stick, organized by the tasks in the Agreement.

### **Products:**

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

## **REPORTS AND INVOICES**

### **Subtask 1.5 Progress Reports and Invoices**

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

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

- Submit a monthly *Progress Report* to the CAM. Each progress report must:
  - Summarize progress made on all Agreement activities as specified in the scope of work for the preceding month, including accomplishments, problems, milestones, products, schedule, fiscal status, and an assessment of the ability to complete the Agreement within the current budget and any anticipated cost overruns. See the Progress Report Format Attachment for the recommended specifications.
- Submit a monthly or quarterly *Invoice* that follows the instructions in the “Payment of Funds” section of the terms and conditions, including a financial report on Match Funds and in-state expenditures.

### **Products:**

- Progress Reports
- Invoices

### **Subtask 1.6 Final Report**

The goal of this subtask is to prepare a comprehensive Final Report that describes the original purpose, approach, results, and conclusions of the work performed under this Agreement. When creating the Final Report Outline and the Final Report, the Recipient must use the CEC Style Manual provided by the CAM.

**Exhibit A**  
**Scope of Work**  
**Caban Systems, Inc.**

**Subtask 1.6.1 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 Product:**

- Energy Commission 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, Energy Commission Style Manual, and Final Report Template provided by the CAM with the following considerations:
  - Ensure that the report includes the following items, in the following order:
    - Cover page (**required**)
    - Credits page on the reverse side of cover with legal disclaimer (**required**)
    - Acknowledgements page (optional)
    - Preface (**required**)
    - Abstract, keywords, and citation page (**required**)
    - Table of Contents (**required**, followed by List of Figures and List of Tables, if needed)
    - Executive summary (**required**)
    - Body of the report (**required**)
    - References (if applicable)
    - Glossary/Acronyms (If more than 10 acronyms or abbreviations are used, it is required.)
    - Bibliography (if applicable)
    - Appendices (if applicable) (Create a separate volume if very large.)
    - Attachments (if applicable)
  - Submit a draft of the Executive Summary to the TAC for review and comment.
  - Develop and submit a *Summary of TAC Comments* 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.

**Exhibit A**  
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**Caban Systems, Inc.**

- 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
- Draft Final Report
- *Written Responses to Comments (if applicable)*
- 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 CEC funds. Match funds must be identified in writing, and the Recipient must obtain any associated commitments before incurring any costs for which the Recipient will request reimbursement.

**The Recipient shall:**

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

If match funds were a part of the proposal that led to the CEC awarding this Agreement, then provide in the letter:

- A list of the match funds that identifies:
  - The amount of cash match funds, their source(s) (including a contact



**Exhibit A**  
**Scope of Work**  
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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 1.8 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.

**Exhibit A**  
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- The schedule the Recipient will follow in applying for and obtaining the permits.

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

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

**Products:**

- Permit Status Letter
- Updated List of Permits (*if applicable*)
- Updated Schedule for Acquiring Permits (*if applicable*)
- Copy of Each Approved Permit (*if applicable*)

**Subtask 1.9 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 each 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*)

**Exhibit A**  
**Scope of Work**  
**Caban Systems, Inc.**

**TECHNICAL ADVISORY COMMITTEE**

**Subtask 1.10 Technical Advisory Committee (TAC)**

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

The purpose of the TAC is to:

- Provide guidance in project direction. The guidance may include scope and methodologies, timing, and coordination with other projects. The guidance may be based on:
  - Technical area expertise;
  - Knowledge of market applications; or
  - Linkages between the agreement work and other past, present, or future projects (both public and private sectors) that TAC members are aware of in a particular area.
- Review products and provide recommendations for needed product adjustments, refinements, or enhancements.
- Evaluate the tangible benefits of the project to the state of California and provide recommendations as needed to enhance the benefits.
- Provide recommendations regarding information dissemination, market pathways, or commercialization strategies relevant to the project products.
- 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;

**Exhibit A**  
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- Utility representatives;
- Air district staff; and
- Members of relevant technical society committees.

**The Recipient shall:**

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

**Products:**

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

**Subtask 1.11 TAC Meetings**

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

**The Recipient shall:**

- Discuss the TAC meeting schedule with the CAM at the Kick-off meeting. Determine the number and location of meetings (in-person and via teleconference) in consultation with the CAM.
- Prepare a *TAC Meeting Schedule* that will be presented to the TAC members during recruiting. Revise the schedule after the first TAC meeting to incorporate meeting comments.
- Prepare a *TAC Meeting Agenda* and *TAC Meeting Back-up Materials* for each TAC meeting.
- Organize and lead TAC meetings in accordance with the TAC Meeting Schedule. Changes to the schedule must be pre-approved in writing by the CAM.
- Prepare *TAC Meeting Summaries* that include any recommended resolutions of major TAC issues.

**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.

## **Exhibit A Scope of Work Caban Systems, Inc.**

- Help identify key areas where the project has a competitive advantage, value proposition, or strength upon which to build.
- Advocate on behalf of the project in its effort to build partnerships, governmental support and relationships with a national spectrum of influential leaders.
- Ask probing questions that 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 1.12 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 from 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

**Exhibit A**  
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- Project Performance Metrics Results

#### **IV. TECHNICAL TASKS**

##### **TASK 2 - FUEL CELL RESEARCH AND INITIAL DESIGN**

The goals of this task are to develop the EnduroPlus system architecture, specify product requirements, identify initial suppliers, and develop a validation test plan.

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

- Perform a detailed technical architecture plan
- Contact and review the top hydrogen fuel cell suppliers
- Identify and purchase 2 test fuel cell systems
- Perform initial functionality tests
- Review system design and build quality
- Select fuel cell system for integration
- Prepare a *Fuel Cell System Findings Report* that includes but is not limited to:
  - High-level executive summary
  - Process and results of testing
  - Equipment planned for use
  - Technical issues
  - Lessons learned
  - This report should not disclose any confidential information.
- Develop a document that outlines all product requirements
- Identify any additional components suppliers
- Develop initial prototype system design
- Prepare a *Prototype Findings Report* that includes but is not limited to:
  - High-level executive summary
  - Overview of prototype design
  - Technical issues
  - Lessons learned
  - This report should not disclose any confidential information.

##### **Products:**

- Fuel Cell System Findings Report
- Prototype Findings Report

##### **TASK 3 - DEVELOP SOFTWARE AND CONTROLS**

The goals of this task are to identify all product features, develop a software roadmap, purchase and install relevant test equipment, and test software for functionality and reliability.

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

- Identify all product features related to the integration of a fuel cell and related controls

## **Exhibit A Scope of Work Caban Systems, Inc.**

- Develop software roadmap for embedded software related to fuel cell system and related controls
  - Outline development plan and bi-weekly sprint schedule
  - Review roadmap with management team for scope and feasibility
- Identify all product features related to Priority Load Shedding
- Develop software roadmap for Priority Load Shedding
  - Outline development plan and bi-weekly sprint schedule
  - Review roadmap with management team for scope and feasibility
- Identify all product features related to Demand Response
- Develop software roadmap for Demand Response
  - Outline development plan and bi-weekly sprint schedule
  - Review roadmap with management team for scope and feasibility
- Prepare a *Software Roadmap Report* that includes but is not limited to:
  - High-level executive summary
  - Overview of software development roadmap across all products
  - Technical issues
  - Lessons learned
  - This report should not disclose any confidential information.
- Identify, purchase, and install relevant test equipment
- Develop software testing plan across all features in development
- Prepare a *Software Testing Plan* that includes but is not limited to:
  - High-level executive summary
  - Overview of software testing plan, methods, and reliability
  - Technical issues
  - Lessons learned
  - This report should not disclose any confidential information.
- Execute on software roadmaps
- Test software for functionality and reliability
- Prepare *CPR Report #1*
- Participate in a CPR meeting per subtask 1.3

### **Products:**

- Software Roadmap Report
- Software Testing Plan
- CPR Report #1

### **TASK 4 - INITIAL PROTOTYPE BUILD**

The goal of this task is to construct an initial integrated unit with all the tested subcomponents and respective tools.

### **The Recipient shall:**

- Review and optimize prototype design
- Finalize prototype design
- Prepare a *Prototype Design Report* that includes but is not limited to:

**Exhibit A**  
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- High-level executive summary
- Overview of prototype design
- Technical Issues
- Lessons Learned
- This report should not disclose any confidential information.
- Identify and purchase tools and equipment needed to build the prototype
- Manufacture the prototype EnduroPlus unit
- Develop the initial product engineering requirements

**Products:**

- Prototype Design Report

**TASK 5 - ENDUROPLUS PROTOTYPE VALIDATION**

The goal of this task is to finalize product requirements based on the previous task and equipment engineering, develop test procedures and requirements, identify any additional required equipment, and execute on testing plan.

**The Recipient shall:**

- Review initial product engineering requirements
- Develop test procedures and requirements
- Identify test equipment
- Identify any materials or fuels needed
- Prepare a *Product Test Plan* that includes but is not limited to:
  - High-level executive summary
  - Method by which the product will be measured for effectiveness
  - Equipment planned and other materials planned for use
  - Technical issues
  - Lessons learned
  - This report should not disclose any confidential information.
- Purchase, install, and calibrate any additional testing equipment
- Execute on testing plan
- Review data collected from prototype operation
- Finalize product specifications
- Prepare *CPR Report #2*
- Participate in a CPR meeting per subtask 1.3

**Products:**

- Product Test Plan
- CPR Report #2

**TASK 6 EVALUATION OF PROJECT BENEFITS**

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



**Exhibit A**  
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**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 December 15th of each year. The Annual Survey includes but is not limited to the following information:
  - Technology commercialization progress
  - New media and publications
  - Company growth
  - Follow-on funding and awards received
- Complete the *Final Project Benefits Questionnaire*. The *Final Project Benefits Questionnaire* shall be completed by the Recipient with 'Final' selected for the 'Relevant data collection period' and submitted to the CAM for review and approval.
- Respond to CAM questions regarding the questionnaire drafts.
- Complete and update the project profile on the CEC's public online project and recipient directory on the [Energize Innovation website \(www.energizeinnovation.fund\)](http://www.energizeinnovation.fund), and provide *Documentation of Project Profile on EnergizeInnovation.fund*, including the profile link.
- If the Prime Recipient is an Innovation Partner on the project, complete and update the organizational profile on the CEC's public online project and recipient directory on the [Energize Innovation website \(www.energizeinnovation.fund\)](http://www.energizeinnovation.fund), and provide *Documentation of Organization Profile on EnergizeInnovation.fund*, including the profile link.

**Products:**

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

**TASK 7 TECHNOLOGY/KNOWLEDGE TRANSFER ACTIVITIES**

The goal of this task is to develop a plan to accelerate the commercial adoption of the EnduroPlus. Eligible activities include, but are not limited to, the following:

- Scale-up analysis including manufacturing analysis, independent design verification, and process improvement efforts.
- Technology verification testing, or application to a test bed program located in California.
- Legal services or licensing to secure necessary intellectual property to further develop the technology.

**Exhibit A**  
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- Market research, business plan development, and cost-performance modeling.
- Entry into an incubator or accelerator program located in California.

**The Recipient Shall:**

- Develop and submit a *Technology Transfer Plan (Draft/Final)* that identifies the proposed activities the recipient will conduct to accelerate the successful commercial adoption of the technology.
- Present the *Draft Technology Transfer Plan* to the TAC for feedback and comments.
- Develop and submit a *Summary of TAC Comments* that summarizes comments received from the TAC members on the *Draft Technology Transfer 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 an explanation why.
- Submit the *Final Technology Transfer Plan* to the CAM for approval.
- Implement activities identified in *Final Technology Transfer Plan*.
- Develop and submit a *Technology Transfer Summary Report (Draft/Final)* that includes high level summaries of the activities, results, and lessons learned of tasks performed relating to implementing the *Final Technology Transfer Plan*. This report should not include any proprietary information.
- When directed by the CAM, develop presentation materials for an CEC-sponsored conference/workshop(s) on the project.
- When directed by the CAM, participate in annual EPIC symposium(s) sponsored by the 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:**

- Technology Transfer Plan (Draft/Final)
- Summary of TAC Comments
- Technology Transfer Summary Report (Draft/Final)
- High Quality Digital Photographs

**V. PROJECT SCHEDULE**

Please see attached Excel spreadsheet.

**STATE OF CALIFORNIA**

**STATE ENERGY RESOURCES  
CONSERVATION AND DEVELOPMENT COMMISSION**

RESOLUTION - RE: CABAN SYSTEMS, INC.

**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-20-026 with Caban Systems, Inc. for a \$1,095,264 grant to develop a state-of-the-art clean energy storage backup system to serve critical infrastructure facilities to mitigate the health and safety risks from planned and unplanned power outages. The project will build upon Caban Systems, Inc.'s successful CEC-funded Modular Battery Platform Project by integrating a commercially available clean hydrogen fuel cell into its advanced modular lithium-ion battery pack to provide over 72 hours of clean back-up power; 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 CEC does hereby certify that the foregoing is a full, true, and correct copy of a Resolution duly and regularly adopted at a meeting of the CEC held on April 14, 2021.

AYE:  
NAY:  
ABSENT:  
ABSTAIN:

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Patricia Carlos  
Secretariat