



**CALIFORNIA
ENERGY COMMISSION**



**California Energy Commission
September 11, 2024 Business Meeting
Backup Materials for Regents of the University of California; University of
California, San Diego (UCSD)**

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

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

[PROPOSED]

RESOLUTION NO: 24-0911-10

STATE OF CALIFORNIA

**STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION**

**RESOLUTION: Regents of the University of California; University of California,
San Diego**

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

RESOLVED, that the CEC approves agreement DBA-24-004 with the Regents of the University of California; University of California, San Diego (UCSD) for a \$7,146,296 grant. Under this agreement, UCSD will purchase, install, and report performance of a four-hour lithium-ion battery energy storage system with a nameplate capacity of 9.8 MW / 39.2 MWh. The system will replace (upgrade) an existing two-hour lithium-ion battery system with a nameplate capacity of 2.5 MW / 5.0 MWh that is part of the existing bulk grid power assets owned and operated by UCSD; and

RESOLVED, that this agreement will ensure the availability of the incremental capacity of the battery energy storage system during extreme events for a term of five years from the commercial online date of the battery energy storage system; and

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

CERTIFICATION

The undersigned Secretariat to the CEC does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the CEC held on September 11, 2024.

AYE:

NAY:

ABSENT:

ABSTAIN:

Dated:

Kristine Banaag
Secretariat



GRANT REQUEST FORM (GRF)

A. New Agreement Number

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

New Agreement Number: DBA-24-004

B. Division Information

1. Division Name: Reliability, Renewable Energy & Decarbonization Incentives Division
2. Agreement Manager: Pamela Doughman
3. MS-:45
4. Phone Number: (916) 776-0750

C. Recipient's Information

1. Recipient's Legal Name: The Regents of the University of California; University of California, San Diego
2. Federal ID Number: 95-6006144

D. Title of Project

Title of project: Securing Bulk Grid Reliability with a Zero-Emission High-Density Distributed Asset

E. Term and Amount

1. Start Date: October 9, 2024
2. End Date: March 29, 2031
3. Amount: \$7,146,296

F. Business Meeting Information

1. Are the ARFVTP agreements \$75K and under delegated to Executive Director? N/A
2. The Proposed Business Meeting Date: 09-11-2024
3. Consent or Discussion? Discussion
4. Business Meeting Presenter Name: Ashley Emery
5. Time Needed for Business Meeting: 5 minutes
6. The email subscription topic is: Distributed Electricity Backup Assets

Agenda Item Subject and Description:

Regents of the University of California; University of California, San Diego. Proposed resolution approving Agreement DBA-24-004 with Regents of the University of California, University of California, San Diego (UCSD) for \$7,146,296 and adopting staff's recommendation that this action is exempt from CEQA. This agreement will purchase, install, and report performance of a four-hour lithium-ion battery system with a nameplate capacity of 9.8 MW / 39.2 MWh. The system will replace (upgrade) an existing two-hour lithium-ion battery system with a nameplate capacity of 2.5 MW / 5.0 MWh that is part of the existing bulk grid power assets owned and operated by UCSD. (DEBA funding) Contact: Pamela Doughman (Staff Presentation: 5 minutes)

G. California Environmental Quality Act (CEQA) Compliance

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

Yes



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

a) Agreement **IS** exempt?

Yes

Statutory Exemption?

No

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

PRC section number: None

CCR section number: None

Categorical Exemption?

Yes

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

CCR section number: 15301 Existing Facilities, Minor Alteration

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

No

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

California Code of Regulations, title 14, section 15301, subdivision (b) provides that the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, such as existing facilities of investor and publicly owned utilities used to provide electric power, natural gas, sewerage, or other public utility services, involving negligible or no expansion of existing or former use, are categorically exempt from the provisions of CEQA.

This project will involve upgrading the existing BESS, currently rated at 2.5 MW/5.0 MWh, with a new lithium-ion BESS with a capacity nameplate of 9.8 MW/ 39.2 MWh at the UCSD East Campus Utility Plant at 9413 Voight Drive, San Diego (APN 760-2511-700). The BESS is a component of the existing microgrid. The project site is approximately one-half acre of pre-disturbed land and is located immediately adjacent to the UCSD East Utility Plant and a 69 kVA substation (APN 3431-6040-00). The upgraded BESS will occupy the same footprint as the existing BESS. The site is a fully built-out, fenced-in, paved area with existing transformers, underground 12 kV high-voltage electrical lines, and high-voltage switchgear. The site is also encircled by an existing 8-inch curb for containment and has been fully permitted by UCSD’s Fire Marshall Office for lithium-ion BESS use.

The current BESS will be removed and decommissioned. Work required to install the new BESS containers includes the construction of new concrete footings for the containers and five new 2 MW transformers, 180 feet of underground trenching between the containers and the 12 kV switchgear, installation of underground electrical conduits and associated conductor pulls, replacement fill and



poured asphalt above the trenching, and crane lifts for each of the ten containers and five transformers. The project will involve the minor alteration of an existing microgrid with a more efficient BESS. This project will result in negligible or no expansion of use of the East Campus Utility Plant beyond that already existing.

University of California San Diego, with approval authority delegated by The Regents of the University of California have deemed the project as an allowed modification to the existing UCSD East Campus Utility Plant and it does not require a local discretionary permit. The installation of the upgraded BESS, which is a component of the microgrid, will be a minor alteration of an existing utility system for the UCSD East Campus Utility Plant, with no physical expansion beyond the existing system footprint.

The upgrade of the existing BESS will not result in a significant cumulative impact, there is no reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances, it will not damage resources within a scenic highway, it will not cause substantial adverse change to the significance of a historic resource, and it is not located on a listed site pursuant to Government Code 65962.5. Therefore, the project is categorically exempt under California Code of Regulations, title 14, section 15301, subdivision (b).

b) Agreement **IS NOT** exempt.

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

No

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

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

H. Is this project considered “Infrastructure”?

No

I. Subcontractors

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

Delete any unused rows from the table

Subcontractor Legal Company Name	CEC Funds	Match Funds
TBD Engineering Contractor	\$ 0	\$75,000
TBD Civil Contractor	\$ 0	\$1,530,600



Subcontractor Legal Company Name	CEC Funds	Match Funds
TBD Electrical Contractor	\$ 0	\$1,118,680

J. Vendors and Sellers for Equipment and Materials/Miscellaneous

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

Vendor/Seller Legal Company Name	CEC Funds	Match Funds
TBD Battery System Supplier	\$5,229,242	\$5,355,625
TBD High-Voltage Transformer Supplier	\$538,598	\$528,057

K. Key Partners

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

Key Partner Legal Company Name
No key partners to report

L. Budget Information

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

Funding Source	Funding Year of Appropriation	Budget List Number	Amount
DEBA	2021-22	500.108	\$7,146,296

TOTAL Amount: \$7,146,296

R&D Program Area: Not Applicable

Explanation for "Other" selection Not Applicable

Reimbursement Contract #: Not Applicable

Federal Agreement #: Not Applicable

M. Recipient's Contact Information

1. Recipient's Administrator/Officer

Name: Miriam Holtzman

Address: Center for Energy Research, UC San Diego, 9500 Gilman Drive



STATE OF CALIFORNIA
CALIFORNIA ENERGY COMMISSION

Grant Request Form
CEC-270 (Revised 01/2024)

City, State, Zip: La Jolla, CA 92093

Phone: (858) 534-8936

E-Mail: mholtzman@ucsd.edu

2. Recipient's Project Manager

Name: Michael D. Ferry

Address: Center for Energy Research, UC San Diego, 9500 Gilman Drive, MC 0417

City, State, Zip: La Jolla, CA 92093-0417

Phone: (858) 534-9720

E-Mail: mdferry@ucsd.edu

N. Selection Process Used

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

Selection Process	Additional Information
Competitive Solicitation #	GFO-23-401
First Come First Served Solicitation #	Not Applicable
Other	Not Applicable

O. Attached Items

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

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

Approved By

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

Agreement Manager: Pamela Doughman

Approval Date: April 25, 2024



STATE OF CALIFORNIA
CALIFORNIA ENERGY COMMISSION

Office Manager: Ashley Emery

Approval Date: April 30, 2024

Director: Deana Carrillo

Approval Date: June 10, 2024

Grant Request Form
CEC-270 (Revised 01/2024)

Exhibit A Scope of Work

I. TASK ACRONYM/TERM LISTS

A. Task List

Task #	CPR ¹	Task Name
1		General Project Tasks
2		Project Design & Engineering
3		Project Permitting
4	X	Long-Lead Time and Major Equipment Procurement
5		Construction Request for Proposals
6		Project Construction
7		System Interconnection and Commercial Operation
8		Annual Measurement and Verification Reporting
9		Evaluation of Project Benefits
10		Project Fact Sheet

B. Acronym/Term List

Acronym/Term	Meaning
CAISO	California Independent System Operator
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CEC	California Energy Commission
CPR	Critical Project Review
DEBA	Distributed Electricity Backup Assets
MW	Megawatt
MWh	Megawatt-hour
Recipient	The Regents of the University of California; University of California, San Diego
SCADA	Supervisory Control and Data Acquisition

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

A. Purpose of Agreement

The purpose of this Agreement is to fund installation and reporting of performance of a four-hour lithium-ion battery system. This is a capacity upgrade for an existing battery system and will connect to the bulk electricity system at the same interconnection point as the existing battery system.

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.

Exhibit A

Scope of Work

B. Problem/ Solution Statement

Background

Assembly Bill (AB) 205 (Ting, Chapter 61, Statutes of 2022) created the Strategic Reliability Reserve to support the state's electric grid reliability during extreme events. PRC Section 25790(c) states, "As California transitions to a clean energy future and contends with climate impacts and other challenges, sufficient capacity of new and existing generation assets will be required to maintain reliability during extreme events." As part of the Strategic Reliability Reserve, the Distributed Electricity Backup Assets (DEBA) Program provides incentives for constructing cleaner and more efficient distributed energy assets to strengthen electricity reliability. The DEBA Program also supports efficiency upgrades and capacity additions to existing bulk grid power generators in California that will support the state's electrical grid during extreme events, prioritizing 1) feasible, cost-effective zero- and low-emission resources, and then 2) feasible, cost-effective conventional resources. Grant funding under GFO-23-401 is intended to accelerate project timelines and help fill gaps in the market that are preventing implementation of eligible projects.

Problem

Interconnection of new bulk grid electricity assets can take multiple years. A large amount of existing bulk grid electricity assets plan to retire in coming years. Until new reliability resources are available, less efficient bulk grid natural gas power plants may be needed to maintain reliability, delaying the implementation of plans to take these resources offline.

Solution

Under this Agreement the Recipient will purchase, install, and report performance of a battery energy storage system comprised of self-contained, fully integrated containerized systems for a total of 9.8 MW at 4-hours of capacity (39.2 MWh). This battery capacity will be added to the existing bulk grid power assets owned and operated by UC San Diego at the Central Utilities Plant and Battery Energy Storage System. The project will upgrade the existing 2.5 MW/5 MWh lithium-ion battery system, installed in 2015 and operating in the CAISO market since 2020, to a nameplate capacity of 9.8 MW/39.2 MWh. The project will occupy the same footprint as the existing system, utilize a majority of the same electrical infrastructure, and connect to the bulk electricity system at the same interconnection point.

C. Goals and Objectives of the Agreement

Agreement Goals

The goals of this Agreement are to:

- Accelerate purchase and installation of a 4-hour battery energy storage system co-located with an existing power plant and interconnected to the bulk transmission grid in California.
- Measure and verify five (5) years of performance of the availability of the incremental capacity of the battery energy storage system during peak reliability hours (4 p.m. – 10 p.m.) and electricity grid emergency events.
- Measure and verify five (5) years of performance of the battery energy storage system to charge during the day when the greenhouse gas intensity of grid electricity is low and discharge during peak reliability hours (4 p.m. – 10 p.m.).

Agreement Objectives

The objectives of this Agreement are to:

Exhibit A Scope of Work

- Purchase and install a battery energy storage system that increases the nameplate capacity of an existing facility that is interconnected in California to the bulk transmission grid.
- Make the incremental capacity of the battery energy storage system available during extreme events for a term of five years from the commercial online date of the battery energy storage system.
- Make the incremental capacity of the battery energy storage system available on a day-ahead and real-time basis to the host California Balancing Authority for economic and exceptional dispatch, consistent with the applicable requirements and operational capabilities of the battery energy storage system.
- Provide measurement and verification data and performance reports according to a measurement verification plan approved by the CAM.

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

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.

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.

Exhibit A

Scope of Work

The meeting may take place in person or by electronic conferencing (e.g., Teams), 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 1.8);
- Permit documentation (subtask 1.9);
- Subcontracts (subtask 1.10); 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); and
 - Any other relevant topics.
- Provide *Kick-off Meeting Presentation* to include but not limited to:
 - Project overview (i.e. project description, goals and objectives, technical tasks, expected benefits, etc.)
 - Project schedule that identifies milestones
 - List of potential risk factors and hurdles, and mitigation strategy
 - Provide an *Updated Project Schedule*, *Match Funds Status Letter*, and *Permit Status Letter*, as needed to reflect any changes in the documents.

The CAM shall:

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

Recipient Products:

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

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

Exhibit A

Scope of Work

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., Teams) as determined by the CAM.

The Recipient shall:

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

The CAM shall:

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

Recipient Products:

- CPR Report(s)

CAM Products:

- CPR Agenda
- Progress Determination

Subtask 1.4 Final Meeting

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

The Recipient shall:

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

Exhibit A

Scope of Work

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

- The technical portion of the meeting will involve the presentation of findings, conclusions, and recommended next steps (if any) for the Agreement. The CAM will determine the appropriate meeting participants.
- The administrative portion of the meeting will involve a discussion with the CAM and the CAO of the following Agreement closeout items:
 - Disposition of any procured equipment.
 - The CEC's request for specific "generated" data (not already provided in Agreement products).
 - Need to document the Recipient's disclosure of "subject inventions" developed under the Agreement.
 - "Surviving" Agreement provisions including but not limited to the repayment provisions, confidential products, and data sharing listed in the Standard Terms & Conditions, Section 22(K).
 - 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 Bimonthly Status Updates

- The goal of this task is to have bimonthly status updates between the CAM and Recipient to verify that satisfactory and continued progress is made towards achieving the objectives of this Agreement on time and within budget.
- The updates shall include information to monitor the timeliness of the commercial online date and ensure that all reimbursable activities scheduled to be completed by March 30, 2030, are complete and reimbursed by the CEC before the liquidation date of June 30, 2030. No tasks completed after March 30, 2030, shall be reimbursed by CEC funds.
- The objectives of this task are to summarize activities performed during the reporting period, to identify activities planned for the next reporting period, to identify issues that may affect performance and expenditures, to verify that all CEC reimbursable activities scheduled to be completed by March 30, 2030, are completed and reimbursed before the liquidation date of June 30, 2030, to verify match funds are being proportionally spent concurrently or in advance of CEC funds or are being spent in accordance with an approved Match Funding Spending Plan, to form the basis for determining whether invoices are consistent with work performed, and to answer any other questions from the CAM. Bimonthly calls might not be held on those months when a quarterly progress report is submitted or the CAM determines that a bimonthly call is unnecessary.

Exhibit A Scope of Work

The CAM shall:

- Review bimonthly email summary.
- Provide questions to the Recipient prior to the bimonthly call.
- Provide call summary notes to Recipient of items discussed during call.

The Recipient shall:

- Email a summary every two months to the CAM.
- Schedule a follow-up call with the CAM to discuss project status updates.
- Review the questions provided by CAM prior to the bimonthly call.
- Provide verbal answers to the CAM during the call.

Product:

- Email to CAM every two months with status updates.
- Email to CAM concurring with bimonthly call summary notes.

Subtask 1.6 Quarterly Progress Reports and Invoices

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

The Recipient shall:

- Submit a Quarterly Progress Report to the CAM. Each progress report must:
 - Summarize progress made on all Agreement activities as specified in the scope of work for the reporting period, including accomplishments, problems, milestones, products, schedule, fiscal status, and an assessment of the ability to complete the Agreement within the current budget and any anticipated cost overruns. Progress reports are due to the CAM the 10th day of each January, April, July, and October. The Quarterly Progress Report template can be found on the ECAMS Resources webpage available at: <https://www.energy.ca.gov/media/4691>
- Submit a monthly or quarterly Invoice on the invoice template(s) provided by the CAM.

Recipient Products:

- Quarterly Progress Reports
- Invoices

CAM Product:

- Invoice template

Subtask 1.7 Final Report

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

Subtask 1.7.1 Final Report Outline

The Recipient shall:

Exhibit A

Scope of Work

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

Recipient Products:

- Final Report Outline (draft and final)

CAM Products:

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

Subtask 1.7.2 Final Report

The Recipient shall:

- Prepare a Final Report for this Agreement in accordance with the approved Final Report Outline, Energy Commission Style Manual, and Final Report Template provided by the CAM with the following considerations:
- Ensure that the report includes the following items, in the following order:
 - Cover page (**required**)
 - Credits page on the reverse side of cover with legal disclaimer (**required**)
 - Acknowledgements page (optional)
 - Preface (**required**)
 - Abstract, keywords, and citation page (**required**)
 - Table of Contents (**required**, followed by List of Figures and List of Tables, if needed)
 - Executive summary (**required**)
 - 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 report to the CAM for review and comment at least two months prior to the end of the agreement. 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. The final report must be submitted at least one month prior to the agreement end date.

Products:

- Draft Final Report
- Written Responses to Comments (*if applicable*)
- Final Report

Exhibit A Scope of Work

CAM Product:

- Written Comments on the Draft Final Report

MATCH FUNDS, PERMITS, AND SUBCONTRACTS

Subtask 1.8 Match Funds

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

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

The Recipient shall:

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

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

- A list of the match funds that identifies:
 - The amount of cash match funds, their source(s) (including a contact name, address, and telephone number), and the task(s) to which the match funds will be applied.
 - The amount of each in-kind contribution, a description of the contribution type (e.g., property, services), the documented market or book value, the source (including a contact name, address, and telephone number), and the task(s) to which the match funds will be applied. If the in-kind contribution is equipment or other tangible or real property, the Recipient must identify its owner and provide a contact name, address, telephone number, and the address where the property is located.
 - If different from the solicitation application, provide a letter of commitment from an authorized representative of each source of match funding that the funds or contributions have been secured.
- At the Kick-off meeting, discuss match funds and the impact on the project if they are significantly reduced or not obtained as committed. If applicable, match funds will be included as a line item in the progress reports and will be a topic at CPR meetings.
- Provide a *Supplemental Match Funds Notification Letter* to the CAM of receipt of additional match funds.
- Provide a *Match Funds Reduction Notification Letter* to the CAM if existing match funds are reduced during the course of the Agreement. Reduction of match funds may trigger a CPR meeting.

Products:

- Match Funds Status Letter

Exhibit A

Scope of Work

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

Subtask 1.9 Permits

The goal of this subtask is to obtain all certifications and permits required for construction, upgrades, work completed, and continued operations as required 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 *Certification and 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 certifications or permits will be required during the course of the Agreement, provide in the letter:
 - A list of the certifications or permits that identifies: (1) the type of certification or 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 certifications and 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 Certifications and Permits* (including the appropriate information on each permit) and an *Updated Schedule for Acquiring Certifications and Permits*.
- Send the CAM a *Copy of Each Approved Certification and 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:

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

Subtask 1.10 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.

Exhibit A Scope of Work

- 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*)

IV. TECHNICAL TASKS

*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. **Subtask 1.1 (Products)** describes the procedure for submitting products to the CAM.*

TASK 2: PROJECT DESIGN & ENGINEERING

The goal of this task is to complete project design and engineering, including civil and electrical design and engineering, emergency response plan, hazard mitigation analysis, and offsite consequence analysis.

The Recipient shall:

- Convene internal project launch meeting of University of California stakeholders and responsible departments and external contractor to establish official schedule, budgets, timelines, permitting, equipment purchases, and construction.
- Finalize subcontractor Design & Engineering scope of work and budget.
- Issue Notice-To-Proceed to subcontractor as the engineer of record for the battery energy storage system project, including:
 - Stamped drawings for design review and permitting.
 - Civil Engineering, Grading, and Drainage Plans.
 - Electrical Engineering, Low and Medium Voltage Plans.
 - Step and Touch Potential Analysis.
 - Arc Flash/Coordination Study.
 - Structural Engineering, including Foundations.
 - Energy Management System/ Supervisory Control and Data Acquisition (SCADA) Engineered Plans.
- Prepare fire engineering and an *Emergency Response and Emergency Action Plan* required by Senate Bill 38 (Laird, Chapter 377, Statutes of 2023) for battery energy storage facilities, including:
 - Emergency Response and Emergency Action Plan
 - Hazard Mitigation Analysis
 - Offsite Consequence Analysis
- Provide the following products to CAM:
 - *Civil and Electrical Design and Engineering Drawings*
 - *Emergency Response and Emergency Action Plan*
 - *Hazard Mitigation Analysis*

Exhibit A Scope of Work

- *Offsite Consequence Analysis*

Products:

- Civil and Electrical Design and Engineering Drawings
- Emergency Response and Emergency Action Plan (Draft and Final)
- Hazard Mitigation Analysis (Draft and Final)
- Offsite Consequence Analysis (Draft and Final)

TASK 3: PROJECT PERMITTING

The goal of this task is to receive University of California, San Diego, authority-having-jurisdiction approval of construction plans.

The Recipient shall:

- Submit construction plans for review and approval by the University of California, San Diego, authority having jurisdiction for project permitting for:
 - Civil engineering drawings and construction plans
 - Electrical engineering drawings and construction plans
 - Structural engineering drawings and construction plans
 - Fire engineering plans
 - SCADA/Cybersecurity report
- Provide the following products to the CAM:
 - *Final Engineering Stamped and Approved Construction Plans*
 - *Fire Engineering Plans*

Products:

- Final Engineering Stamped and Approved Construction Plans
- Fire Engineering Plans (Draft and Final)

TASK 4: LONG-LEAD TIME AND MAJOR EQUIPMENT PROCUREMENT

The goal of this task is to procure long-lead time and major equipment for the Battery Energy System.

The Recipient shall:

- Initiate long-lead time equipment procurement process.
- Issue procurement order for transformers.
- Issue procurement order for 4-hour battery energy storage system containers with integrated alternating current output.
- Prepare a *Procurement Report*, detailing:
 - the status of the long-lead time equipment procurement process
 - The status of the transformer procurement process
 - The status of the fully integrated battery container procurement process.
- Prepare a CPR Report in accordance with subtask 1.3 (CPR Meetings)
- Participate in a CPR meeting.
- Prepare a *Delivery Report*, detailing:
 - the delivery of the transformer
 - the delivery of the battery containers.
- Provide the following products to the CAM:
 - *Procurement Report*
 - *Delivery Report*

Exhibit A

Scope of Work

Products:

- CPR Report
- Procurement Report
- Delivery Report

TASK 5: CONSTRUCTION REQUEST FOR PROPOSALS

The goal of this task is to select a vendor to construct the battery energy storage system.

The Recipient shall:

- Conduct internal procurement process to prepare a request for proposals.
- Issue a public request for proposals to select a construction vendor.
- Execute a contract with a construction vendor.
- Provide the following product to the CAM:
 - *Construction request for proposals*

Product:

- Construction Request for Proposals

TASK 6: PROJECT CONSTRUCTION

The goal of this task is to construct the battery energy storage system.

The Recipient shall:

- Conduct pre-construction activities to remove existing battery energy storage system, existing low-voltage transformers, and prepare site, including:
 - Equipment removal
 - Decommission containerized battery systems
 - Decommission low-voltage transformers
 - Site preparation, grading, and trenching
- Construct, install, and commission a new battery energy storage system, including:
 - Civil and electrical construction
 - Large equipment and transformer pads
 - California Independent System Operator (CAISO) metering and telemetry installation
 - Equipment delivery and installation
 - Crane off-loading
 - Equipment anchoring
 - Low-voltage conduit and cable installation
 - Medium-voltage terminations and testing
 - Energy management system controller installation and wiring
 - Arc flash signage
 - Commissioning
 - Reviews and final checklist
- Prepare the *Pre-Construction Final Report* summarizing all pre-construction activities to remove existing battery energy storage system, existing low-voltage transformers, and site preparation.
- Prepare the *Site Construction Final Report* summarizing all construction, installation, and commissioning activities for the new battery energy storage system.
- Provide the following products to the CAM:

Exhibit A

Scope of Work

- *Pre-Construction Final Report*
- *Site Construction Final Report*

Products:

- Pre-Construction Final Report
- Site Construction Final Report

TASK 7: SYSTEM INTERCONNECTION AND COMMERCIAL OPERATION

The goal of this task is to complete system interconnection and begin commercial operation.

The Recipient shall:

- Conduct CAISO New Resource Implementation Application and Processing Buckets 1-3:
 - Full network model and forecast preparation
 - Regulatory contracts and model testing
 - Market preparation
- Conduct CAISO New Resource Implementation Application and Processing Buckets 4-6:
 - Trial operations approval
 - Trial operations
 - Commercial operation
 - CAISO Commercial Operation Certificate issuance prior to declaring commercial operation date
- Complete interconnection and market pre-commissioning
- Complete market commissioning
- Declare commercial operation date
- Provide the following products to the CAM:
 - *Interconnection and Market Pre-Commissioning Report*
 - *Copy of CAISO Commercial Operation Certificate*
 - *Commercial Operation Report*

Products:

- Interconnection and Market Pre-Commissioning Report
- Copy of CAISO Commercial Operation Certificate
- Commercial Operation Report

TASK 8: ANNUAL MEASUREMENT AND VERIFICATION REPORTING

The goal of this task is to measure and verify five (5) years of performance of the battery energy storage system.

The Recipient shall:

- Develop a *Measurement and Verification Plan* for approval by the CAM. The Measurement and Verification Plan must include, but is not limited to, a plan to provide annual measurement data and performance reports on the following:
 - Availability of the incremental capacity of the battery energy storage system during extreme events for a term of five years from the commercial online date of the battery energy storage system.
 - Availability of the incremental capacity of the battery energy storage system on a day-ahead and real-time basis to the host California Balancing Authority for

Exhibit A

Scope of Work

economic and exceptional dispatch, consistent with the applicable requirements and operational capabilities of the battery energy storage system.

- Charging of the battery energy storage system during the day when the greenhouse gas intensity of grid electricity is low and discharge during peak reliability hours (4 p.m. – 10 p.m.)
- Provide annual measurement and verification data and performance reports according to a measurement verification plan approved by the CAM.

Products:

- Measurement and Verification Plan (draft and final)
- Measurement and Verification Report 1 (draft and final)
- Measurement and Verification Report 2 (draft and final)
- Measurement and Verification Report 3 (draft and final)
- Measurement and Verification Report 4 (draft and final)
- Measurement and Verification Report 5 (draft and final)

TASK 9: EVALUATION OF PROJECT BENEFITS

The goal of this task is to report the benefits resulting from this project, including greenhouse gas emission reductions and other benefits as specified by the CAM.

The Recipient shall:

- Complete the *Initial Project Benefits Questionnaire*. The Initial Project Benefits Questionnaire shall be initially completed by the Recipient and submitted to the CAM for review and approval.
- Complete the *Annual Survey* by December 15th of each year.
- Complete the *Final Project Benefits Questionnaire*. The Final Project Benefits Questionnaire shall be completed by the Recipient and submitted to the CAM for review and approval.
- Respond to CAM questions regarding the questionnaire drafts.

Products:

- Initial Project Benefits Questionnaire (draft and final)
- Annual Surveys
- Final Project Benefits Questionnaire (draft and final)

TASK 10: PROJECT FACT SHEET

The goal of this task is to develop an initial and final project fact sheet that describes the CEC-funded project and the benefits resulting from the project for the public and key decision makers.

The Recipient shall:

- Prepare an *Initial Project Fact Sheet* at start of the project that describes the project and the expected benefits. Use the format provided by the CAM.
- Prepare a *Final Project Fact Sheet* at the project's conclusion that describes the project, the actual benefits resulting from the project, and lessons learned from implementing the project. Use the format provided by the CAM.
- 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.

Exhibit A Scope of Work

Products:

- Initial Project Fact Sheet (draft and final)
- Final Project Fact Sheet (draft and final)
- High Quality Digital Photographs

V. PROJECT SCHEDULE

Please see the attached Excel spreadsheet.

Notice of Exemption

Appendix E

To: Office of Planning and Research
P.O. Box 3044, Room 113
Sacramento, CA 95812-3044
County Clerk

From: (Public Agency): California Energy Commission
715 P Street, MS-45
Sacramento, CA 95814

County of: San Diego

Project Title: Securing Bulk Grid Reliability with a Zero-Emission High-Density Distributed Asset

Project Applicant: The Regents of the University of California; University of California, San Diego

Project Location - Specific: 9413 Voight Drive, La Jolla, CA 92093

Project Location - City: La Jolla Project Location - County: San Diego County

Description of Nature, Purpose and Beneficiaries of Project:

The Regents of the University of California, University of California San Diego (UCSD) owns and operates an existing microgrid electrical distribution system with onsite generation and storage. The microgrid is powered by the UCSD's existing energy infrastructure and consists of a 30-megawatt (MW) cogeneration plant, 3 MW of existing solar photovoltaic (PV), a 2.5 MW/5.0 megawatt hour (MWh) battery energy storage system (BESS) and all electrical assets including 12 kV distribution lines, high voltage switchgear, transformers, and associated metering equipment downstream of a 69 kilovolt (kV) substation which is owned and operated by San Diego Gas and Electric (SDG&E). SDG&E provides transmission and distribution services only.

The project will upgrade the microgrid's existing 2.5 MW/5.0 MWh lithium-ion BESS component with a more efficient BESS with a nameplate capacity of 9.8 MW/ 39.2 MWh. The nameplate capacity of the existing BESS, installed in 2015 and operational since 2016, is a 2.5 MW/ 5.0 MWh system. Due to cycle aging degradation of the lithium iron phosphate battery chemistry, string imbalances and software maintenance issues, the existing system's output can no longer maintain the 2.5 MW/5.0 MWh output. The more efficient BESS would not result in higher energy consumption or expansion of the utilities plant. The minor alteration of the microgrid's BESS component will secure the UCSD's microgrid's reliability and will connect to the existing 12 kV system, mitigate peak load at the SDG&E substation.

The upgraded BESS will occupy the same physical footprint as the existing BESS, utilize existing electrical infrastructure, and connect to the bulk electricity system at the same interconnection point. The proposed project meets and exceeds the solicitation goals of prioritizing and accelerating the implementation of feasible and cost-effective zero-emission resources to achieve bulk grid reliability. The project is consistent with the California Energy Commission's mission of leading the state to a 100 percent clean energy future and will contribute to meeting California's clean energy goals and support grid reliability.

Name of Public Agency Approving Project: California Energy Commission

Name of Person or Agency Carrying Out Project: The Regents of the University of California;
University of California, San Diego

Exempt Status: **(check one)**:

- ☐ Ministerial (Sec. 21080(b)(1); 15268);
- ☐ Declared Emergency (Sec. 21080(b)(3); 15269(a));
- ☐ Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
- ☒ Categorical Exemption. State type and section number: Class 1, Section 15301(b) Existing Facilities, Minor Alteration
- ☐ Statutory Exemptions. State code number: _____

Reasons why project is exempt:

California Code of Regulations, title 14, section 15301, subdivision (b) provides that the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, such as existing facilities of investor and publicly owned utilities used to provide electric power, natural gas, sewerage, or other public utility services, involving negligible or no expansion of existing or former use, are categorically exempt from the provisions of CEQA.

This project will involve upgrading the existing BESS, currently rated at 2.5 MW/5.0 MWh, with a new lithium-ion BESS with a capacity nameplate of 9.8 MW/ 39.2 MWh at the UCSD East Campus Utility Plant at 9413 Voight Drive, San Diego (APN 760-2511-700). The BESS is a component of the existing microgrid. The project site is approximately one-half acre of pre-disturbed land and is located immediately adjacent to the UCSD East Utility Plant and a 69 kVA substation (APN 3431-6040-00). The upgraded BESS will occupy the same footprint as the existing BESS. The site is a fully built-out, fenced-in, paved area with existing transformers, underground 12 kV high-voltage electrical lines, and high-voltage switchgear. The site is also encircled by an existing 8-inch curb for containment and has been fully permitted by UCSD's Fire Marshall Office for lithium-ion BESS use.

The current BESS will be removed and decommissioned. Work required to install the new BESS containers includes the construction of new concrete footings for the containers and five new 2 MW transformers, 180 feet of underground trenching between the containers and the 12 kV switchgear, installation of underground electrical conduits and associated conductor pulls, replacement fill and poured asphalt above the trenching, and crane lifts for each of the ten containers and five transformers. The project will involve the minor alteration of an existing microgrid with a more efficient BESS. This project will result in negligible or no expansion of use of the East Campus Utility Plant beyond that already existing.

University of California San Diego, with approval authority delegated by The Regents of the University of California have deemed the project as an allowed modification to the existing UCSD East Campus Utility Plant and it does not require a local discretionary permit. The installation of the upgraded BESS, which is a component of the microgrid, will be a minor alteration of an existing utility system for the UCSD East Campus Utility Plant, with no physical expansion beyond the existing system footprint.

The upgrade of the existing BESS will not result in a significant cumulative impact, there is no reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances, it will not damage resources within a scenic highway, it will not cause substantial adverse change to the significance of a historic resource, and it is not located on a listed site pursuant to Government Code 65962.5. Therefore, the project is categorically exempt under California Code of Regulations, title 14, section 15301, subdivision (b).

Lead Agency

Contact Person: _____ Area Code/Telephone/Extension: _____

If filed by applicant:

1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project? Yes No

Signature: _____ Date: _____ Title: _____

Signed by Lead Agency Signed by Applicant

Authority cited: Sections 21083 and 21110, Public Resources Code.
Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.

Date Received for filing at OPR: _____

Revised 2011