



**CALIFORNIA
ENERGY COMMISSION**



**California Energy Commission
August 14, 2024 Business Meeting
Backup Materials for City of Roseville**

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: 24-0814-15

STATE OF CALIFORNIA

**STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION**

RESOLUTION: Roseville Efficiency Enhancements for Grid Reliability

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 DBA-24-001 with the City of Roseville (Roseville) for a \$1,374,747 grant. This project will purchase, install, and report performance of efficiency upgrades to improve performance of the Roseville State Power Augmentation Project generators, and extend the availability of the emergency generators through December 2031; 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 August 14, 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-24-001

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: City of Roseville
2. Federal ID Number: 94-6000409

D. Title of Project

Title of project: Roseville Efficiency Enhancements for Grid Reliability

E. Term and Amount

1. Start Date: September 10, 2024
2. End Date: March 29, 2032
3. Amount: \$1,374,747

F. Business Meeting Information

1. Are the ARFVTP agreements \$75K and under delegated to Executive Director? N/A
2. The Proposed Business Meeting Date: 08-14-2024
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:

City of Roseville. Proposed resolution approving agreement DBA-24-001 with the City of Roseville for \$1,374,747, and adopting staff's determination that this action is exempt from CEQA. This agreement will purchase, install, and report performance of efficiency upgrades to improve performance of the Roseville State Power Augmentation Project generators. The project will install evaporative coolers and natural gas compression to allow the combined output to increase by 9.5 MW from 44.5 MW to 54 MW. (DEBA Funding) Contact: Ashley Emery (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.

Section 15301(b), Existing Facilities

This project will involve the installation of evaporative coolers and a natural gas compression system on two generators operated by a publicly owned electric power provider (Roseville Electric Utility) and pursuant to California Code of Regulations, title 14, section 15301(b) is exempt from CEQA. The installation of evaporative coolers and a natural gas compression system will enable Roseville Electric Utility to be less reliant on its aging Roseville Power Plant 2 (RPP2) which has a 60 percent higher heat rate and greenhouse gas (GHG) output. The modification is negligible and would not expand the use of the existing RSPAPS generators outside of grid emergencies. It would extend the availability of the emergency generators through December 2031.

The project has been deemed an allowed modification to the existing power generation facility by the City of Roseville and does not require a local discretionary permit. The installation of the systems on the generators will be a minor alteration of mechanical equipment, with no expansion beyond the existing operations during emergency conditions. Extending the availability of more efficient emergency generators to ensure grid reliability through December 2031 will not have a significant adverse effect on the environment.

The installation of the gas compressor and evaporative cooler systems requires minor civil and electrical work at the existing RSPAPS. A total of 2,000 square feet of reinforced concrete foundations for placement of skids and mechanical equipment will be required.

One gas compressor will be installed per TM2500 with provisions for a spare compressor for future redundancy. Two gas compressor skids will be installed on concrete pads (approximately 25’x60’x12”) with all gas piping installed above ground (approximately 200 feet). Each gas compressor will be powered by a 1000 HP, 3-Phase, 4160V motor. To supply electrical power to the motors, a 12-kilovolt



underground cable will be run from the “point of connection” to a new 12000/4160V 3-phase transformer (approximately 500 feet). The underground electrical cable will be installed in 4” underground conduits, 48” deep, with native material backfill.

Two evaporative coolers will be installed on the existing inlet filter houses. Each evaporative cooler will be mounted on new concrete pads (approximately 12’x18’x12”). A small pump skid will be added, one per combustion turbine, to provide demineralized water to the evaporative coolers. The associated water lines will be installed above ground.

The installation work needed for the gas compressor and evaporative coolers would follow all requirements included in the Conditions and Reporting Requirements for the original permitting of the RSPAPS. It is unlikely that construction of the systems would result in a substantial adverse impact on historical resources.

The installation and operation of the turbine will not result in a significant cumulative impact, damage resources within a scenic highway, cause substantial adverse change to the significance of a historic resource, or be located on a listed hazardous waste site. Therefore, the project is categorically exempt under California Code of Regulations, title 14, section 15301(b).

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.

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
Integrated Engineers and Contractors Corporation	\$518,451	\$1,380,947
PEI Placer Electric, Inc.	\$250,000	\$0
Performance Mechanical, Inc.	\$200,000	\$0
GE Vernova Operations, LLC	\$118,656	\$0

J. Vendors and Sellers for Equipment and Materials/Miscellaneous

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

Vendor/Seller Legal Company Name	CEC Funds	Match Funds
Compass Energy Systems Ltd.	\$0	\$3,753,940
GE Vernova Operations, LLC	\$0	\$2,378,994
TBD	\$150,000	\$0

K. Key Partners

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

Key Partner Legal Company Name
No key partners to report

L. Budget Information

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

Funding Source	Funding Year of Appropriation	Budget List Number	Amount
DEBA	2021-22	500.108	\$1,374,747

TOTAL Amount: \$1,374,747

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: Joanna Cucchi

Address: City of Roseville – Roseville Electric Utility

City, State, Zip: 311 Vernon Street, Roseville, CA 95678

Phone: (916) 746-1609

E-Mail: jcucchi@roseville.ca.us

2. Recipient's Project Manager

Name: Amber Blixt

Address: City of Roseville – Roseville Electric Utility

City, State, Zip: 311 Vernon Street, Roseville, CA 95678

Phone: (916) 774-5693

E-Mail: aablixt@roseville.ca.us

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	Yes
5	Awardee CEQA Documentation	Yes

Approved By



STATE OF CALIFORNIA
CALIFORNIA ENERGY COMMISSION

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

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

Agreement Manager: Pamela Doughman

Approval Date: May 29, 2024

Office Manager: Ashley Emery

Approval Date: June 10, 2024

Director: Deana Carrillo

Approval Date: June 10, 2024

Exhibit A Scope of Work

I. TASK ACRONYM/TERM LISTS

A. Task List

Task #	CPR ¹	Task Name
1		General Project Tasks
2	X	Evaporative Cooling Design and Procurement
3		Evaporative Cooling Construction
4		Gas Compression Design and Procurement
5		Gas Compression Construction
6		Annual Measurement and Verification Reporting
7		Evaluation of Project Benefits
8		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	City of Roseville
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 provide funding for the purchase, installation, and reporting of upgrades to the California Department of Water Resources' Roseville State Power Augmentation Project generators.

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

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

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

As part of the Electricity Supply Strategic Reliability Reserve Program (ESSRRP), Recipient currently operates two generators within the Roseville State Power Augmentation Project. Due to mechanical inefficiencies, these generators are derated to 44.5 MW, which is substantially below the combined permitted output of 67.2 MW. Additionally, they are scheduled to leave the ESSRRP by the end of the temporary license in September 2026, potentially removing important energy assets that are currently dispatchable in extreme grid events.

Solution

Under this Agreement the Recipient will purchase, install, and report performance of efficiency upgrades to improve performance of these two generators currently used in the Roseville State Power Augmentation Project as part of the Electricity Supply Strategic Reliability Reserve Program (ESSRRP). The project will install evaporative coolers and natural gas compression to allow the combined output to increase by 9.5 MW from 44.5 MW to 54 MW. After these generators leave the ESSRRP, these upgrades will enable them to remain committed to dispatch in extreme grid events for the duration of this Agreement through December 2031 or five years from the project online date, whichever is later.

C. Goals and Objectives of the Agreement

Agreement Goals

The goals of this Agreement are to:

- Accelerate purchase and installation of upgrades to improve efficiency and add capacity to an existing power plant interconnected to the bulk transmission grid in California.
- Measure and verify five (5) years of performance of the availability of the incremental capacity during peak reliability hours (4 p.m. – 10 p.m.) and electricity grid emergency events.

Agreement Objectives

The objectives of this Agreement are to:

- Purchase and install upgrades to improve efficiency and add capacity to an existing power plant that is interconnected in California to the bulk transmission grid.
- Make the incremental capacity available during extreme events for a term of five years from the commercial online date of the upgraded generators.
- Make the incremental capacity 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 upgraded generators.
- Provide measurement and verification data and performance reports according to a measurement verification plan approved by the CAM.

Exhibit A Scope of Work

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.

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:

Exhibit A

Scope of Work

- 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. 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;
- Products (subtask 1.1);
- CPR meetings (subtask 1.3);
- Match Funds (subtask 1.8);
- Permits (subtask 1.9);
- Subcontracts (subtask 1.10); and
- Any other relevant topics.

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

Exhibit A

Scope of Work

- The CAM's expectations for accomplishing tasks described in the Scope of Work;
 - An updated Project Schedule;
 - Products (subtask 1.1);
 - Bimonthly Status Updates (subtask 1.5);
 - Quarterly Progress Reports and Invoices (subtask 1.6);
 - Final Report (subtask 1.7); 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 1.8)
- Permit Status Letter (subtask 1.9)

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., Teams) as determined by the CAM.

Exhibit A

Scope of Work

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.

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

- “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 are scheduled to be completed by March 30, 2030 and 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.

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.

Exhibit A Scope of Work

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:

- 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

Exhibit A

Scope of Work

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

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

Exhibit A

Scope of Work

must be identified in writing, and the Recipient must obtain any associated commitments before incurring any costs for which the Recipient will request reimbursement.

The Recipient shall:

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

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

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

Products:

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

Subtask 1.9 Permits

The goal of this subtask is to obtain all 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.

Exhibit A

Scope of Work

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.
- 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

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: EVAPORATIVE COOLING DESIGN AND PROCUREMENT

The goal of this task is to conduct design and procurement for evaporative cooling for the project.

The Recipient shall:

- Conduct design and procurement for evaporative cooling for the project.
- Prepare a *CPR Report* in accordance with subtask 1.3 (CPR Meetings).
- Participate in a CPR meeting.
- Provide the following products to the CAM:
 - *Copy of Signed Contract for Design, Procurement, and Installation of Evaporative Coolers*
 - *Final Engineering Stamped and Approved Construction Plans for Evaporative Coolers*

Product:

- CPR Report
- Copy of Signed Contract for Design, Procurement, and Installation of Evaporative Coolers
- Final Engineering Stamped and Approved Construction Plans

TASK 3: EVAPORATIVE COOLING CONSTRUCTION

The goal of this task is to install and commission evaporative coolers on two existing natural gas generators.

The Recipient shall:

- Conduct mechanical tie-ins, including water supply, for evaporative coolers on two existing natural gas generators.
- Install necessary power and control circuits for evaporative coolers on two existing natural gas generators.
- Test and commission evaporative coolers on two existing natural gas generators.
- Perform final inspection of installation of evaporative coolers on two existing natural gas generators.
- Provide the following products to the CAM:
 - *Commissioning Test Reports and Results for Evaporative Coolers*
 - *Substantial Completion Certificates for Evaporative Coolers*
 - *Final Completion / Project Signoffs for Evaporative Coolers*

Product:

- Commissioning Test Reports and Results for Evaporative Coolers
- Substantial Completion Certificates for Evaporative Coolers
- Final Completion / Project Signoff for Evaporative Coolers

Exhibit A

Scope of Work

TASK 4: GAS COMPRESSION DESIGN AND PROCUREMENT

The goal of this task is to conduct design and procurement for gas compression design and procurement for the project.

The Recipient shall:

- Conduct design and procurement for gas compression for the project.
- Provide the following products to the CAM:
 - *Copy of Signed Contract for Design, Procurement, and Installation of Natural Gas Compression*
 - *Final Engineering Stamped and Approved Construction Plans for Natural Gas Compression*

Product:

- Copy of Signed Contract for Design, Procurement, and Installation of Natural Gas Compression
- Final Engineering Stamped and Approved Construction Plans for Natural Gas Compression

TASK 5: GAS COMPRESSION CONSTRUCTION

The goal of this task is to install and commission gas compressors for the project.

The Recipient shall:

- Perform mechanical construction for gas compressors, including:
 - Construct site to accommodate installation of gas compression skids.
 - Install gas compressors for the project.
- Perform site civil construction for gas compressors, including:
 - Construct trenches for underground conduit.
 - Install underground conduit.
 - Install power and control circuits to gas compressors.
- Perform electrical high voltage installation for gas compressors.
- Test and commission gas compressors.
- Perform final inspection of gas compressors.
- Provide the following products to the CAM:
 - *Commissioning Test Reports and Results for Gas Compressors*
 - *Substantial Completion Certificates for Gas Compressors*
 - *Final Completion / Project Signoffs for Gas Compressors*

Products:

- Commissioning Test Reports and Results for Gas Compressors
- Substantial Completion Certificates for Gas Compressors
- Final Completion / Project Signoffs for Gas Compressors

TASK 6: ANNUAL MEASUREMENT AND VERIFICATION REPORTING

The goal of this task is to measure and verify five (5) years of performance of the upgraded generators.

The Recipient shall:

Exhibit A

Scope of Work

- 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 during extreme events for a term of five years from the commercial online date of the project.
 - Availability of the incremental capacity 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 project.
 - Electricity generated by the incremental capacity during peak reliability hours (4 p.m. – 10 p.m.).
 - Improved efficiency of the power plant attributable to the project.
 - Greenhouse gas emissions and criteria air pollutant emissions from the power plant compared to emissions before the commercial operation date of the project, including total emissions and emissions per MWh of electricity generated.
- 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 7: EVALUATION OF PROJECT BENEFITS

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

The Recipient shall:

- Complete the *Initial Project Benefits Questionnaire*. The Initial Project Benefits Questionnaire shall be initially completed by the Recipient with 'Kick-off' selected for the 'Relevant data collection period' and submitted to the CAM for review and approval.
- Complete the *Annual Survey* by July 15th of each year.
- 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.

Products:

- Initial Project Benefits Questionnaire
- Annual Surveys
- Final Project Benefits Questionnaire

TASK 8: 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:

Exhibit A

Scope of Work

- 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.

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.

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: Placer County,
California

(Address)

Project Title: Roseville Efficiency Enhancements for Grid Reliability

Project Applicant: City of Roseville

Project Location - Specific: 5120 Phillip Road, Roseville CA

Project Location - City: Roseville

Project Location - County: Placer County

Description of Nature, Purpose and Beneficiaries of Project:

Following Governor Newsom’s Emergency Proclamation, issued July 30, 2021, the city of Roseville, Roseville Electric Utility (Roseville) partnered with the State of California to add emergency generating capacity to the electric grid for operation during extreme events. Roseville worked with the California Department of Water Resources (DWR) to file an application (Docket # 21-TPG-01) with the California Energy Commission (CEC) on September 2, 2021 for the installation and operation of two natural gas-fired generating units as part of the Roseville State Power Augmentation Power Site (RSPAPS). On September 8, 2021, the CEC’s Executive Director granted Roseville a license to operate the RSPAPS emergency and temporary power generators for up to five years from the approval date, consistent with the requirements in the license approval (CEC Docket No. 21-TPG-01, [TN 239619](#)), including that the power generators only operate during grid emergencies, as designated and directed by the California Independent System Operator (CAISO), until they comply with all local, state, and federal regulatory requirements. The RSPAPS units are owned by DWR, operated by Roseville, and dispatched by the CAISO when needed for reliability purposes. The units are located next to Roseville’s existing 165 MW natural gas generating facility, the Roseville Energy Park, as well as a co-located community solar project that provides Roseville customers with local renewable energy.

On April 22, 2024, the CEC announced its intent to award Roseville grant funds under the Distributed Electricity Backup Assets (DEBA) Program to install efficiency upgrades to the RSPAPS to enhance grid reliability. The funding for efficiency enhancements will enable Roseville to install evaporative coolers and a natural gas compression system on the RSPAPS General Electric TM2500 generators. The evaporative coolers will decrease the inlet air temperature reducing the impact of ambient temperature derate effects. The natural gas compression system will increase gas pressure to align with the generators' optimal gas pressure enabling the generators to operate at their full nameplate capacity. The generators currently produce 22.25-megawatts (MW) each (total project output of 44.5 MW). With the new systems, the generators will harness an additional 4.75 MW each (total of 9.5 MW) of otherwise lost energy during high temperature days. This MW increase is still below the permitted output of 33.6 MW each (67.2 MW total).

As a condition of receiving the DEBA funding, Roseville is required to maintain the operation of the emergency and temporary power generators through December 31, 2031, under the same conditions as

permitted under the CEC's initial temporary license. Currently, the CEC staff is approving modifications to the temporary license to address the efficiency upgrades to the RSPAPS mechanical equipment funded by DEBA (modified certificate). Upon the expiration of the modified certificate in September 2026, the CEC staff will process a petition to amend submitted by Roseville to include the upgraded units as part of Roseville's permanent facility. Roseville's amended certificate would not have an expiration date and will allow operation of the units through December 2031 as required by the DEBA funding.

The efficiency upgrade would not immediately require a new permit from the Placer County Air Pollution Control District (PCAPCD) since implementation of the project would not exceed existing permit specifications, although Roseville may need an extension of the current permit through December 2031. Presently, only administrative revisions would be made to the permit to reflect the upgraded equipment descriptions, and the inclusion of a provision for Roseville to notify the PCAPCD once construction is complete. The project is consistent with the CEC'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: City of Roseville

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: Section 15301(b) Existing Facilities
- ☐ Statutory Exemptions. State code number: _____

Reasons why project is exempt:

This project will involve the installation of evaporative coolers and a natural gas compression system on two generators operated by a publicly owned electric power provider (Roseville Electric Utility) and pursuant to California Code of Regulations, title 14, section 15301(b) is exempt from CEQA. The installation of evaporative coolers and a natural gas compression system will enable Roseville Electric Utility to be less reliant on its aging Roseville Power Plant 2 (RPP2) which has a 60 percent higher heat rate and greenhouse gas (GHG) output. The modification is negligible and would not expand the use of the existing RSPAPS generators outside of grid emergencies. It would extend the availability of the emergency generators through December 2031.

The project has been deemed an allowed modification to the existing power generation facility by the City of Roseville and does not require a local discretionary permit. The installation of the systems on the generators will be a minor alteration of mechanical equipment, with no expansion beyond the existing operations during emergency conditions. Extending the availability of more efficient emergency generators to ensure grid reliability through December 2031 will not have a significant adverse effect on the environment.

The installation of the gas compressor and evaporative cooler systems requires minor civil and electrical work at the existing RSPAPS. A total of 2,000 square feet of reinforced concrete foundations for placement of skids and mechanical equipment will be required.

One gas compressor will be installed per TM2500 with provisions for a spare compressor for future redundancy. Two gas compressor skids will be installed on concrete pads (approximately 25'x60'x12") with all gas piping installed above ground (approximately 200 feet). Each gas compressor will be powered by a 1000 HP, 3-Phase, 4160V motor. To supply electrical power to the motors, a 12 kilovolt underground cable will be run from the "point of connection" to a new 12000/4160V 3-phase transformer (approximately 500 feet). The underground electrical cable will be installed in 4" underground conduits, 48" deep, with native material backfill.

Two evaporative coolers will be installed on the existing inlet filter houses. Each evaporative cooler will be mounted on new concrete pads (approximately 12'x18'x12"). A small pump skid will be added,

one per combustion turbine, to provide demineralized water to the evaporative coolers. The associated water lines will be installed above ground.

The installation work needed for the gas compressor and evaporative coolers would follow all requirements included in the Conditions and Reporting Requirements for the original permitting of the RSPAPS. It is unlikely that construction of the systems would result in a substantial adverse impact on historical resources.

The installation and operation of the turbine will not result in a significant cumulative impact, damage resources within a scenic highway, cause substantial adverse change to the significance of a historic resource, or be located on a listed hazardous waste site. Therefore, the project is categorically exempt under California Code of Regulations, title 14, section 15301(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: _____