

CALIFORNIA ENERGY COMMISSION

Federal ID Number

94-0360795

A)New Agreement # FPI-20-008 (to be completed by CGL office)

B) Division	Agreement Manager:	MS-	Phone
ERDD	Cyrus Ghandi		916-776-0762

C) Recipient's Legal Name

E. & J. Gallo Winery

D) Title of Project

Gallo Compressor System Optimization and Refrigeration System Conversion

E) Term and Amount

Start Date	End Date	Amount
6/1/2021	3/31/2024	\$ 769,861

F) Business Meeting Information

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

Proposed Business Meeting Date 5/12/2021 Consent Discussion

Business Meeting Presenter Cyrus Ghandi Time Needed: 5 minutes

Please select one list serve. Select

Agenda Item Subject and Description:

E. & J. Gallo Winery. Proposed resolution approving Agreement FPI-20-008 with E. & J. Gallo Winery for a \$769,861 grant to install a high-efficiency compressor system at its Livingston winery and a low-GWP low-charge ammonia refrigeration system at its St. Helena winery, and adopting staff's determination that this action is exempt from CEQA. This project will result in reduced electricity consumption, GHG emissions, and operating costs.

G) California Environmental Quality Act (CEQA) Compliance

- 1. Is Agreement considered a "Project" under CEQA?
 - \boxtimes Yes (skip to question 2)

☐ No (complete the following (PRC 21065 and 14 CCR 15378)):

Explain why Agreement is not considered a "Project":

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

- a) 🛛 Agreement **IS** exempt.
 - Statutory Exemption. List PRC and/or CCR section number:

Categorical Exemption. List CCR section number: Cal. Code Regs., tit. 14, § 15301 ; Cal. Code Regs., tit. 14, § 15302

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

Explain reason why Agreement is exempt under the above section: Cal. Code Regs., tit 14, § 15301. This project will involve minor alteration of existing facilities and mechanical equipment at two existing food processing facilities and will result in no expansion of the existing use. The equipment to be replaced includes



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advanced refrigeration system and piping and fittings at the St. Helena winery and a compressor system and control systems at the Livingston winery. Site preparation may include a new concrete pad. The materials used to construct the system are chemically inert, not hazardous to human health, and do not have a significant effect on the environment. The systems purchased have safety certifications in compliance with relevant codes and standards. In addition, all required permits for installation and operation of the system will be obtained prior to system installation and demonstration. The demonstration will not have a significant impact on local air quality, noise, or traffic. For these reasons, the project will not have a significant effect on the environment and falls under the categorical exemption listed in 14 C.C.R. § 15301.

Cal. Code Regs., tit 14, § 15302 This project involves the replacement of existing mechanical equipment at two existing food processing facilities in Livingston, CA and St. Helena, CA. This project will replace existing inefficient equipment at existing food processing facilities to reduce energy consumption and greenhouse gas emissions. The equipment to be replaced includes advanced refrigeration system and associated piping and fittings at the Recipient's wine processing facility in St. Helena and a compressor system and associated control systems at the Recipient's wine processing facility in Livingston. The new equipment will be located on the same site as the equipment replaced and have substantially the same purpose and capacity as the equipment replaced. For these reasons, the project falls under categorical exemption listed in 14 C.C.R. § 15302.

Each exemption is an independent basis for finding the project is exempt.

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

Check all that apply

- Initial Study
- Negative Declaration
- Mitigated Negative Declaration
- Environmental Impact Report
- Statement of Overriding Considerations

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

Legal Company Name:	Budget
VCCT, Inc. dba VaCom Technologies	\$ 25,000
	\$



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

Legal Company Name:

J) Budget Information

Funding Source	Funding Year of Appropriation	Budget Lis Number	
GGRF	17-18	301.002A	\$769,861
R&D Program Area: EERO: FP	IP	тот	AL: \$ 769,861
Explanation for "Other" selectio	n		
Reimbursement Contract #:	Federal Agreemen	t #:	
K) Recipient's Contact Infor 1. Recipient's Administ		2. Rec	ipient's Project Manager
Name: Daniel Slagel		Nan	ne: Patrick Doyle
Address: 600 Yosemit		Add	ress: 105 Zinfandel Ln
City, State, Zip: Mode 95354-2760			, State, Zip: Saint Helena, CA 74-1631
Phone: 209-602-3670		Pho	ne: 707-237-1148
E-Mail: Daniel.Slagel@	⊉ejgallo.com	E-M	lail: Patrick.Doyle@ejgallo.com
 Competitive Solicitation First Come First Served Solicitation M) The following items shout 1. Exhibit A, Scope of W 2. Exhibit B, Budget Des 3. CEC 105, Questionna 4. Recipient Resolution 	Id be attached to th /ork tail aire for Identifying Co	#: is GRF	 Attached Attached Attached Attached Attached
5. CEQA Documentatio	n 🗌 N	I/A	X Attached
Agreement Manager	Date		

Deputy Director

Date

I. TASK ACRONYM/TERM LISTS

A. Task List

Task #	CPR ¹	Task Name
1		General Project Tasks
2		Site Preparation and Equipment Procurement
3	Х	Equipment Installation
4		Measurement and Verification
5		Technology/Knowledge Transfer Activities

B. Acronym/Term List

Acronym/Term	Meaning
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CPR	Critical Project Review
GHG	Greenhouse Gas
GWP	Global Warming Potential
M&V	Measurement and Verification

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

A. Purpose of Agreement

The purpose of this Agreement is to replace aging and inefficient compressor equipment with dropin ready replacement equipment at the recipient's Livingston facility and to replace two refrigeration packages using R-22 high-global warming potential (GWP) refrigerants with a refrigeration system that uses low GWP refrigerants at its St. Helena facility (referred to as The Ranch). The installation of new equipment/technologies will contribute to reduced energy use and greenhouse gas (GHG) emissions.

B. Problem/ Solution Statement

Problem

The equipment that will be replaced is aging, inefficient and has been unreliable in recent years, with high maintenance costs and personnel time to troubleshoot equipment failures. Furthermore, due to the age of the equipment, it is becoming increasingly harder to find replacement parts when there is an equipment failure, as some of the parts are no longer ready-made.

This is problematic when equipment issues occur during grape crush season (which has been experienced by the Recipient). Grapes must be fermented within hours of being picked; there is

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.

no ability to store grapes to process at a later time if equipment failures occur. Also critical to the fermentation process is the ability to cool the vessel the wine is being fermented in to maintain wine quality and to store the wine at consistent temperatures. If the cold temperature cannot be maintained without interruptions, the entire batch of wine is compromised, resulting in significant economic losses. Without this equipment replacement, the Recipient remains vulnerable to continued equipment failures, high maintenance costs, and potential additional losses of revenue.

Solution

The Recipient will replace four inefficient compressors and will completely remove an existing high-GWP refrigeration system that currently uses R-22 (a 100-year GWP of 1,810), retrofitting piping and valves and installing new energy efficient upgrades to connect to an existing refrigeration system that uses ammonia, with a GWP of 0. The implementation of all proposed technologies will work cohesively to contribute to reduced GHG emissions by up to 80 percent through reduced energy use.

C. Goals and Objectives of the Agreement

Agreement Goals

The goals of this Agreement are to:

- Reduce electricity use in the beverage production process at the Recipient's Livingston and The Ranch facilities.
- Reduce GHG emissions generated at the Recipient's Livingston and The Ranch facilities.
- Reduce energy costs associated with the beverage production process at the Recipient's Livingston and The Ranch facilities.
- Demonstrate market potential of energy efficiency equipment to a broad range of California processors/industries.
- Benefit priority populations and low-income communities in California by reducing GHG emissions generated in Livingston.

Agreement Objectives

The objectives of this Agreement are to:

- Install commercially available drop-in ready equipment at the Recipient's Livingston and The Ranch facilities. This will include three new compressor systems and the removal of an existing high-GWP refrigeration system that currently uses R-22 (a 100-year GWP of 1,810) and retrofitting and conversion to a refrigeration system that uses ammonia, with a GWP of 0.
- Develop and implement M&V protocols to monitor and verify efficiency and emissions of equipment.
- Reduce electricity consumption by approximately 370,000 kWh per year and GHG emissions by approximately 1,300 metric tons of carbon dioxide equivalent per year through reduced electricity consumption and refrigerant leakage.
- Measure and validate electricity and GHG emissions reductions resulting from the improved compressor and refrigeration systems.
- Share the knowledge gained, project results, and lessons learned with relevant industry and public..

TASK 1 GENERAL PROJECT TASKS

PRODUCTS

Subtask 1.1 Products

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

The Recipient shall:

For products that require a draft version, 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 Energy Commission's software and Microsoft (MS)-operating computing platforms, or with any other format approved by the CAM. Deliver an electronic copy of the full text of any Agreement data and documents in a format specified by the CAM, such as memory stick or CD-ROM.

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

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

• Software Application Development

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

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

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

MEETINGS

Subtask 1.2 Kick-off Meeting

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

The Recipient shall:

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

The <u>administrative portion</u> of the meeting will include discussion of the following:

- Terms and conditions of the Agreement;
- Administrative products (subtask 1.1);
- CPR meetings (subtask 1.3);
- Match fund documentation (subtask 1.6);
- Permit documentation (subtask 1.7);
- Subcontracts (subtask 1.8); and
- Any other relevant topics.

The <u>technical portion</u> of the meeting will include discussion of the following:

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

The CAM shall:

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

Recipient Products:

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

CAM Product:

• Kick-off Meeting Agenda

Subtask 1.3 Critical Project Review (CPR) Meetings

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

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

meetings generally take place at the Energy Commission, but they may take place at another location, or may be conducted via electronic conferencing (e.g., WebEx) as determined by the CAM.

The Recipient shall:

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

The CAM shall:

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

Recipient Products:

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

CAM Products:

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

Subtask 1.4 Final Meeting

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

The Recipient shall:

• Meet with Energy Commission staff to present project findings, conclusions, and recommendations. The final meeting must be completed during the closeout of this

Agreement. This meeting will be attended by the Recipient and CAM, at a minimum. The (meeting may occur in person or by electronic conferencing (e.g., WebEx), with 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 state-owned equipment.
 - Need to file a Uniform Commercial Code Financing Statement (Form UCC-1) regarding the Energy Commission's interest in patented technology.
 - The Energy Commission's request for specific "generated" data (not already provided in Agreement products).
 - Need to document the Recipient's disclosure of "subject inventions" developed under the Agreement.
 - "Surviving" Agreement provisions such as repayment provisions and confidential products.
 - Final invoicing and release of retention.
- Prepare a *Final Meeting Agreement Summary* that documents any agreement made between the Recipient and Commission staff during the meeting.
- Prepare a Schedule for Completing Agreement Closeout Activities.
- Provide *All Draft and Final Written Products* on a CD-ROM or USB memory stick, organized by the tasks in the Agreement.

Products:

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

REPORTS AND INVOICES

Subtask 1.5 Progress Reports and Invoices

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

The Recipient shall:

- Submit a 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 preceding month, including accomplishments, problems, milestones, products, schedule, fiscal status, and an assessment of the ability to complete the Agreement within the current budget and any anticipated cost overruns. See the Progress Report Format Attachment for the recommended specifications.
- Submit a quarterly *Invoice* that follows the instructions in the "Payment of Funds" section of

the terms and conditions, including a financial report on Match Fund and in-state expenditures.

Products:

- Progress Reports
- Invoices

Subtask 1.6 Final Report

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

The Recipient shall:

- 1) Prepare a *Final Report* for this Agreement in accordance with the 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)
 - Table of Contents (**required**, followed by List of Figures and List of Tables, if needed)
 - Executive summary (**required**) following the Executive Summary Template
 - Include a summary table that includes the following information, but is not limited to (**required**):
 - Recipient name;
 - Project description;
 - Project location(s);
 - Census tract;
 - Dates: project selected and completed;
 - GGRF dollars allocated;
 - Leveraged and/or match funds;
 - Estimated/actual total project GHG emission reductions;
 - Estimated/actual energy saved (kWh, therms, or other fuels) for energy efficiency projects;
 - Estimated/actual energy generated (kWh or therm equivalents) for renewable energy projects;
 - Other benefits or results;
 - Other market sectors that can benefit from the project
 - Benefits to priority populations.
 - Appendices Include a copy of the M&V report for each demonstration site funded by the Energy Commission grant). (required)

- Follow the Style Guide format requirements for headings, figures/tables, citations, and acronyms/abbreviations.
- Ensure that the document omits subjective comments and opinions. However, recommendations in the conclusion of the report are allowed.
- Submit a draft of the report to the CAM for review and comment according to the project schedule. The CAM will provide written comments to the Recipient on the draft product within 15 days of receipt
- Consider incorporating all CAM comments into the Final Report. 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 Final Report 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.
- Submit one bound copy of the *Final Report* to the CAM along with *Written Responses to Comments on the Draft Final Report*.

Products:

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

CAM Product:

• Written Comments on the Draft Final Report

MATCH FUNDS, PERMITS, AND SUBCONTRACTS

Subtask 1.7 Match Funds

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

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

The Recipient shall:

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

If match funds were a part of the proposal that led to the Energy Commission awarding 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 1.8 Permits

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

The Recipient shall:

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

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

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

Products:

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

Subtask 1.9 Subcontracts

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

The Recipient shall:

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

Products:

• Subcontracts (draft if required by the CAM)

III. TECHNICAL TASKS

TASK 2 SITE PREPARATION AND EQUIPMENT PROCUREMENT

The goal of this task is to procure the necessary equipment and materials for this project.

The Recipient shall:

- Confirm finalized equipment needs and equipment specifications from California-based vendors. Equipment needs are anticipated to be:
 - Livingston Three new 500 HP Ammonia Screw Compressor Packages and related Compressor Power and Control Panels.
 - The Ranch Central Refrigeration Upgrade New glycol open top tanks; two suction pumps, roof top exhaust fans and wall mount louvers, related safety equipment and controls, valves, refrigeration piping, and initial system glycol charge.
- Secure final equipment and installation quotations/bids from California-based vendors.
- Secure preliminary schedule for equipment delivery and installation.
- Secure any needed permits to conduct site preparation and install new equipment.
- Order equipment and supplies for installation of equipment from California-based vendors and confirm equipment delivery date.
- Conduct site preparation for new equipment.
- Provide a *Site Preparation and Equipment Procurement Memo* that shall include, but not be limited to:
 - Summary of the steps to prepare the sites;
 - Copy of the performance specifications for each equipment purchased by the grant.
 - o Summary of the bids received and from whom;
 - Copies of all required permits needed for installation at each site;
 - o Copies of the final procurement documents and purchase orders; and
 - Status of the planned installation including preliminary schedule for equipment delivery and installation for each site.

Products:

• Site Preparation and Equipment Procurement Memo

TASK 3 EQUIPMENT INSTALLATION

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

The Recipient shall:

- Receive delivery of finalized equipment at the Recipient's Livingston and The Ranch facilities as identified in Task 2.
- Install equipment to include:

Livingston

Decommissioning and removing four existing compressor systems.

- Installing three new 500 HP Ammonia Screw Compressor Packages and related Control Panels.
- Start-up and commissioning of equipment, making needed adjustments to meet stated performance specifications.
- o Conducting safety review with personnel, project team.

<u>The Ranch</u>

- Decommissioning and removing existing high-GWP refrigeration system that currently uses R-22.
- Installing new energy efficiency equipment; piping; pipe supports; valves; and piping insulation to connect to Gallo's existing energy efficient central refrigeration system and allow for conversion to a refrigeration system that uses ammonia, with a GWP of 0.
- Start-up and commission the new refrigeration system, making needed adjustments to meet stated performance specifications.
- Conduct safety review with personnel, project team.
- Provide an *Equipment Installation Memo* that shall include, but not be limited to:
 - Summary of the equipment installation requirements for each demonstration site.
 - Identification of barriers involved during installation and discuss the steps taken to overcome those barriers.
 - Discuss results of equipment start-up and commissioning at each site with respect to whether the equipment as installed meets the stated performance specifications.
- Prepare CPR Report and participate in CPR meeting in accordance with subtask 1.3.

Products:

- Equipment Installation Memo (draft and final)
- CPR Report

TASK 4 MEASUREMENT AND VERIFICATION

The goal of this task is to report the benefits resulting from this project by performing measurement and verification (M&V) of greenhouse gas (GHG) and energy consumption reduction.

The Recipient shall:

- Enter into agreement with M&V subcontractor per Task 1.9 (if using outside vendor)
- Coordinate site visits with the M&V subcontractor at the demonstration sites
- Develop M&V protocol for *pre-installation* measurement (and calculation):
 - Electric, natural gas and/or other fossil fuel consumption and GHG emissions (use appropriate emissions factor from Attachment 8 of the grant solicitation) of the equipment/process/system(s)/sub-system(s) that are to be upgraded and/or replaced and/or modified.
 - Ensure installation of sub-metering equipment and data loggers for pre/post data analysis.
- Prepare and provide a detailed *M&V Plan* for each project demonstration site to include but not be limited to:
 - A description of the monitoring equipment and instrumentation which will be used.

- A description of the key input parameters and output metrics which will be measured.
- A description of the M&V protocol and analysis methods to be employed.
- A description of the independent, third-party M&V services to be employed, if applicable.
- Perform three months (or shorter period as approved in writing by the CAM) of preinstallation measurements (and calculations) based on the M&V protocol for preinstallation.
- Prepare and provide a *Pre-Installation M&V Findings Report* for each demonstration site that includes M&V protocol, pre-install measurements (and calculations), analysis, and results performed in this task.
- Develop M&V protocol for *post-installation* measurements (and calculations) of:
 - Electric, natural gas and/or other fossil fuel consumption and GHG emissions (use appropriate emissions factor from Attachment 8 of the grant solicitation) of the equipment/process/system(s)/sub-system(s) that will be upgraded and/or replaced and/or modified
- Perform 12 months or two seasons, for seasonal facilities, (or shorter period as approved in writing by the CAM) of post-installation measurements based on M&V protocol for post-installation.
- Provide a summary of post-installation M&V progress in Progress Report(s) (see subtask 1.5) which shall include but not be limited to:
 - A narrative on operational highlights from the reporting period, including any stoppages in operation and why; and
 - A summary of M&V findings from the reporting period.
- Analyze post-installation electrical, natural gas and/or other fossil fuel consumption and GHG emissions.
- Prepare and provide a *Post-Installation M&V Findings Report* for each demonstration site that includes M&V protocol, pre and post install measurements (and calculations), analysis, and results performed in this task. Results should at a minimum report on the reduction of electricity, natural gas and/or other fossil fuel usage and reductions of GHG emissions that directly result from this project.
- Provide all key assumptions used to estimate and determine energy and GHG reductions (and additions, if applicable).
- Provide all key assumptions used to estimate projected benefits, including targeted market sector (e.g., population and geographic location), projected market penetration, baseline and projected energy use and cost, operating conditions, and emission reduction calculations.

Products:

- M&V Plan (draft and final)
- Pre-Installation M&V Findings Report (draft and final)
- Post-Installation M&V Findings Report(s) (draft and final)

TASK 5 TECHNOLOGY/KNOWLEDGE TRANSFER ACTIVITIES

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

The Recipient shall:

- When directed by the CAM, develop *Presentation Materials* for an Energy Commission-sponsored conference/workshop(s) on the project.
- When directed by the CAM, participate in workshops symposium(s) sponsored by the California Energy Commission.
- Complete and update the project profile on the CEC's public online project and recipient directory on the Energize Innovation website(www.energizeinnovation.fund), and provide *Documentation of Project Profile on EnergizeInnovation.fund*, including the profile link.
- 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 site(s) or related project photographs.

Products:

- Presentation Materials (draft and final)
- Documentation of Project Profile on EnergizeInnovation.fund
- High Quality Digital Photographs

IV. PROJECT SCHEDULE

Please see the attached Excel spreadsheet.

STATE OF CALIFORNIA

STATE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION - RE: E. & J. GALLO WINERY

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 FPI-20-008 with E. & J. Gallo Winery for a \$769,861 grant to install a high-efficiency compressor system at its Livingston winery and a low-GWP low-charge ammonia refrigeration system at its St. Helena winery. This project will result in reduced electricity consumption, GHG emissions, and operating costs; and

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

CERTIFICATION

The undersigned Secretariat to the CEC does hereby certify that the foregoing is a full, true, and correct copy of a Resolution duly and regularly adopted at a meeting of the CEC held on May 12, 2021.

AYE: NAY: ABSENT: ABSTAIN:

> Patricia Carlos Secretariat