

A) New Agreement # FPI-19-009 (to be completed by CGL office)

B) Division		Agreement Manager:	MS-	Phone
ERDD		Hannah Craig	51	916-327-2457
			- -	
C) Recipient's Legal Name				ral ID Number
Spreckels Sugar Company,	Inc.		84-02	228800
D) Title of Project				
Spreckels Sugar Company's	Solar Microgrid I	Project		
E) Term and Amount				
Start Date	End Date	Amount		
6/15/2020	3/31/2024	\$ 2,105,320		
F) Business Meeting Info	rmation			
☐ ARFVTP agreements \$	\$75K and under d	elegated to Executive Di	rector	
Proposed Business Meetin	g Date 6/10/2020	☐ Consent ☒ Discus	sion	
Business Meeting Present	er: Kaycee Chanç	Time Needed: 5 minute	S	
Please select one list serve	e. Food Production	on Investment Program		
renewable electricity at the staff's determination that the presentation: 5 minutes)		•		. •
G) California Environmer	ntal Quality Act (CEQA) Compliance		
1. Is Agreement cons	sidered a "Project	" under CEQA?		
	uestion 2)			
☐ No (complete	the following (PR	C 21065 and 14 CCR 15	378)):	
Explain why Agree	ement is not consi	dered a "Project":		
•		rsical change in the envir e in the environment bec		a reasonably
2. If Agreement is co	nsidered a "Proje	ct" under CEQA:		
a) 🛚 Agreem	nent IS exempt.			
☐ Statuto	ry Exemption. Lis	t PRC and/or CCR section	on number	:
	rical Exemption. I . Code Regs., tit 1	List CCR section number 4, § 15303	r: Cal. Cod	le Regs., tit 14, §
☐ Commo	on Sense Exempti	on. 14 CCR 15061 (b) (3)	
Explain rea				

within the Spreckels Sugar Company existing industrial property. The area where the PV arrays will be installed is a few hundred feet south of the main industrial complex of buildings and other structures. Imperial County will require the applicant to satisfy its requirements to obtain a ministerial building permit for the proposed installation; there is no requirement for a local discretionary permit for this project.

Environmental Analysis: The project site is disturbed, disused industrial property with areas containing scrap metal equipment, which will be removed from the site before project installation. Because the area for the PV arrays and associated equipment is generally undeveloped, key staff in the CEC Siting, Transmission, and Environmental Protection (STEP) Division evaluated the site to determine whether the proposed project could potentially cause any significant impacts to occur. The California Environmental Quality Act (CEQA) Guidelines specify exceptions to a categorical exemption. For certain exemption classes, including Classes 3 and 11, project location must be considered to determine whether "a project that is ordinarily insignificant in its impact on the environment may in a particularly sensitive environment be significant" (Cal. Code Regs., tit 14, § 15300.2(a)). In evaluating whether a significant effect will occur, "[a] categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances" (Cal. Code Regs., tit 14, § 15300.2(c)). The project is not located in a sensitive environment, nor are any unusual circumstances identified that could lead to a reasonable possibility of a significant effect occurring with project implementation. Another exception is specified for a project which may cause "a substantial adverse change in the significance of a historical resources" (Cal. Code Regs., tit 14, § 15300.2(f)). As discussed below, the project will not have a significant effect on historical resources. The following subsections summarize the results of staff's analysis:

Biological Resources: The site is characterized by heavily disturbed soil with no vegetation present. Machinery and equipment are routinely operated on the property, and the site includes areas for transport, storage, and use of dry and liquid byproducts of beet processing. The solar power arrays and the trenched, interconnection conduit will be installed on bare, disturbed soil within the facility. No special-status plant or wildlife species are expected to occur on the site or near the proposed activities. Therefore, the project would cause no adverse impacts on biological resources.

Historical Resources: As defined in Section 15064.5(a) of Title 14 of the California Code of Regulations, historical resources include sites, objects, buildings, structures, manuscripts, areas, and places that meet significance criteria defined in CEQA. These sorts of resources, whether significant or not, are commonly referred to as cultural resources. A review of official records of previous cultural resource studies and known cultural resources on the project site and vicinity (dated April 29, 2020) indicates that no known cultural resources exist on the project site. Six previous cultural resources studies encompassed or bordered the project site. These studies did not identify any cultural resources in the areas slated for ground disturbance under the proposed project. Staff's review of the regional and local cultural resources record does not suggest that buried cultural resources underlay the proposed project site. The historical resources



exception for categorical exemption does not apply to the proposed project because it would not cause a substantial adverse change in the significance of a historical resource (Cal. Code Regs., tit 14, § 15300.2(f)).

Soil and Water Resources: Project construction is expected to disturb up to approximately 0.05 acre of soil at the locations for the PV array support foundations and trenching for electrical conduit. This level of soil disturbance would not cause a significant risk to surface water quality through erosion or sedimentation. The project is not expected to need coverage under the State Water Resources Control Board's Construction General Permit for storm water discharges because construction-related ground disturbance is under 1.0 acre. Wastewater discharge from industrial process water uses is not expected to change. The project would not cause a significant effect on water quality. During operations, the project will require a minimal amount of potable water for infrequent PV panel washing (up to a couple of thousand gallons annually). This level of water use would not cause a significant effect on water supplies. Categorical Exemptions: An exemption for a Class 3 project provides for construction and location of limited numbers of new, small facilities or structures and installation of small new equipment and facilities in small structures. "The numbers of structures described in this section are the maximum allowable on any legal parcel" (Cal. Code Regs., tit 14, § 15303). Installation of the solar PV arrays at the existing Spreckels Sugar Company facility is an allowable use on the land parcel where the site is located (APN 040-330-002). The property is in an area designated as Heavy Industrial in the Mesquite Lake Specific Plan (approved on March 14, 2006), which is part of the Imperial County General Plan, The installation will be within an approximately 2.4-acre area directly south of the main part of the industrial facility. The project's microgrid technology system will only serve the power needs of the existing facility. The new energy storage system will be enclosed and placed on a concrete pad of an existing covered storage area. Staff conclude that the project will not cause significant effects on the environment due to unusual circumstances, nor is the project site located in a sensitive resource environment. The project will not cause a substantial adverse change in the significance of a historical resource. Therefore, the project is categorically exempt under Section 15303 of Title 14 of the California Code of Regulations. An exemption for a Class 11 project provides for construction or placement of minor structures accessory to (appurtenant to) existing commercial, industrial, or institutional facilities (Cal. Code Regs., tit 14, § 15311). The microgrid technology system powered by PV arrays involves construction and placement of equipment that is directly appurtenant to the Spreckels Sugar Company industrial process operations. Likewise, the energy storage system is appurtenant to the existing facility and an integral part of the microgrid system. The ground-mounted solar PV array installation is limited to an approximately 2.4-acre area immediately south and within a few hundred feet of the existing industrial complex. As described above, the project will not cause significant effects on the environment due to unusual circumstances, nor is the project site located in a sensitive resource environment. The project will not cause a substantial adverse change in the significance of a historical resource. Therefore, the project is categorically exempt under Section 15311 of Title 14 of the California Code of Regulations. Each exemption is an independent basis for finding the project exempt.

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

Check all that apply

☐ Initial Study

steps)

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
Clean Focus Renewables, Inc	\$ 82,611

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

Legal Company Name:

J) Budget Information

Funding Source	Funding Year of Appropriation	Budget List Number	Amount
GGRF	17-18	301.002A	\$2,105,320

R&D Program Area: EERO: FPIP TOTAL: \$ 2,105,320

Explanation for "Other" selection

Reimbursement Contract #: Federal Agreement #:

K) Recipient's Contact Information

1. Recipient's Administrator/Officer

Name: Christian Froelich

Address: 395 W Keystone Rd

City, State, Zip: Brawley, CA 92227-

9739

Phone: 760-344-3110

E-Mail:

christian.froelich@spreckelssugar.com

2. Recipient's Project Manager

Name: Greg Martin

Address: 395 W Keystone Rd

City, State, Zip: Brawley, CA 92227-

9739

Phone: 760-344-3110

E-Mail: info@spreckelssugar.com



L) Sele	ction Process Used				
⊠ Com					
☐ First	t Come First Served Sol	licitation Solicitation #:			
M) The	following items should	d be attached to this GRI	=		
1. Exhibit A, Scope of Work			Attached		
2.	Exhibit B, Budget Detail			Attached	
3.	CEC 105, Questionnaire for Identifying Conflicts			Attached	
4.	Recipient Resolution N/A			Attached	
5.	CEQA Documentation		□ N/A		
Agreement Manager		- Date			
Office Manager		Date			
Deputy D	irector	 Date			

I. TASK ACRONYM/TERM LISTS

A. Task List

Task #	CPR	Task Name
1		General Project Tasks
2	Χ	Project Engineering Design Of Microgrid System
3		Site Preparation and Equipment Procurement
4	Х	Equipment Installation
5	Х	Measurement and Verification
6		Technology/Knowledge Transfer Activities

B. Acronym/Term List

Acronym/Term	Meaning
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CPR	Critical Project Review
ESS	Energy Storage System
GHG	Greenhouse Gas
M&V	Measurement and Verification
PV	Photovoltaics
Recipient	Spreckels Sugar Company, Inc

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

A. Purpose of Agreement

The purpose of this Agreement is to fund a utility-scale microgrid project at the Recipient's sugar beet refinery. The microgrid will include solar photovoltaic (PV) panels, an energy storage system (ESS), and a microgrid controller that allows the facility to operate independently of the grid.

B. Problem/Solution Statement

Problem

Microgrids enable facilities to increase renewable energy use across multiple loads and times of day, thus reducing greenhouse gas (GHG) emissions while lowering energy costs and increasing power reliability. However, microgrids have not been widely adopted, particularly at industrial facilities, due to the specialized engineering required to implement them and the risk of large capital projects with uncertain returns.

Solution

The Recipient will design, install, and operate a custom solar-storage microgrid. Electricity production and GHG emission reductions will be measured and verified. This can demonstrate the benefits of renewable energy production and electricity reliability to other industrial customers, as well as the benefits of microgrid technology more broadly to utilities and other involved parties.

C. Goals and Objectives of the Agreement

Agreement Goal

The goal of this Agreement is to implement a solar-powered microgrid project that will lower GHG emissions by producing renewable energy and provide resilience by allowing the Recipient to operate critical loads in a grid outage.

Agreement Objectives

The objectives of this Agreement are to:

- Design, install, and operate a solar PV-based microgrid with battery storage;
- Measure electricity production, battery charging and discharging, GHG emission reductions and off-grid capabilities of the functional microgrid;
- Demonstrate the technical, economic, and resiliency benefits of microgrid systems in industrial facility application; and
- Disseminate information related to the project and its benefits.

III. TASK 1 GENERAL PROJECT TASKS

PRODUCTS

Subtask 1.1 Products

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

The Recipient shall:

For products that require a draft version, 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 fileformat.
- 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
- Lavers.
- 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:

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

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

- The CAM's expectations for accomplishing tasks described in the Scope of Work;
- o An updated Project Schedule;
- Technical products (subtask 1.1);
- Progress reports and invoices (subtask 1.5);
- o 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:
 - o 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:
 - o Other market sectors that can benefit from the project
 - Benefits to priority populations.

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- 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 no match funds were part of the proposal that led to the Energy Commission awarding this Agreement and none have been identified at the time this Agreement starts, then state this in the letter.

If match funds were a part of the proposal that led to the Energy Commission awarding 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 no permits are required at the start of this Agreement, then state this in the letter. If permits will be required during the course of the Agreement, provide in the letter:
 - A list of the permits that identifies: (1) the type of permit; and (2) the name, address, and telephone number of the permitting jurisdictions or lead agencies.
 - The schedule the Recipient will follow in applying for and obtaining the permits.

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

IV. TECHNICAL TASKS

TASK 2 PROJECT ENGINEERING DESIGN OF MICROGRID SYSTEM

The goal of this task is to design the necessary equipment and plan the equipment layout for the project site. The pieces of equipment that need to be designed and integrated in an equipment layout are the components of a microgrid with a grid-connected (and islanding-capable) solar PV system, ESS, and control, communications and M&V equipment. The equipment will be installed at the Recipient's primary food processing facility.

The Recipient shall:

- Prepare a PV Layout Summary that shows the design of the on-site solar power generation facility.
- Provide a Permit Summary that describes relevant regulatory and other public entitlements required for project completion.
- Write an Interconnection Agreement Summary that introduces the power utility

interconnection contract.

- Prepare a Procurement Summary outlining engineering, equipment and other purchasing for the project.
- Compose a PV Sitework Plan Summary describing the main points of plans for any site modifications.
- Produce an ESS Design Summary that includes the configuration and components of the modular battery bank.
- Provide a *Project Design Report* that shall include, but not be limited to:
 - Summary of the steps taken to reach the final design and final layout:
 - Identification of barriers involved and discuss the steps taken to overcome those barriers:
 - Discussion of the final engineering design and equipment layout and any site- and facility-specific considerations:
 - PV Layout Summary;
 - Permit Summary;
 - Interconnection Agreement Summary;
 - Procurement Summary;
 - PV Sitework Plan Summary; and
 - ESS Design Summary.
- Prepare a CPR Report #1 in accordance with subtask 1.3.
- Participate in a CPR Meeting.

Products:

- Project Design Report (draft and final)
- CPR Report #1

TASK 3 SITE PREPARATION AND EQUIPMENT PROCUREMENT

The goal of this task is to prepare the site and procure the necessary equipment and materials for this project. The site preparation consists primarily of the physical work to prepare the solar power field and the administrative work to secure permits and other entitlements for the proposed development. The procurement will consist of purchasing the solar power, energy storage and microgrid systems hardware and software.

The Recipient shall:

- Confirm and secure needed entitlements, including the utility interconnection agreement.
- Prepare the site for installation of the solar power subsystem, including:
 - Performing general site preparation
 - Erecting fencing and gates as needed
 - Making any needed site improvements, such as bridging an irrigation canal
 - Landscaping as needed
 - Trenching on premises (lower voltage) and for the utility interconnection (higher voltage)
 - Conducting an installation layout survey Layout
- Obtain final equipment and installation quotations and bids.
- Procure all necessary equipment, including addressing on-site logistics and distribution matters
- Provide a Site Preparation and Equipment Procurement Memo that shall include, but not be limited to:

- Summary of the steps to prepare the site;
- Copy of the performance specifications for each piece of equipment purchased by the grant.
- Summary of the bids received and from whom:
- Copies of all required permits needed for installation at each site;
- 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 4 EQUIPMENT INSTALLATION

The goal of this task is to install and commission the equipment for this project. The equipment being installed at the project location is comprised of solar PV, an ESS, microgrid relays, and other electrical hardware and software.

The Recipient shall:

- Install the solar power subsystem, including:
 - Foundations and racking hardware;
 - Modules; and
 - Electrical hardware, including DC, AC, utility interconnection, and data acquisition systems hardware.
- Install the ESS.
- Install the microgrid electrical hardware and software.
- Startup and commission all of the equipment and make adjustments as needed to meet stated performance specifications.
- Provide an Equipment Installation Memo that shall include, but not be limited to:
 - Summary of the equipment installation requirements at the 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 the site with respect to whether the equipment as installed meets the stated performance specifications.
- Prepare a CPR Report #2 in accordance with subtask 1.3.
- Participate in a CPR Meeting.

Products:

- Equipment Installation Memo (draft and final)
- CPR Report #2

TASK 5 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 GHG and energy production and consumption.

The Recipient shall:

- Enter into agreement with M&V subcontractor per Task 1.9.
- Coordinate site visits with the M&V subcontractor at the demonstration site
- Develop M&V protocol for *pre-installation* measurements (and calculations):
 - 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
 - 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.

- Prepare a CPR Report #3 in accordance with subtask 1.3.
- Participate in a CPR Meeting.

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)
- CPR Report #3

TASK 6 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.
- 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 or related project photographs.

Products:

- Presentation Materials (draft and final)
- High Quality Digital Photographs

V. PROJECT SCHEDULE

Please see the attached Excel spreadsheet.

RESOLUTION NO: 20-0610-13a

STATE OF CALIFORNIA

STATE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION - RE: SPRECKELS SUGAR COMPANY, INC.

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

RESOLVED, that the CEC approves Agreement FPI-19-009 with Spreckels Sugar Company, Inc. for a \$2,105,320 grant to build a microgrid powered by solar photovoltaic panels and an energy storage system to reduce GHG emissions by generating renewable electricity at the recipient's sugar manufacturing facility in Brawley; and

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

<u>CERTIFICATION</u>

The undersigned Secretariat to the Commission does hereby certify that the foregoing is a full, true, and correct copy of a Resolution duly and regularly adopted at a meeting of the CEC held on June 10, 2020.

AYE:		
NAY:		
ABSENT:		
ABSTAIN:		
	Cody Goldthrite	
	Secretariat	