

GRANT REQUEST FORM (GRF)

CEC-270 (Revised 10/2015)

CALIFORNIA ENERGY COMMISSION

New Agreement REA-18-043 (To be completed by CGL Office)

Division	Agreement Manager:	MS-	Phone
500 Renewable Energy Division	Myoung-Ae Jones	45	916-651-1464

Recipient's Legal Name	Federal ID Number
Marsha Habib	-

Title of Project
25 HP Direct Solar Irrigation Pumping System + EV charger

Term and Amount	Start Date	End Date	Amount
	6 / 12 / 19	3 / 31 / 2023	\$ 76,446

Business Meeting Information
 ARFVTP agreements \$75K and under delegated to Executive Director.

Proposed Business Meeting Date	06 / 12 / 2019	<input type="checkbox"/> Consent	<input checked="" type="checkbox"/> Discussion
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Business Meeting Presenter	Geoffrey Dodson	Time Needed:	10 minutes
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Please select one list serve. Renewable

Agenda Item Subject and Description

MARSHA HABIB. Proposed resolution approving Agreement REA-18-043 with Marsha Habib for a \$76,446 grant to install a 27 kW solar PV pumping system, a 9 kW solar PV system, battery energy storage, and EV charging infrastructure to serve a mixed-crop farm in San Benito County, and adopting staff's determination that this action is exempt from CEQA. This project is expected to provide benefits to priority populations through job creation and criteria pollutant emission reductions.

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CALIFORNIA ENERGY COMMISSION



Legal Company Name:	Budget
Sustainable technologies	\$ 76,446
	\$ 0
	\$ 0

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

Legal Company Name:

Budget Information

Funding Source	Funding Year of Appropriation	Budget List No.	Amount
Other	FY-17-18	301.002 B	\$76,446
Funding Source			\$
R&D Program Area: N/A		TOTAL:	\$76,446
Explanation for "Other" selection			
Reimbursement Contract #:		Federal Agreement #:	

Recipient's Administrator/ Officer				Recipient's Project Manager			
Name:	Marsha Habib			Name:	Marsha Habib		
Address:	2402 Yarrow St.			Address:	2402 Yarrow St.		
City, State, Zip:	Hollister CA, 95023			City, State, Zip:	Hollister CA, 95023		
Phone:	510-847-5358	Fax:	- -	Phone:	510-847-5358	Fax:	- -
E-Mail:	oyaorganicfarm@gmail.com			E-Mail:	oyaorganicfarm@gmail.com		

Selection Process Used

<input checked="" type="checkbox"/> Competitive Solicitation	Solicitation #:	GFO-18-401
<input type="checkbox"/> First Come First Served Solicitation		

The following items should be attached to this GRF

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

Agreement Manager_____
Date_____
Office Manager_____
Date_____
Deputy Director_____
Date

Exhibit A

Scope of Work

TASK LIST

Task #	Task Name
1	General Project Tasks
2A	System 1 Technical Tasks
2B	System 2 Technical Tasks
3	Reporting

Grant Agreement Purpose:

The purpose of this grant Agreement is to fund renewable energy projects in the agricultural sector in order to reduce greenhouse gas emissions.

Objectives of the Agreement:

The objectives of this Agreement are to 1) establish lines of communication and procedures for implementing this Agreement, and 2) complete all items necessary for successful operation of the chosen renewable energy systems and all associated optional additional equipment.

TASK 1 General Project Tasks

Task 1.1 Products

The goal of this subtask is to establish the requirements for submitting project products (e.g. reports, status letters, etc.). Unless otherwise specified by the Commission Agreement Manager (CAM), the recipient must deliver products as required below and by the dates listed in the Scope of Work Schedule (Attachment 1).

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 for all software products. All of the following must be version 2007 or later:

- Data sets will be in MS Access or MS Excel File format.
- Text documents will be in MS Word file format.
- Documents intended for public distribution will be provided in PDF file format and native Microsoft file format.
- Project management documents will be in Microsoft Excel file format.

The Recipient shall:

- Submit the product to the CAM for acceptance. The CAM may request minor revisions or explanations prior to acceptance.
- Submit all data and documents required as products under this Agreement in an electronic format 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 a USB memory stick/flash drive.

Task 1.2 Attend Kick-off Meeting

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

Exhibit A Scope of Work

The CAM shall designate and communicate the date and location of this meeting and provide an agenda to the Recipient prior to the meeting. The meeting may be held via telephone or other electronic means.

The Recipient shall:

- Attend a “Kick-Off” meeting with the CAM, and the Commission Agreement Officer. The Recipient shall bring its Project Manager, Agreement Administrator, and others designated by the CAM to this meeting.
- Discuss the following administrative and technical aspects of this Agreement:
 - Agreement Terms and Conditions
 - The CAM’s expectations for accomplishing the tasks described in the Scope of Work.

Products:

- Updated schedule of tasks and deliverables.

Task 1.3 Invoices

The Energy Commission will reimburse 90 percent of each approved invoice submitted. The remaining 10 percent will be withheld until the project, including the installation and operation of all renewable energy technology and related equipment, is verified by Energy Commission staff. Following a notice of final installation and operation, the CAM will verify the successful installation and operation of all project components identified in Task 2 and any additional Technical Tasks. This may include a site visit or a request for additional documentation to demonstrate system operation (such as meter readings or utility bills). Following satisfactory verification, the Recipient can submit an invoice requesting release of retained funds.

The Recipient shall:

- Prepare invoices for all reimbursable expenses incurred performing tasks under this Agreement in compliance with the Terms and Conditions of the Agreement and the approved Project Budget. Invoices may be submitted as frequently as needed but not more frequently than one invoice per month. All invoices must be accompanied by a brief progress report as detailed in Task 1.4 below.
- Identify all costs associated with California Based Vendors.
- Following CAM approval of all final documents and deliverables, prepare a final invoice to receive funds held as retention from each previously submitted invoice.

Products:

- Invoices
- Proof of payment for incurred costs submitted within 14 calendar days of receiving payment from the Energy Commission (if applicable).

Task 1.4 Quarterly Progress Reports

The goal of this task is to periodically verify that satisfactory and continued progress is made towards achieving the objectives of this Agreement on time and within budget.

Exhibit A Scope of Work

The objectives of this task are to summarize activities performed during the reporting period, identify activities planned for the next reporting period, identify issues that may affect performance and expenditures, and form the basis for determining whether invoices are consistent with work performed.

As described in the REAP Solicitation Manual, Section I.E.6., all invoices must be accompanied by a brief progress report describing activities completed and associated with the costs contained in the invoice. A progress report will be required quarterly, or no less than once every 90 days. Progress reports contained within an invoice will fulfill this requirement. If no invoices are submitted within a 90-day period, a separate progress report will be required. The CAM will provide a template progress report form at the kick-off meeting.

Critical Project Review

The CAM may conduct a Critical Project Review upon reasonable notice at any time during the Agreement term. The purpose is to determine whether deliverables are being met and evaluate project implementation progress to ensure projects are complete within the Agreement term. If Recipient is not meeting deliverables resulting in delays with project implementation, the CAM may conduct a Critical Project Review to assess the project status. Recipient may be required to submit documentation to show progress toward completion, including but not limited to: invoice/receipts for project costs, contractor/consultant and subcontractor invoices and agreements, permitting/agreement fees, etc. Recipients must allow access to project records and documentation relevant to the Agreement.

The Recipient shall:

- Prepare a 90-day Progress Report that summarizes all Agreement activities conducted by the Recipient for the reporting period, including an assessment of the ability to complete the Agreement within the current budget and any anticipated cost overruns. The first progress report is due no later than 90 days following the commencement of the Agreement. Each subsequent report is due 90 days following the previous progress report received (either part of an invoice or a standalone report).

Products:

- Quarterly Progress Reports

Task 1.5 Permitting

The goal of this task is to obtain all permits required for work completed under this Agreement in advance of the date they are needed to maintain the approved Agreement schedule.

Permit costs and the expenses associated with obtaining permits are not reimbursable under this Agreement. Permits must be identified in the Permit Status Letter and issued before the Recipient can expend grant funds to complete activities for which a permit is required.

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, the Recipient will document this in the Permit Status Letter. The Permit Status Letter must include the following information for all permits required during the course of the Agreement:

Exhibit A Scope of Work

- the type of permit;
- the name, address, and telephone number of the permitting jurisdictions or lead agencies.
- the schedule the Recipient will follow in applying for and obtaining each permit.
- Submit a copy of any permits required for work completed under this Agreement, if requested by the CAM.
- Notify the CAM if, during the course of the Agreement, permits are not applied for or obtained according to the schedule provided in the Permit Status Letter, or applications for permits are denied, in writing within 10 working days of the date exceeded or notification of the permit denial. Either of these events may trigger a Critical Project Review meeting.
- Prepare for discussion of the Permit Status Letter including the schedule for obtaining each permit at the Kick-off meeting (Task 1.2), and a deadline for submitting a revised Permit Status Letter (if needed), and copies of permits obtained 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 Critical Project Review meetings.
- Provide the CAM with an Updated Permit Status Letter if, during the course of the Agreement, additional permits are identified as being necessary to complete tasks under this Agreement, including the appropriate information on each permit and schedule for acquiring permits.

Products:

- Permit Status Letter including schedule for obtaining each permit.
- Written notification of permit delay or denial, if applicable, within 10 working days of the date exceeded (pursuant to permit schedule date(s), notification of permit denial).
- Updated Permit Status Letter (if applicable, including the appropriate information on each permit and schedule for acquiring permits).
- A copy of any permits requested by CAM.

Task 1.6 Obtain and Execute Contracts

The goal of this task is to ensure the Recipient enters into the necessary contracts to provide quality products and contractors required to carry out the tasks under this Agreement consistent with the Agreement Terms and Conditions and the Recipient's own procurement policies and procedures. This task will also provide the Energy Commission an opportunity to review contracts to ensure that the tasks are consistent with this Agreement, and the budgeted expenditures are reasonable and consistent with allowable costs detailed in the budget.

The Recipient shall:

- Identify all activities requiring contractors and all equipment contracts required to complete the work under this Agreement, pursuant to the approved project as described in this scope of work.

Exhibit A Scope of Work

- Submit a copy of each contract required to conduct the work under this Agreement to the CAM for review, if requested.
- Submit copies of all final executed contracts for equipment.
- If additional contractors are identified as necessary to complete the Project during the course of the Agreement, then the Recipient shall notify the CAM in writing within 10 calendar days of identifying the need for additional contractors. The CAM may request copies of all applicable documents.

Products:

- List of all contractors and all equipment contracts required to complete the work under this Agreement.
- Final signed contracts or purchase agreements, if requested.

TASK 2A - System 1 Technical Tasks

The purpose of this task is successful procurement and installation of all project components identified in this Agreement.

Required technology (select one):

- Solar photovoltaic (PV)
- Wind turbine

Optional additional equipment (select all that apply):

- Battery Energy Storage
- Pump replacement (conversion of fossil fuel pump to electric pump)
- Electric Vehicle Charging Infrastructure

System 1 Project Detail

a. Renewable Energy System

Description of where equipment will be installed on the property (*For example: northeast corner by barn*):

Project APN: 016-150-022. Northwest side of the property on the Roundabout made by the access roads.

For Solar PV, please identify the surface of installation:

- Rooftop If so, is the rooftop on an existing building? Yes No
- Parking lot (can be unpaved). If so, is it an existing parking lot? Yes No

Exhibit A Scope of Work

Ground-mounted or Floating (Solar Panels mounted on pontoons and floating on irrigation pond).

Other:

Electricity produced will be used to power (For example: greenhouse; irrigation pumps; electric vehicle charging):

25 HP Well Irrigation pump and EV 48VDC charger.

Rated Capacity of system: [27] kW

General Description of Equipment (please include information such as number of arrays or turbines):

VariSun 27 kW Solar Pumping Ballasted Ground Mount Direct Solar Pumping System. The Ballasted ground mount system will be composed of two 56 FT long arrays. There will be 9 strings of 10 panels, each individually fused going into the VariSun 25 HP Pump Inverter Control Panel. Additionally, the arrays will be connected to the Schneider 48 VDC charge controller for EV charging.

Expected Make and Model of Equipment to be Installed (include modules and inverter):

VariSun by Sustainable Technologies - **VS-P25-GM**

<http://sustech.cc/?product=vs-p25-gm-25-hp-varisun-solar-pumping-system>

The 27 KW VariSun Pumping System component list follows:

300 watt – 60 cell Mission Solar or Seraphim Modules, US made.	90	Each
25 HP VariSun Solar pumping Inverter control panel	1	Each
DC disconnects switchgear	9	Each
NEMA 4 control panel with charging system for control power and irrigation controller	1	Each
MPPT Solar controller	1	Each
Brittmore Solway II Ground mount racking	1	Set

Expected Contractor(s), if known (include Contractor State License Board (CSLB) license number):

Sustainable Technologies 772329

b. Electric Vehicle Charger

Description of where equipment will be installed on the property and the renewable energy source serving the charger (For example: located with solar system installed at northeast corner by greenhouse):

48VDC utility car charger connected to the solar pump system.

Exhibit A Scope of Work

Charger will be used to charge? *(For example small car, off-road vehicles forklift, etc.):*

To serve electric utility farm carts.

Is/are the vehicle(s) referenced above used for the agricultural operation specified in the application?

Yes No

Charging Equipment Specifications *(for example make, model, size, ports):*

Schneider XW 80A 600VDC MPPT Charge Controller.

Expected Contractor(s), if known *(include CSLB license number):*

Sustainable Technologies 772329

Task 2A.1 Site Preparation and Equipment Procurement

The goal of this task is to prepare the Project site for installation and procure the equipment that will be installed.

The Recipient shall:

- Complete all site preparation, including space clearing, debris disposal, etc.
- Obtain any equipment not procured in Task 1.6.
- Notify CAM by email when task activities are complete.

Products:

- Completion of Site Preparation as identified in System 1 Project Detail table for all elements of project proposal (if applicable) and Equipment Procurement Memo that shall include but not be limited to:
 - Itemization and identification of Equipment to be procured including the manufacturer name(s); model(s) and serial number(s).
 - Summary of the steps to prepare the site(s).
 - Copy of the performance specifications for each equipment item purchased.
 - Status of the planned equipment installation including preliminary schedule for equipment delivery and installation for each site.
- Notification to CAM of task completion.

Task 2A.2 Equipment Installation

The goal of this task is to install all equipment components associated with the project. Installation will be considered complete when each project component is operational, and when the renewable energy technology component is generating electricity.

Exhibit A Scope of Work

As there are potentially multiple project components with unique completion dates, the applicant may provide appropriate products based on completion of individual project components (for example, a project featuring a solar PV system and battery energy storage may provide products supporting the completion of the solar PV system even if the battery storage is not yet completed).

The Recipient shall:

- Ensure successful completion of equipment installation for each project component.
- Ensure the renewable energy technology component is generating electricity and serving the demand specified in the Project Detail section of this Scope of Work.
- Notify CAM upon successful installation for each project component.

Products:

- Notification to CAM of completion of installation for each project component.

TASK 2B - System 2 Technical Tasks

The purpose of this task is successful procurement and installation of all project components identified in this Agreement.

Required technology (select one):

- Solar photovoltaic (PV)
- Wind turbine

Optional additional equipment (select all that apply):

- Battery Energy Storage
- Pump replacement (conversion of fossil fuel pump to electric pump)
- Electric Vehicle Charging Infrastructure

Exhibit A Scope of Work

System 2 Project Detail
The standalone 9kW solar system will charge this 20 kWh storage system.

- a. **Renewable Energy System**
 Battery will be used for: (For example, provide back up for grid outages; to regularly shift or extend hours of use for the installed solar energy system):
Description of where equipment will be installed on the property (For example: northeast corner by barn):
 Provide energy for OYA Office and farm storage/packing house.

Project APN: 016-150-023. The system will be installed at the Southwest end of the farm.
Expected equipment to be installed:

For Solar PV, please identify the surface of installation:

Rooftop. If so, is the rooftop on an existing building? Yes No
Expected Contractor(s), if known (include CSLB license number):

Parking lot (can be unpaved). If so, is it an existing parking lot? Yes No
 Sustainable Technologies 772329

- c. Ground mounted or Floating (Solar Panels mounted on pontoons and floating on irrigation pond).
Electric Vehicle Charger

Other:
Description of where equipment will be installed on the property and the renewable energy source serving the charger (For example: located with solar system installed at northeast corner by greenhouse):
Electricity produced will be used to power (For example: greenhouse; irrigation pumps; electric vehicle charging):

48VDC utility cart charger connected to the office off-grid solar system and will serve electric utility farm carts.
 The 9 kW PV and 20 kWh battery system will provide energy to the OYA Farm field office, the warehouse/packing house that includes the farm workers lunch room.

Charger will be used to charge? (For example small car, off-road vehicles forklift, etc.):
Rated Capacity of system: [9] kW

Electric utility farm carts
General Description of Equipment (please include information such as number of arrays or turbines):

Is/are the vehicle(s) referenced above used for the agricultural operation specified in the application?
 The ground mount system will have 30-305 Watt modules connected to the Pika Energy inverter. The inverter will be connected to the Pika Energy Harbor 6 Smart Battery Module.
 Yes No

Charging Equipment Specifications (for example make, model, size, ports):
Expected Make and Model of Equipment to be Installed (include modules and inverter):

Charging equip TBD. The design team is working with Pika energy and the farmer to determine best charging option for the farm operation and for system operation.
 30- Mission Solar MSE305SQ5 modules
 Pika Islanding Inverter X11402, or Delta bidirectional 120/240 10 KW inverter.

Pika Harbor 6 Smart Battery, or Enerport L1020 EES.
Expected Contractor(s), if known (include CSLB license number):

Custom Self standing racking skids
 Sustainable Technologies 772329

Expected Contractor(s), if known (include Contractor State License Board (CSLB) license number):

Sustainable Technologies 772329

- b. **Battery Energy Storage**

Description of where equipment will be installed on the property and the renewable energy source serving the charger (For example: located with solar system installed at northeast corner by greenhouse):

Task 2B.1 Site Preparation and Equipment Procurement

The goal of this task is to prepare the Project site for installation and procure the equipment that will be installed.

The Recipient shall:

- Complete all site preparation, including space clearing, debris disposal, etc.
- Obtain any equipment not procured in Task 1.6.

Exhibit A Scope of Work

- Notify CAM by email when task activities are complete.

Products:

- Completion of Site Preparation as identified in System 2 Project Detail table for all elements of project proposal (if applicable) and Equipment Procurement Memo that shall include but not be limited to:
 - Itemization and identification of Equipment to be procured including the manufacturer name(s); model(s) and serial number(s).
 - Summary of the steps to prepare the site(s).
 - Copy of the performance specifications for each equipment item purchased.
 - Status of the planned equipment installation including preliminary schedule for equipment delivery and installation for each site.
- Notification to CAM of task completion.

Task 2B.2 Equipment Installation

The goal of this task is to install all equipment components associated with the project. Installation will be considered complete when each project component is operational, and when the renewable energy technology component is generating electricity.

As there are potentially multiple project components with unique completion dates, the applicant may provide appropriate products based on completion of individual project components (for example, a project featuring a solar PV system and battery energy storage may provide products supporting the completion of the solar PV system even if the battery storage is not yet completed).

The Recipient shall:

- Ensure successful completion of equipment installation for each project component.
- Ensure the renewable energy technology component is generating electricity and serving the demand specified in the Project Detail section of this Scope of Work.
- Notify CAM upon successful installation for each project component.

Products:

- Notification to CAM of completion of installation for each project component.

TASK 3 Reporting

Task 3.1 Report of Project Completion

The goal of this task is to provide notice of project completion once all project components are installed and operational, and all equipment items are connected and operating as identified in Recipient's application.

The Recipient shall:

- Ensure successful completion of all project components so the project is operational as described in the application form.

Exhibit A Scope of Work

- Provide a report documenting that all project components are installed and operational including, but not limited to:
 - Documentation that the project is generating electricity
 - Photograph evidence (with distinguishing elements to demonstrate the equipment location).
 - Written affirmation that:
 - the project is generating electricity through a renewable energy source in direct support of the applicant's agriculture operation(s);
 - all project components are installed and functional.

Products:

- A Report of Project Completion. CAM shall provide the format and specific content for the report.

Task 3.2 Measurement and Verification Reporting

The goals of this task are to monitor continued operation of the installed equipment; collect data related to the operation of the installed equipment; report the data to the Energy Commission; and verify that satisfactory and continued progress is made toward achieving the goals of this Agreement.

CAM will provide reporting templates at the "kick-off" meeting, including format and specific content for reports. The due date for these reports will be determined by the date the Report of Project Completion is submitted to CAM.

The Recipient shall:

- Prepare Performance Report for Year One and Year Two, with operational and electrical generation data and other relevant data associated with the installed equipment. The Year One and Year Two Report will include data at the end of the first and second year of operation.
- Prepare Report of Continued Operation to confirm the project is still operational at the end of year three.

Products:

- Year one Performance Report at end of year one.
- Year two Performance Report at end of year two.
- Year three Confirmation of Continued Operation at the end of year three.

STATE OF CALIFORNIA

STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION - RE: MARSHA HABIB

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

RESOLVED, that the Energy Commission approves Agreement REA-18-043 with Marsha Habib for a \$76,446 grant to install a 27 kW solar PV pumping system, a 9 kW solar PV system, battery energy storage, and EV charging infrastructure to serve a mixed-crop farm in San Benito County, and adopting staff's determination that this action is exempt from CEQA. This project is expected to provide benefits to priority populations through job creation and criteria pollutant emission reductions; and

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

CERTIFICATION

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 California Energy Commission held on June 12, 2019.

AYE: [List of Commissioners]

NAY: [List of Commissioners]

ABSENT: [List of Commissioners]

ABSTAIN: [List of Commissioners]

Cody Goldthrite,
Secretariat