

New Agreement ARV-12-xxx (To be completed by CGL Office)

Division	Agreement Manager:	MS-	Phone
600 Fuels and Transportation Division	Darren Nguyen	27	916-654-5144

Recipient's Legal Name	Federal ID Number
Harvest Power Tulare, LLC (previously known as Tulare County Compost Biomass, Inc)	46-2026013

Title of Project

Term and Amount	Start Date	End Date	Amount
	6 / 12 / 2013	12 / 30 / 2016	\$ 4,787,694

Business Meeting Information			
<input type="checkbox"/> ARFVTP agreements under \$75K delegated to Executive Director.			
Proposed Business Meeting Date	6 / 12 / 2013	<input type="checkbox"/> Consent	<input checked="" type="checkbox"/> Discussion
Business Meeting Presenter	Darren Nguyen	Time Needed:	5 minutes
Please select one list above. All fees (AB118- ARFVTP)			

Agenda Item Subject and Description
Possible approval of Agreement ARV-12-064 with Harvest Power Tulare, LLC for a \$4,787,694 grant to build, own, and operate a biofuel facility that will convert organic waste to biomethane via anaerobic digestion. The biomethane will be cleaned, compressed, and used as transportation fuel at a compressed natural gas fueling station to be constructed on site.

California Environmental Quality Act (CEQA) Compliance
1. Is Agreement considered a "Project" under CEQA? <input checked="" type="checkbox"/> Yes (skip to question 2) <input type="checkbox"/> No (complete the following (PRC 21065 and 14 CCR 15378)): Explain why Agreement is not considered a "Project": Agreement will not cause direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment because .
2. If Agreement is considered a "Project" under CEQA: <input type="checkbox"/> a) Agreement IS exempt. (Attach draft NOE) <input type="checkbox"/> Statutory Exemption. List PRC and/or CCR section number: <input type="checkbox"/> Categorical Exemption. List CCR section number: <input type="checkbox"/> Common Sense Exemption. 14 CCR 15061 (b) (3) Explain reason why Agreement is exempt under the above section: <input checked="" type="checkbox"/> b) Agreement IS NOT exempt. (Consult with the legal office to determine next steps.) Check all that apply <input type="checkbox"/> Initial Study <input checked="" type="checkbox"/> Environmental Impact Report <input type="checkbox"/> Negative Declaration <input type="checkbox"/> Statement of Overriding Considerations <input type="checkbox"/> Mitigated Negative Declaration

List all subcontractors (major and minor) and equipment vendors: (attach additional sheets as necessary)	
Legal Company Name:	Budget
	\$ 0
	\$ 0
	\$ 0

List all key partners: (attach additional sheets as necessary)
Legal Company Name:
GICON

GRANT REQUEST FORM (GRF)



Budget Information			
Funding Source	Funding Year of Appropriation	Budget List No.	Amount
ARFVTF			\$4,787,694
Funding Source			\$
R&D Program Area:	Select Program Area	TOTAL:	\$4,787,694
Explanation for "Other" selection			
Reimbursement Contract #:		Federal Agreement #:	

Recipient's Administrator/ Officer		Recipient's Project Manager	
Name:	Wayne Bishop	Name:	Wayne Bishop
Address:	PO BOX 11402	Address:	PO BOX 11402
City, State, Zip:	Bakersfield, CA 93389	City, State, Zip:	Bakersfield, CA 93389
Phone:	661-378-4555	Fax:	- -
E-Mail:	wbishop@harvestpower.com	E-Mail:	wbishop@harvestpower.com

Selection Process Used	
<input checked="" type="checkbox"/> Competitive Solicitation	Solicitation #: PON-11-602
<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 checked="" type="checkbox"/> N/A <input type="checkbox"/> Attached

_____ Agreement Manager _____ Date _____ Office Manager _____ Date _____ Deputy Director _____ Date

DRAFT

**Exhibit A
Scope of Work**

TECHNICAL TASK LIST

Task #	CPR	Task Name
1		Agreement Management
2		Pre-Construction
3	x	Construction
4		Operations
5		Data Collection and Analysis

KEY NAME LIST

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
1	Wayne Bishop		
2	Wayne Bishop	EPC - To be Determined	GICON
3	Wayne Bishop	EPC - To be Determined	GICON
4	Wayne Bishop		
5	Wayne Bishop		

GLOSSARY

Specific terms and acronyms used throughout this work scope are defined as follows:

Acronym	Definition
CAM	Commission Agreement Manager
CPR	Critical Project Review
ARFVT	Alternative and Renewable Fuel and Vehicle Technology
CI	Carbon Intensity
CO ₂	Carbon Dioxide
GGE	Gasoline Gallon Equivalent
GHG	Greenhouse Gas
LCFS	Low Carbon Fuel Standard
AD	Anaerobic Digestion
CNG	Compressed Natural Gas
EPC	Engineer-Procurement Contractor
Recipient	Harvest Power Tulare, LLC

Background:

Assembly Bill 118 (Núñez, Chapter 750, Statutes of 2007), created the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVT Program). The statute, subsequently amended by AB 109 (Núñez, Chapter 313, Statutes of 2008), authorizes the Energy Commission to develop and deploy alternative and renewable fuels and advanced transportation technologies to help attain the state's climate change policies. The Energy Commission has an annual program budget of approximately \$100 million and provides financial support for projects that:

- Develop and improve alternative and renewable low-carbon fuels;
- Optimize alternative and renewable fuels for existing and developing engine technologies;
- Produce alternative and renewable low-carbon fuels in California;
- Decrease, on a full fuel cycle basis, the overall impact and carbon footprint of alternative and renewable fuels and increase sustainability;
- Expand fuel infrastructure, fueling stations, and equipment;
- Improve light-, medium-, and heavy-duty vehicle technologies;
- Retrofit medium- and heavy-duty on-road and non-road vehicle fleets;
- Expand infrastructure connected with existing fleets, public transit, and transportation corridors; and
- Establish workforce training programs, conduct public education and promotion, and create technology centers.

The California Energy Commission issued solicitation PON-11-601 to provide funding opportunities under the ARFVT Program for projects which create new, low carbon facilities, that lower the carbon intensity of fuels produced at existing facilities and to support projects must demonstrate economically competitive yields and lower GHG potential than Low Carbon Fuel Standard (LCFS) pathways for corn ethanol or soy biodiesel. To be eligible for funding under PON-11-601, the projects must also be consistent with the Energy Commission's ARFVT Investment Plan updated annually. In response to PON-11-601, the Recipient submitted application number 12, which was proposed for funding in the Energy Commission's Notice of Proposed Awards on October 5th, 2012, and is incorporated by reference to this Agreement in its entirety.

In the event of any conflict or inconsistency between the terms of the Solicitation and the terms of the Recipient's Application, the Solicitation shall control. In the event of any conflict or inconsistency between the Recipient's Application and the terms of the Energy Commission's Award, the Energy Commission's Award shall control. Similarly, in the event of any conflict or inconsistency between the terms of this Agreement and the Recipient's Application, the terms of this Agreement shall control.

All work proposed and budgeted for in this agreement are separate and distinct from Energy Commission agreement number ARV-12-063 with Harvest Power LLC. All costs associated to this agreement shall be clearly documented and show that they are separate and distinct of any costs that are incurred in agreement ARV-12-063.

Problem Statement:

Natural gas is increasingly being recognized as a viable alternative transportation fuel. There are various reasons for this: the United States has a large supply, it is much less expensive than petroleum and expected to remain that way in the near-term, and it releases far less greenhouse gas (GHG) emissions and criteria pollutants than gasoline or diesel fuel. However, biomethane produced by organic feedstocks via anaerobic digestion can be a source of renewable natural gas (RNG). RNG can be cleaned, compressed and sold at the source of generation, dramatically reducing overall CO₂ emissions and having far less impact on communities and other natural resources.

The proposed project will be one of the first, if not the first, “digester-to-pump” projects in California. There remain several barriers to widespread adoption of this method. Currently, there are no operating commercial-scale high solids digesters in North America integrated with a CNG fueling station. Gas conditioning and upgrading to transportation quality RNG has not been demonstrated with these feedstocks and so poses certain engineering challenges. The price of fossil fuel gas is at historic lows making it difficult for biomethane to compete, particularly since the price of natural gas does not reflect all its externalities. Feedstock availability is another barrier. In areas where organic waste can be disposed of cheaply, that is, where there are low “tip fees,” acquiring sufficient feedstock can be challenging. This project will help overcome these obstacles and expedite widespread commercialization.

Goals of the Agreement:

The goal of this project is to validate direct “digester-to-pump” biomethane as a viable and replicable model to boost California’s quantity of renewable transportation fuel. The Recipient will meet this goal by deploying the best-in-class technology along through an experienced team of organic materials professionals.

Objectives of the Agreement:

The objectives of this project are to:

- Process 40,000 tons per year of mixed organic feedstock material.
- Convert the feedstock through high solids anaerobic digestion to 83,000 MMBTUs of renewable natural gas gross production, with net production available for sale of 660,000 gasoline gallon equivalent (GGE).
- Construct and operate an on-site CNG fueling station.
- Confirm economic and technical assumptions of the project to stimulate replication.

TASK 1 ADMINISTRATION

Task 1.1 Attend Kick-off Meeting

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

The Recipient shall:

- Attend a “Kick-Off” meeting with the Commission Project Manager, the Grants Officer, and a representative of the Accounting Office. The Recipient shall bring its Project Manager, Agreement Administrator, Accounting Officer, and others designated by the Commission Project Manager to this meeting. The administrative and technical aspects of this Agreement will be discussed at the meeting. Prior to the kick-off meeting, the Commission Project Manager will provide an agenda to all potential meeting participants.

The administrative portion of the meeting shall include, but not be limited to the following:

- Discussion of the terms and conditions of the Agreement
- Discussion of Critical Project Review (Task 1.2)
- Match fund documentation (Task 1.6). No work may be done until this documentation is in place.
- Permit documentation required (Task 1.7)
- Discussion of subcontracts needed to carry out project (Task 1.8)

The technical portion of the meeting shall include, but not be limited to, the following:

- The Commission Project Manager’s expectations for accomplishing tasks described in the Scope of Work
- An updated Schedule of Products
- Discussion of Progress Reports (Task 1.4)
- Discussion of Technical Products (Product Guidelines located in Section 5 of the Terms and Conditions)
- Discussion of the Final Report (Task 1.1)

The Commission Project Manager shall designate the date and location of this meeting.

Recipient Products:

- Updated Schedule of Products
- Updated List of Match Funds
- Updated List of Permits

Commission Project Manager Product:

- Kick-Off Meeting Agenda

Task 1.2 Critical Project Review (CPR) Meetings

The goal of this task is to determine if the project should continue to receive Energy Commission funding to complete this Agreement and to identify any needed modifications to the tasks, products, schedule or budget.

CPRs provide the opportunity for frank discussions between the Energy Commission and the Recipient. CPRs generally take place at key, predetermined points in the Agreement, as determined by the Commission Project Manager and as shown in the Technical Task List above. However, the Commission Project Manager may schedule additional CPRs as necessary, and any additional costs will be borne by the Recipient.

Participants include the Commission Project Manager and the Recipient and may include the Commission Grants Officer, the Fuels and Transportation Division (FTD) team lead, other Energy Commission staff and Management as well as other individuals selected by the Commission Project Manager to provide support to the Energy Commission.

The Commission Project Manager shall:

- Determine the location, date, and time of each CPR meeting with the Recipient. These meetings generally take place at the Energy Commission, but they may take place at another location.
- Send the Recipient the agenda and a list of expected participants in advance of each CPR. If applicable, the agenda shall include a discussion on both match funding and permits.
- Conduct and make a record of each CPR meeting. One of the outcomes of this meeting will be a schedule for providing the written determination described below.
- Determine whether to continue the project, and if continuing, whether or not modifications are needed to the tasks, schedule, products, and/or budget for the remainder of the Agreement. Modifications to the Agreement may require a formal amendment (please see the Terms and Conditions, Section 8). If the Commission Project Manager concludes that satisfactory progress is not being made, this conclusion will be referred to the Transportation Committee for its concurrence.
- Provide the Recipient with a written determination in accordance with the schedule. The written response may include a requirement for the Recipient to revise one or more product(s) that were included in the CPR.

The Recipient shall:

- Prepare a CPR Report for each CPR that discusses the progress of the Agreement toward achieving its goals and objectives. This report shall include recommendations and conclusions regarding continued work on the projects. This report shall be submitted along with any other products identified in this scope of work. The Recipient shall submit these documents to the Commission Project Manager and any other designated reviewers at least 15 working days in advance of each CPR meeting.
- Present the required information at each CPR meeting and participate in a discussion about the Agreement.

Commission Project Manager Products:

- Agenda and a list of expected participants

- Schedule for written determination
- Written determination

Recipient Product:

- CPR Report(s)

Task 1.3 Final Meeting

The goal of this task is to closeout this Agreement.

The Recipient shall:

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

This meeting will be attended by, at a minimum, the Recipient, the Commission Grants Office Officer, and the Commission Project Manager. The technical and administrative aspects of Agreement closeout will be discussed at the meeting, which may be two separate meetings at the discretion of the Commission Project Manager.

The technical portion of the meeting shall present an assessment of the degree to which project and task goals and objectives were achieved, findings, conclusions, recommended next steps (if any) for the Agreement, and recommendations for improvements. The Commission Project Manager will determine the appropriate meeting participants.

The administrative portion of the meeting shall be a discussion with the Commission Project Manager and the Grants Officer about the following Agreement closeout items:

- What to do with any equipment purchased with Energy Commission funds (Options)
- Energy Commission's request for specific "generated" data (not already provided in Agreement products)
- "Surviving" Agreement provisions
- Final invoicing and release of retention
- Prepare a schedule for completing the closeout activities for this Agreement.

Products:

- Written documentation of meeting agreements
- Schedule for completing closeout activities

Task 1.4 Monthly Progress Reports

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

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

The Recipient shall:

- Prepare a Monthly Progress Report which 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. Each progress report is due to the Commission Project Manager within 10 days of the end of the reporting period. The recommended specifications for each progress report are contained in Section 6 of the Terms and Conditions of this Agreement.

Product:

- Monthly Progress Reports

Task 1.5 Final Report

The goal of the Final Report is to assess the project's success in achieving its goals and objectives, advancing science and technology, and providing energy-related and other benefits to California.

The objectives of the Final Report are to clearly and completely describe the project's purpose, approach, activities performed, results, and advancements in science and technology; to present a public assessment of the success of the project as measured by the degree to which goals and objectives were achieved; to make insightful observations based on results obtained; to draw conclusions; and to make recommendations for further projects and improvements to the ETD project management processes.

The Final Report shall be a public document. If the Recipient has obtained confidential status from the Energy Commission and will be preparing a confidential version of the Final Report as well, the Recipient shall perform the following activities for both the public and confidential versions of the Final Report.

The Recipient shall:

- Prepare an Outline of the Final Report.
- Prepare a Final Report following the approved outline and the latest version of the Final Report guidelines which will be provided by the Commission Project Manager. The Commission Project Manager shall provide written comments on the Draft Final Report within fifteen (15) working days of receipt. The Final Report must be completed at least 60 days before the end of the Agreement Term.
- Submit one bound copy of the Final Report with the final invoice.

Products:

- Draft Outline of the Final Report
- Final Outline of the Final Report
- Draft Final Report
- Final Report

Task 1.6 Identify and Obtain Matching Funds

The goal of this task is to ensure that the match funds planned for this Agreement are obtained for and applied to this Agreement during the term of this Agreement.

The costs to obtain and document match fund commitments are not reimbursable through this Agreement. Although the Energy Commission budget for this task will be zero dollars, the Recipient may utilize match funds for this task. Match funds shall be spent concurrently or in advance of Energy Commission funds for each task during the term of this Agreement. Match funds must be identified in writing and the associated commitments obtained before the Recipient can incur any costs for which the Recipient will request reimbursement.

The Recipient shall:

- Prepare a letter documenting the match funding committed to this Agreement and submit it to the Commission Project Manager at least 2 working days prior to the kick-off meeting. 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 such 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 each cash match fund, its source, including a contact name, address and telephone number and the task(s) to which the match funds will be applied.
 - Amount of each in-kind contribution, a description, documented market or book value, and its 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 shall identify its owner and provide a contact name, address and telephone number, and the address where the property is located.
- Provide a copy of the letter of commitment from an authorized representative of each source of cash match funding or in-kind contributions that these funds or contributions have been secured. For match funds provided by a grant, a copy of the executed grant shall be submitted in place of a letter of commitment.
- Discuss match funds and the implications to the Agreement if they are reduced or not obtained as committed, at the kick-off meeting. If applicable, match funds will be included as a line item in the progress reports and will be a topic at CPR meetings.

- Provide the appropriate information to the Commission Project Manager if during the course of the Agreement additional match funds are received.
- Notify the Commission Project Manager within 10 days if during the course of the Agreement existing match funds are reduced. Reduction in match funds must be approved through a formal amendment to the Agreement and may trigger an additional CPR.

Products:

- A letter regarding match funds or stating that no match funds are provided
- Copy(ies) of each match fund commitment letter(s) (if applicable)
- Letter(s) for new match funds (if applicable)
- Letter that match funds were reduced (if applicable)

Task 1.7 Identify and Obtain Required Permits

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 keep the Agreement schedule on track.

Permit costs and the expenses associated with obtaining permits are not reimbursable under this Agreement. Although the Energy Commission budget for this task will be zero dollars, the Recipient shall budget match funds for any expected expenditures associated with obtaining permits. Permits must be identified in writing and obtained before the Recipient can make any expenditure for which a permit is required.

The Recipient shall:

- Prepare a letter documenting the permits required to conduct this Agreement and submit it to the Commission Project Manager at least 2 working days prior to the kick-off meeting. If there are no permits required at the start of this Agreement, then state such in the letter. If it is known at the beginning of the Agreement that permits will be required during the course of the Agreement, provide in the letter:
 - A list of the permits that identifies the:
 - Type of permit
 - Name, address and telephone number of the permitting jurisdictions or lead agencies
 - The schedule the Recipient will follow in applying for and obtaining these permits.
- Discuss the list of permits and the schedule for obtaining them at the kick-off meeting and develop a timetable for submitting the updated list, schedule and the copies of the permits. The implications to the Agreement 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 the Progress Reports and will be a topic at CPR meetings.
- If during the course of the Agreement additional permits become necessary, provide the appropriate information on each permit and an updated schedule to the Commission Project Manager.

- As permits are obtained, send a copy of each approved permit to the Commission Project Manager.
- If during the course of the Agreement permits are not obtained on time or are denied, notify the Commission Project Manager within 5 working days. Either of these events may trigger an additional CPR.

Products:

- Letter documenting the permits or stating that no permits are required
- A copy of each approved permit (if applicable)
- Updated list of permits as they change during the term of the Agreement (if applicable)
- Updated schedule for acquiring permits as changes occur during the term of the Agreement (if applicable)

Task 1.8 Obtain and Execute Subcontracts

The goal of this task is for Recipients to identify any subcontracts required to carry out the tasks under this Agreement and to procure them consistent with the terms and conditions of this Agreement and the Recipient's own procurement policies and procedures. It will also provide the Energy Commission an opportunity to review the subcontracts to ensure that the tasks are consistent with this Agreement, that the budgeted expenditures are reasonable and consistent with applicable cost principles.

The Recipient shall:

- Prepare a letter documenting the subcontracts required to conduct this Agreement, and submit it to the Commission Project Manager at least 2 working days prior to the kick-off meeting. If there are no subcontracts required at the start of this Agreement, then state such in the letter. If it is known at the beginning of the Agreement that subcontracts will be required during the course of the Agreement, provide in the letter:
 - A list of the subcontracts that describes the anticipated maximum budget and general scope of work for each,
 - A description of the procurement process to be used, and
 - The schedule the Recipient will follow in applying for and obtaining these subcontracts
- Submit a draft of the subcontract that will include a budget with the information required in the budget details to the Commission Project Manager for review.
- Submit a final copy of the executed subcontract.

Products:

- Letter describing the subcontracts needed, or stating that no subcontracts are required
- Draft subcontracts
- Final subcontracts

TECHNICAL TASKS

Task 2 Engineering Design

The goals of this task are to complete all required design work; arrange for construction; and document preparedness to build the project.

The Recipient shall

- Prepare a Written Notification of Readiness to Construct stating the project has the following items:
 - Final budget
 - Final schedule
 - Final design
 - Binding bids for all engineering, equipment procurement, and construction,
 - Project financing with lenders
 - Other third party agreements necessary for licensing GICON technologies or items necessary to begin construction.
- Develop proposed Construction Timeline running from the intended date to begin construction until the commercial operation date of the project

Product:

- Written Notification of Readiness to Construct
- Construction Schedule

Task 3 Construction

Task 3.1 – Site Preparation

The goal of this task is to conduct the on-site preliminary activities necessary to allow for construction to proceed on the site.

The Recipient shall:

- Execute connection of utilities necessary to construction and operation of the facility (e.g. water, sewer, electricity, backup gas).
- Perform any earthwork necessary for construction and operation of the facility.

Products:

- Written Notice from subcontractor that site is ready for construction

Task 3.2 – Phase 1 Construction

The goal of this task is to construct the biofuel production facility as outlined in the Final Design and in accordance with the Construction timeline.

The Recipient shall:

- Execute construction of the project as outlined in the Final Design and in accordance with the Construction timeline. This construction shall include the following major components:
 - Foundations
 - Erecting all structures, including digester tunnels and tanks
 - Install gas collection & processing
 - Install Electrical/HVAC/Plumbing
 - Construct CNG fueling station
 - Perform Mechanical Testing
- Prepare a Written Notice of Substantial Completion

Product:

- Written Notice of Substantial Completion

Task 3.3 – Phase 2 Construction

The goal of this task is to prepare the facility for Start-up.

The Recipient shall:

- Complete remaining construction tasks as outlined in the Construction timeline such as:
 - Interior finishes
 - Install support systems (control, fire, security, communications)
 - Paving & Landscaping
 - Mechanical and Biological Commissioning & Start-Up
- Prepare Written Notification of Commercial Operation and submit it to the CAM within ten working days of commercial operation of the project. The Written Notification shall contain the following elements:
 - The date the project achieved commercial operation(s)
 - A narrative on the current status of the project and initial operations
 - Any changes made from the project as originally proposed and reasons for those changes.

Product:

- Written Notification of Commercial Operation Start Date

[CPR WILL BE HELD IN THIS TASK. See Task 1.2 for details]

Task 4 Operations

The goal of this task is to operate the fuel production facility as designed and to begin to collect data to document the project's fulfillment of its objectives.

The Recipient shall:

- Operate facility and comply with all applicable regulatory standards.
- Prepare Monthly Operations Report. The Operations Report shall include, but not be limited to, the following information:
 - A narrative on operational highlights from the previous month, including any stoppages in production and a statement as to the project's compliance with regulatory requirements.
 - The total amount of fuel produced on a monthly basis.
 - The total amount of feedstock received and processed on a monthly basis.
 - Conversion ratio for feedstock to fuel production.
 - The direct operational costs of the project.

Products:

- Operations Report

Task 5 Data Collection and Analysis

The goal of this task is to collect and analyze operational data to determine the economic viability and environmental impact of the project. Final analysis of all project data must be included in the Final Report.

The Recipient Shall:

- Collect a minimum of 6 months of operational data from fuel production system to include:
 - time operating (up and down time)
 - efficiency of conversion of feedstock
 - biofuel production rate,
 - quality and quantity of fuel produced
- Estimate gasoline and/or petroleum-based diesel fuel that will be displaced annually.
- Explain how the project will reduce criteria air pollutants and air toxics and reduce or avoid multimedia environmental impact, and lead to a decrease, on a life cycle basis, in emissions of water pollutants or any other substances known to damage human health or the environment.
- Explain how the project incorporated and achieved the sustainability goals.
- Provide a quantified estimate of the project's carbon intensity values for life-cycle scale greenhouse gas emissions.
- Quantify any water efficiency and water use reduction measures used in the project including, but not limited to, the use of recycled or reclaimed water and the reduction or elimination of point and nonpoint source wastewater discharge.
- Describe any potential use of renewable energy or cogeneration in the project.

- Describe any potential energy efficiency measures used in the project that would exceed Title 24 standards in Part 6 of the California Code of Regulations.
- Provide data on expected job creation, economic development, and increased state revenue.
- Compare any project performance and expectations provided in the proposal to Energy Commission with actual project performance and accomplishments.
- Describe how the project supports new technology advancement for vehicles, vessels, engines, and other equipment, and promote the deployment of such technologies in the marketplace. To the extent possible describe how the project, provided a measurable transition from the nearly exclusive use of petroleum fuels to a diverse portfolio of viable alternative fuels that meets California's petroleum reduction and alternative fuel use goals.
- Describe how the project demonstrated the cost-effectiveness of the proposed technology in achieving greenhouse gas emissions reduction.
- Provide additional data that may be requested by the Energy Commission during the term of this Agreement, as is reasonably available.

Products:

- Information will be included in the Final Report.

STAFF DRAFT