

GRANT REQUEST FORM (GRF)

CEC-270 (Revised 02/13)

CALIFORNIA ENERGY COMMISSION

New Agreement ARV-14-029 (To be completed by CGL Office)

Division	Agreement Manager:	MS-	Phone
600 Fuels and Transportation Division	Juan Garcia	27	916-654-3915

Recipient's Legal Name	Federal ID Number
Colony Energy Partners - Tulare, LLC	37-1663807

Title of Project
Demonstration of Colony Energy's Power System at the Endeavor Facility

Term and Amount	Start Date	End Date	Amount
	12 / 10 / 2014	12 / 31 / 2018	\$ 5,000,000

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

Proposed Business Meeting Date	12 / 10 / 2014	<input type="checkbox"/> Consent	<input checked="" type="checkbox"/> Discussion
Business Meeting Presenter	Juan Garcia	Time Needed:	5 minutes

Please select one list serve. Altfuels (AB118- ARFVTP)

Agenda Item Subject and Description

Proposed resolution approving Agreement ARV-14-029 with Colony Energy Partners - Tulare, LLC for a \$5,000,000 grant to construct a digester designed to process locally-collected dairy manure, food and agricultural processing residuals; restaurant and cafeteria food scraps; restaurant grease trap residuals; and organic municipal solid waste. This will result in production of power on-site, as well as the production of pipeline-grade biomethane that will be fed into the natural gas grid and marketed as a diesel alternative for on-road trucks. (ARFVTP Funding). Contact: Juan Garcia

California Environmental Quality Act (CEQA) Compliance

1. Is Agreement considered a "Project" under CEQA?
 Yes (skip to question 2) 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:
 a) Agreement **IS** exempt. (Attach draft NOE)
 Statutory Exemption. List PRC and/or CCR section number: _____
 Categorical Exemption. List CCR section number: _____
 Common Sense Exemption. 14 CCR 15061 (b) (3)
 Explain reason why Agreement is exempt under the above section:
- b) Agreement **IS NOT** exempt. (Consult with the legal office to determine next steps.)
 Check all that apply
 Initial Study Environmental Impact Report
 Negative Declaration Statement of Overriding Considerations
 Mitigated Negative Declaration

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

Legal Company Name:	Budget
Lyles Utility Construction, LLC	\$ 3,000,000
	\$
	\$

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

Legal Company Name:
Anaergia Services, BP Energy Company, Environ Strategy, Greenlane Biogas, Gas Technology Institute Southern California Gas Company (SoCalGas)

GRANT REQUEST FORM (GRF)

Budget Information			
Funding Source	Funding Year of Appropriation	Budget List No.	Amount
ARFVTF	14/15	601.118F	\$5,000,000
Funding Source			\$
R&D Program Area: N/A		TOTAL:	\$5,000,000
Explanation for "Other" selection			
Reimbursement Contract #:		Federal Agreement #:	

Recipient's Administrator/ Officer				Recipient's Project Manager			
Name:	Kent Hawkins			Name:	Kent Hawkins		
Address:	4940 Campus Drive, #C			Address:	4940 Campus Drive, #C		
City, State, Zip:	Newport Beach, CA 92660			City, State, Zip:	Newport Beach, CA 92660		
Phone:	949-752-7120	Fax:	- -	Phone:	949-752-7120	Fax:	- -
E-Mail:	kent@colonyenergypartners.com			E-Mail:	kent@colonyenergypartners.com		

Selection Process Used	
<input checked="" type="checkbox"/> Competitive Solicitation	Solicitation #: PON-13-609
<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

TECHNICAL TASK LIST

Task #	CPR	Task Name
1		Administration
2		Site Improvements
3	X	Anaerobic Digester Facility Installation, Commissioning, and Operations
4		Gas Conditioning System
5		Pipeline and Grid Interconnection
6		Data Collection and Analysis

KEY NAME LIST

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
1	Kent Hawkins (Colony Energy)		Environ Strategy
2	Stan Simmons	Lyles Utility Construction, LLC	Anaergia Services
3	Stan Simmons	Lyles Utility Construction, LLC	Anaergia Services
4	Stan Simmons	Lyles Utility Construction, LLC	Anaergia Services, Greenlane Biogas
5	Stan Simmons	Lyles Utility Construction, LLC	BP Energy Company, SoCalGas
6	Kent Hawkins (Colony Energy)		BP Energy Company , Gas Technology Institute (GTI)

GLOSSARY

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

Term/Acronym	Definition
ARFVTP	Alternative and Renewable Fuel and Vehicle Technology Program
Btu	British Thermal Unit
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CARB	California Air Resources Board
CHP	Combined Heating and Power

Term/Acronym	Definition
CO ₂	Carbon Dioxide
CNG	Compressed Natural Gas
CPR	Critical Project Review
DGE	Diesel Gallon Equivalent
FTD	Fuels and Transportation Division
GHG	Greenhouse Gases
GPD	Gallons Per Day
LCFS	Low Carbon Fuel Standard
LMOP	Landfill Methane Outreach Program
LNG	Liquefied Natural Gas
M&V	Measurement and Verification
MSW	Municipal Solid Waste
NMOC	Non-Methane Organic Compound
NO _x	Nitrogen oxides NO and NO ₂
PFD	Process Flow Diagram
PM	Particulate Matter
PSA	Pressure Swing Adsorption
PUC	Public Utilities Commission of the State of California
SoCalGas	Southern California Gas Company
Recipient	Colony Energy Partners - Tulare, LLC
TAC	Technical Advisory Committee

BACKGROUND

Assembly Bill (AB) 118 (Núñez, Chapter 750, Statutes of 2007), created the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP). The statute authorizes the California Energy Commission (Energy Commission) to develop and deploy alternative and renewable fuels and advanced transportation technologies to help attain the state's climate change policies. AB 8 (Perea, Chapter 401, Statutes of 2013) re-authorizes the ARFVTP through January 1, 2024, and specifies that the Energy Commission allocate up to \$20 million per year (or up to 20 percent of each fiscal year's funds) in funding for hydrogen station development until at least 100 stations are operational. 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;
- Expand fuel infrastructure, refueling 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 Energy Commission issued solicitation PON-13-609 entitled “Pilot-Scale and Commercial Scale Advanced Biofuels Production Facilities” under the ARFVTP on January 14, 2014. This competitive grant solicitation was an offer to share the cost of the development and production of new low carbon transportation fuels. To be eligible for funding under PON-13-609, projects must also be consistent with the Energy Commission’s ARFVTP Investment Plan, updated annually. In response to PON-13-609, Colony Energy Partners - Tulare, LLC (Recipient) submitted application number 7, which was proposed for funding in the Energy Commission’s Notice of Proposed Awards on July 18, 2014. PON-13-609 and Recipient’s application number 7 are hereby incorporated by reference into this Agreement in their 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.

Problem Statement:

The production of renewable natural gas, such as biomethane gas, will help California meet petroleum displacement and air quality goals. Improving the efficiency of anaerobic digester facilities is critical in order for California to accelerate the proliferation of renewable biomethane.

Goals of the Agreement:

The Recipient will develop, construct and operate an economically viable high-solids anaerobic digestion facility with the capacity to produce approximately more than 1.5 million standard cubic feet per day of low-emission renewable biomethane.

The proposed digestion is designed to process locally-collected dairy manure; food and agricultural processing residuals; restaurant and cafeteria food scraps; restaurant grease trap residuals; and organic municipal solid waste.

The facility will utilize an innovative gas conditioner to produce pipeline-grade renewable biomethane. The Recipient will construct and operate a pipeline and interconnection point with a nearby existing Southern California Gas Company (SoCalGas) natural gas pipeline. This will allow the renewable biomethane they produce at their facility to be inserted directly into the natural gas grid.

The renewable biomethane produced by this facility will be distributed for transportation use. Documentation will be collected from the compressed natural gas (CNG) refueling station(s) using the natural gas grid to ensure the total volume of gas inserted into SoCalGas' natural gas pipeline by the Recipient is also withdrawn specifically for transportation use.

The Recipient's proposed facility will be located on an industrial 18-acre parcel that is adjacent to the City of Tulare Industrial Wastewater Treatment Plant (IWWTP). The facility will integrate combined heat and power (CHP) cogeneration modules. A portion of the renewable biomethane produced by the Recipient's anaerobic digestion facility will power these CHP cogeneration modules to generate electric and thermal energy to enable the facility to be self-sufficient. Any surplus thermal energy produced by the CHP cogeneration modules will be exported to the IWWTP to heat the IWWTP's anaerobic digester furthering the generation of renewable energy.

The goals of this Agreement are to:

- Produce renewable biomethane gas to displace conventional fuel sources typically used in distributed energy generation,
- Enable the accelerated replacement of heavy-duty diesel trucks with clean-burning, ultra-low-emission trucks fueled by natural gas (NG) and renewable biomethane.
- Construct and operate a pipeline and interconnection point with a nearby existing SoCalGas natural gas pipeline to allow for the transport of the Recipients' renewable biomethane gas from the Recipient's facility to an interconnection point between the Recipient's facility and SoCalGas' pipeline system for insertion into the natural gas grid.

Objectives of the Agreement:

The objectives of this Agreement are to:

- Successfully implement an anaerobic digestion facility capable of annually producing approximately 400 million standard cubic feet of renewable biomethane gas that adhere to the quality requirements set forth in AB 1900 and SoCalGas' Rule 30;
- Produce and insert 400 million standard cubic feet of renewable biomethane gas into a utility pipeline for use at CNG refueling stations resulting in the displacement of approximately 2.87 million diesel gallons equivalent (DGE) fuel per year with renewable biomethane once the digestion facility becomes fully operational (see Exhibit D Special Terms and Conditions for the definition of "fully operational");
- Displace approximately 57.4 million gallons of diesel over the project's expected 20-year life);
- Collect data to document the project's progress, fulfillment of these objectives, and the project's economic and environmental benefits;
- Provide fuel for up to approximately 400 NG-powered heavy-duty vehicles,

- Reduce NOx by approximately 35.33 tons per year and particulate matter (PM) by approximately 0.71 tons per year;
- Reduce transportation GHG emissions by approximately 41,850 metric tons per year and approximately 209,252 metric tons over the first 5 years of the project; and
- Using a portion of the renewable biomethane produced by the anaerobic digestion facility and the CHP modules produce $\geq 1,200$ kW of electricity and $\geq 1,315$ kW of thermal energy on-site at efficiencies of approximately 41.1% and 46.6% respectively.

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 Commission Agreement Manager (CAM) shall designate the date and location of this meeting and provide an agenda to the Recipient prior to the meeting.

The Recipient shall:

- Attend a “Kick-Off” meeting with the CAM, 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 CAM to this meeting.
- Discuss the following administrative and technical aspects of this Agreement:
 - Agreement Terms and Conditions.
 - Critical Project Review (Task 1.2).
 - Match fund documentation (Task 1.6) (No reimbursable work may be done until this documentation is in place).
 - Permit documentation (Task 1.7).
 - Subcontracts needed to carry out project (Task 1.8).
 - The CAM’s expectations for accomplishing tasks described in the Scope of Work.
 - An updated Schedule of Products and Due Dates.
 - Monthly Progress Reports (Task 1.4).
 - Technical Products (Product Guidelines located in Section 5 of the Terms and Conditions).
 - Final Report (Task 1.5).

Recipient’s Products:

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

CAM's Product:

- Kick-Off Meeting Agenda

Task 1.2 Critical Project Review (CPR) Meetings

CPRs provide the opportunity for frank discussions between the Energy Commission's and the Recipient. The goal of this task is to determine if the project should continue to receive Energy Commission's funding to complete this Agreement and to identify any needed modifications to the tasks, products, schedule or budget.

The CAM may schedule CPR meetings as necessary, and meeting costs shall be borne by the Recipient. A CPR is scheduled for Task 2.

Meeting participants include the CAM and the Recipient and may include the Commission Grants Officer, other Energy Commission's staff and Management as well as other individuals selected by the CAM to provide support to the Energy Commission's.

The CAM 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. Prepare 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 section 8 of the Terms and Conditions). If the CAM concludes that satisfactory progress is not being made, this conclusion shall be referred to the Lead Commissioner for Transportation for his or her 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 of 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 CAM 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.

Recipient's Product:

- CPR Report(s)

CAM's Product:

- Written determination

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

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 CAM shall determine the appropriate meeting participants.

The administrative portion of the meeting shall be a discussion with the CAM 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).
- Need to document Recipient's disclosure of "subject inventions" developed under the Agreement.
- "Surviving" Agreement provisions.
- Final invoicing and release of retention.
- Prepare a schedule for completing the closeout activities for this Agreement.

Recipient's 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 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 CAM 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.
- Document and verify in the first Monthly Progress Report and first invoice match expenditures and provide a synopsis of project progress, if match funds have been expended or if work funded with match share has occurred after the notice of proposed award but before execution of the grant agreement. If no match funds have been expended or if no work funded with match share has occurred before execution, then state this in the report. All pre-execution match expenditures must conform to the requirements in the Terms and Conditions of this Agreement.
- Include in all Monthly Progress Reports documentation a complete accounting of any and all transfers of Low Carbon Fuel Standard (LCFS) credits generated by this project during the term of the Agreement. As a reminder, Recipient must also comply with the conditions set forth in Exhibit D, Special Terms and Conditions.

- Include in all Monthly Progress Reports documentation of all feedstocks used to produce biogas, including information pertaining to the type, quality, and quantity of each feedstock used during the reporting period.
- Include in all Monthly Progress Reports documentation of the end use of all biogas produced to include daily gross volume of biogas produced, the daily net volume of decontaminated renewable biomethane gas inserted into the utility pipeline, any on-site uses, process emissions, and flaring.
- Include in all Monthly Progress Reports documentation of the current progress towards reaching 400 million standard cubic feet of renewable biomethane gas annually to include the DGE displacement of the current production level.

Recipient's Product:

- Monthly Progress Reports

Task 1.5 Final Report

The goal of the Final Report is to assess the project's success in achieving the Agreement's 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 Fuels and Transportation Division project management processes.

The Final Report shall be a public document. If the Recipient has obtained confidential status from the Energy Commission and shall 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 latest version of the Final Report guidelines which shall be provided by the CAM. The CAM 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.

- Include in the Final Report a documented summary of any and all transfers of discounted LCFS credits generated by this project during the term of the Agreement under the conditions set forth in Exhibit D, Special Terms and Conditions.
- Report to the Energy Commission any and all transfers of discounted LCFS credits generated by this project for a period of three years following completion of this Agreement, under the conditions set forth in Exhibit D, Special Terms and Conditions.
- Include in the Final Report a summary of the gross volume of renewable biomethane gas produced and the net volume of decontaminated renewable biomethane gas inserted into the utility pipeline.

Recipient's Products:

- 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 shall 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 shall request reimbursement.

The Recipient shall:

- Prepare and submit a letter documenting the match funding committed to this Agreement to the CAM 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 shall 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 shall 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 shall be included as a line item in the progress reports and shall be a topic at CPR meetings.
- Provide the appropriate information to the CAM if during the course of the Agreement additional match funds are received.
- Notify the CAM 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 meeting.

Recipient's 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 shall 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 CAM 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 shall 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 shall 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 shall also be discussed. If applicable, permits shall be included as a line item in the Progress Reports and shall 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 CAM.
- As permits are obtained, send a copy of each approved permit to the CAM.
- If during the course of the Agreement permits are not obtained on time or are denied, notify the CAM within 5 working days. Either of these events may trigger an additional CPR.

Recipient's 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)
- A copy of each final approved permit (if applicable)

Task 1.8 Obtain and Execute Subcontracts

The goal of this task is to ensure quality products and to procure subcontractors 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. It shall also provide the Energy Commission an opportunity to review the subcontracts to ensure that the tasks are consistent with this Agreement, and that the budgeted expenditures are reasonable and consistent with applicable cost principles. Specifically, the Recipient must provide the subcontract(s) that allows for the integration of the renewable biomethane gas produced from this project to be inserted into a utility pipeline (Inter-connection Agreement) as well as the subcontract(s) with the Compressed Natural Gas (CNG) User (Gas Supply Agreement) that states all of the Recipient's inserted renewable biomethane gas via the Inter-connection Agreement will be used at CNG stations for transportation fuels.

The Recipient shall:

- Manage and coordinate subcontractor activities.
- Submit a draft of each subcontract, to include the Interconnection and Gas Supply Agreement subcontracts required to conduct the work under this Agreement to the CAM for review.
- Submit a final copy of the executed subcontracts, to include the Interconnection and Gas Supply Agreement subcontracts.
- If Recipient decides to add new subcontractors, then the Recipient shall notify the CAM.

Recipient's Products:

- Draft subcontracts, to include the Inter-Connection and Gas Supply Agreement subcontracts
- Final subcontracts, to include the executed Inter-Connection and Gas Supply Agreement subcontracts

TECHNICAL TASKS

TASK 2 SITE IMPROVEMENTS

The goal of this task is to perform construction activities at the site in accordance with the pre-existing design specifications from the Recipient's application (application number 7 to PON-13-609) in preparation for the operation of digester and CHP modules. In accordance with the California Environmental Quality Act (CEQA) requirements, an initial study, attached to this Agreement as Exhibit F, has been completed and has resulted in a Mitigated Negative Declaration, attached in Exhibit G.

The Recipient shall:

- Construct the digester facility. The construction shall include, but not be limited to, the following major components:
 - Two high-solid anaerobic digesters to process multiple feedstocks simultaneously;
 - Two CHP cogeneration modules to reduce the facility's energy costs as well as eliminate interruptions in the production process due to electric grid disruptions;
 - Gas conditioning system to produce renewable biomethane, remove harmful and unwanted substances, and cool the temperature to remove moisture from the biogas.;
 - Reception and storage areas for the feedstock;
 - Pipeline from the Recipient's facility to the interconnection point with SoCalGas' utility pipeline;
 - Interconnection point with the Recipient's facility pipeline and SoCalGas' utility pipeline.
 - Implement and monitor any and all mitigation measures required according to the Mitigated Negative Declaration attached to this Agreement as Exhibit G.
- Provide written notification to the CAM of the completion of site improvements.
- Prepare and submit the Final Site Construction Report.

Recipient's Products:

- Notification of site improvements completion
- Final Site Construction Report

TASK 3 ANAEROBIC DIGESTER INSTALLATION, COMMISSIONING, AND OPERATIONS

The goal of this task is to design and install an anaerobic digester that processes incoming organic materials to produce renewable biomethane gas and digestate which, once decontaminated by the gas conditioning system (Task 4), results in the production of approximately 400 million standard cubic feet of renewable biomethane gas annually and the production of $\geq 1,200$ kW of electricity and $\geq 1,315$ kW of thermal energy on-site at efficiencies of approximately 41.1% and 46.6% respectively. This volume of renewable biomethane shall be inserted into a utility pipeline (Task 5) for use at CNG refueling stations, resulting in the displacement of approximately 2.87 million DGE.

The Recipient shall:

- Design the various component (Task 2) controls, master control panel process monitoring system, and feedstock storage necessary to ensure optimal, safe, and reliable operation of the complete renewable biomethane gas producing digester;
- Finalize detailed plans for feedstock storage and piping for optimal digester operation, renewable biomethane gas production, and digestate dewatering and solids recovery;

- Install an anaerobic digester that will process incoming organic material into renewable biomethane gas;
- Conduct tests on the system controls;
- Conduct tests on the monitor system;
- Conduct tests on the anaerobic digester for optimal output and operational safety;
- Operate and maintain facility and comply with all applicable regulatory standards for the term of the agreement;
- Prepare and submit written notification to the CAM of the anaerobic digestion facility completion;
- Commission the anaerobic digestion facility by documenting, testing, adjusting, and verifying the facility operations and properly training personnel to produce an anaerobic digester facility that can produce approximately 400 million standard cubic feet of renewable biomethane gas annually and insert it into the natural gas grid;
- Prepare and submit written notification to the CAM of the anaerobic digestion facility commissioning completion;
- Prepare and submit a Draft and a Final Detailed Anaerobic Digester System Report to include, but not be limited to, system performance regarding the controls; monitoring system; finalized plans for feedstock storage and piping; and operational safety test results.

Recipient's Product:

- Notification of the anaerobic digestion facility completion
- Notification of the anaerobic digestion facility commissioning completion
- Draft Detailed Anaerobic Digester System Report
- Final Detailed Anaerobic Digester System Report

[A CPR will be held at the conclusion of this task]

TASK 4 GAS CONDITIONING SYSTEM

The goal of this task is to design, install, and commission a renewable biomethane gas clean-up system that will remove digester contaminants such as sulfur, water, hydrocarbons, CO₂, and nitrogen to produce renewable biomethane feed gas from the anaerobic digester for the CHP module's use and insertion to the natural gas grid for transportation use. The gas conditioning system will ensure the purity of the renewable biomethane meets SoCalGas' Gas Quality Specifications stated in SoCalGas' Tariff Rule 30.

The Recipient shall:

- Design renewable biomethane gas quality test plans necessary to design an appropriate clean-up system.

- Develop methodologies, catalyst materials, process approaches, and equipment options for achieving desired purity levels from the clean-up system.
- Perform quality test of the renewable biomethane gas prior to using in the CHP modules' use and insertion to the natural gas grid for transportation use.
- Finalize the renewable biomethane gas clean-up system design.
- Install the renewable biomethane gas clean-up system.
- Prepare and submit written notification to the CAM of the gas conditioning system's installation completion.
- Commission the gas clean-up system by documenting, testing, adjusting, and verifying the facility operations and properly training personnel to remove digester contaminants to adhere to SoCalGas' Gas Quality Specifications stated in SoCalGas' Tariff Rule 30.
- Prepare and submit written notification to the CAM of the gas conditioning system commissioning completion.
- Prepare and submit a Draft and a Final Detailed Gas Condition System Design Report. These reports shall include, but not be limited to, a summary of the renewable biomethane gas purification process and the verification of the quality specifications process.

Recipient's Product:

- Notification of the gas conditioning system installation completion
- Notification of the gas conditioning system commissioning completion
- Draft Detailed Gas Condition System Design Report
- Final Detailed Gas Condition System Design Report

TASK 5 PIPELINE AND GRID INTERCONNECTION

The goal of this task is for the Recipient to construct and operate a pipeline from the digester site to an interconnection point with a SoCalGas' nearby existing natural gas pipeline, to construct and operate the interconnection point, and to transport renewable biomethane gas produced in the anaerobic digester with SoCalGas' utility pipeline via the pipeline from the digester site to the interconnection point.

The Recipient shall:

- Obtain, negotiate, execute, and submit the interconnection agreement with SoCalGas to the CAM;
- Obtain, negotiate, execute, and submit the gas supply agreement(s) with the CNG refueling station(s) that will use gas from SoCalGas' natural gas grid for transportation use to the CAM;
- Obtain, if applicable, authorizations from the Public Utilities Commission (PUC) of the State of California approving this interconnection point.
- Comply, if applicable, with SoCalGas' Rule 39 on terms of access and interconnection capacity studies.

- Confirm with SoCalGas that they will accept the volume of renewable biomethane supply anticipated from this project, i.e., 400 million standard cubic feet per year.
- Design the pipeline capacity to accommodate up to approximately 1.5 million cubic feet of pipeline grade renewable biomethane per day.
- Develop monitoring system necessary to insure safe and reliable delivery of the renewable biomethane from the anaerobic digester production unit to the interconnection point.
- Collaborate with SoCalGas to install the interconnection components to the appropriate standards of SoCalGas.
- Test the interconnection capacity of the installed piping to the standards of SoCalGas.
- Prepare and submit written notification to the CAM of the pipeline-grid connection completion.
- Prepare and submit Draft and Final Detailed Grid Connection Design Reports to include, but not be limited to, an explanation of the grid connection mechanics, the delivery pressure, and a description of SoCalGas' metering technique and any other relevant information that can describe the process for verifying the volume of gas that is to be transmitted into the pipeline-grid connection.

Recipient's Product:

- Interconnection agreement with SoCalGas
- Gas Supply agreement(s) with the CNG refueling station(s)
- Authorizations (if applicable) from the PUC
- Notification of the pipeline-grid interconnection completion from SoCalGas
- Draft of the Recipient's Detailed Grid Connection Design Report
- Final of the Recipient's Detailed Grid Connection Design Report

TASK 6 DATA COLLECTION AND ANALYSIS

The goal of this task is to collect operational data from the project, to analyze that data for economic and environmental benefits, and to include the data and analysis in the Final Report.

The Recipient shall:

- Develop a plan for data collection.
- Troubleshoot any issues identified.
- Collect throughout the term of this agreement, but no less than 6 months, information pertaining to throughput, usage, and operations data from the project including, but not limited to:
 - Maximum capacity of the renewable biomethane production system
 - Documentation of the types, qualities, and quantities of all feedstocks used to produce renewable biomethane

- Documentation of all end uses of renewable biomethane produced, including any onsite uses and deliveries to a pipeline
- Documentation of all emissions of renewable biomethane, including process, venting, fugitive, and any flared biogas
- Gallons of gasoline and/or diesel fuel displaced (with associated mileage information)
- Expected air emissions reduction, for example:
 - Non-methane hydrocarbons
 - Oxides of nitrogen
 - Non-methane hydrocarbons plus oxides of nitrogen
 - Particulate Matter
 - Formaldehyde
- Duty cycle of the current fleet and the expected duty cycle of future vehicle acquisitions
- Specific jobs and economic development resulting from this project
- Identify any current and planned use of renewable energy at the facility.
- Identify the source of the alternative fuel.
- Describe any energy efficiency measures used in the facility that may exceed Title 24 standards in Part 6 of the California Code Regulations.
- Provide data on potential job creation, economic development, and increased state revenue as a result of expected future expansion.
- Provide a quantified estimate of the project's carbon intensity values for life-cycle greenhouse gas emissions.
- Compare any project performance and expectations provided in the proposal to Energy Commission with actual project performance and accomplishments.
- Collect data, information, and analysis described above and include in the Final Report.

Recipient's Product:

- Data collection information and analysis will be included in the Final Report

STATE OF CALIFORNIA

STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION - RE: COLONY ENERGY PARTNERS - TULARE, LLC

WHEREAS the State Energy Resources Conservation and Development Commission (“Energy Commission”) is considering whether to approve agreement ARV-14-029 with Colony Energy Partners – Tulare, LLC, to construct an anaerobic digester to produce on-site electricity via combined heat and power, as well as transportation-grade renewable natural gas; and

WHEREAS the City of Tulare, as the Lead Agency, has in May 2012, conducted for the work proposed in this project an Initial Study (IS) and issued, in July of 2012, a Mitigated Negative Declaration (MND) finding that that in light of the record as a whole before the public agency that there is no substantial evidence that the project, as revised, may have a significant effect on the environment; and

WHEREAS the Energy Commission has reviewed the City of Tulare’s IS and MND, has no information that indicates the environmental documentation is inadequate, has considered the IS and MND in deciding whether to approve the proposed Agreement ARV-14-029, and independently finds that the proposed project, as revised, will have no significant environmental impacts;

THEREFORE BE IT RESOLVED that the State Energy Resources Conservation and Development Commission (Energy Commission) finds that the anaerobic digester and accompanying short pipeline and interconnection, as proposed under Agreement ARV-12-029, will have no significant environmental effects; and

FURTHER BE IT RESOLVED that the Energy Commission approves Agreement ARV-14-029 from PON-14-609 with **Colony Energy Partners- Tulare, LLC** for **\$5,000,000**; 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 December 10, 2014.

AYE: [List of Commissioners]

NAY: [List of Commissioners]

ABSENT: [List of Commissioners]

ABSTAIN: [List of Commissioners]

Harriet Kallemeyn,
Secretariat