



To: Grants and Loans Office

Date: July / 24 / 2012

Project Manager: Isaiah Larsen

Phone Number: (916) 653-6010 ext.

Office: Emerging Fuels & Technology

Division: Fuels & Transportation

MS- 27

Project Title: Lancaster CNG Station

**Type of Request:** *(check one)*

**New Agreement:** *(include items A-F from below)* Agreement Number: Assigned by the G&L Office

Program: Alternative and Renewable Fuel and Vehicle Technology

Solicitation Name and/or Number: PON-11-602

Legal Name of Recipient: Southern California Gas Company

Recipient's Full Mailing Address: M.L. 19A4  
555 West Fifth Street, Los Angeles, CA 90013

Recipient's Project Officer: Stan E. Sinclair Phone Number: (213) 244-2665 ext.

Agreement Start Date: 9 / 12 / 2012 Agreement End Date: 11 / 30 / 2014

**Amendment:** *(Check all that apply)* Agreement Number: \_\_\_\_\_

Term Extension – New End Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

Work Statement Revision *(include Item A from below)*

Budget Revision *(include Item B from below)*

Change of Scope *(include Items A – F as applicable from below)*

Other: (Specify)

**ITEMS TO ATTACH WITH REQUEST:**

- A. Work Statement
- B. Budget
- C. Recipient Resolution, if applicable. (Resolution may be requested in Special Conditions if not currently available.)
- D. Special Conditions, if applicable.
- E. CEQA Compliance Form
- F. Other Documents as applicable
  - Copy of Score Sheets
  - Copy of Pre-Award Correspondence
  - Copy of All Other Relevant Documents

**California Environmental Quality Act (CEQA)**

CEC finds, based on recipient's documentation in compliance with CEQA:

Project exempt: Section 15301 Existing Facilities, Section 15311 NOE filed: April / 11 / 2012

Environmental Document prepared: Type NOD filed: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

Other: Explain

CEC has made CEQA finding described in CEC-280, attached

**Funding Information:**

\*Source #1: ARFVT Amount: \$ 216,000.00 Statute: \_\_\_\_\_ FY: 11-12 Budget List #: \_\_\_\_\_

\*Source #2: \_\_\_\_\_ Amount: \$ \_\_\_\_\_ Statute: \_\_\_\_\_ FY: \_\_\_\_\_ Budget List #: \_\_\_\_\_

\*Source #3: \_\_\_\_\_ Amount: \$ 0.00 Statute: \_\_\_\_\_ FY: \_\_\_\_\_ Budget List #: \_\_\_\_\_

If federally funded, specify federal agreement number: \_\_\_\_\_

\* Source Examples include ERPA, PIER-E, PIER-NG, FED, GRDA, ARFVT, OTHER.

**Business Meeting Approval:** *(refer to Business Meeting Schedule)*

Proposed Business Meeting Date: September / 12 / 2012  Consent  Discussion

Business Meeting Participant: Isaiah Larsen Time Needed: (5 minutes)

**Agenda Notice Statement:** *(state purpose in layperson terms)*

Possible approval of a  Grant /  Contingent Award to...

Southern California Gas Company for \$216,000 to design, construct, and operate a CNG fueling station at its existing Lancaster office. The fueling station will be accessible to 37 CNG fleet vehicles and the public, and will operate 24 hours a day, 7 days per week. SoCalGas will contribute \$650,000 in match funds.

Project Manager \_\_\_\_\_ Date \_\_\_\_\_ Office Manager \_\_\_\_\_ Date \_\_\_\_\_ Deputy Director \_\_\_\_\_ Date \_\_\_\_\_

## EXHIBIT A WORK STATEMENT

### TECHNICAL TASK LIST

Task #	CPR	Task Name
1		Administration
2	X	Design system
3		Install utility service
4		Procure equipment and materials
5		Plan check
6		Construct station
7		Facility start-up and training
7.1		Facility start-up
7.2	X	Training
8		Data Collection and Analysis

### KEY NAME LIST

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
1	Ed Harte, Stan Sinclair	N/A	N/A
1.1	Ed Harte, Stan Sinclair	N/A	N/A
1.2	Ed Harte, Stan Sinclair	N/A	N/A
1.3	Ed Harte, Stan Sinclair	N/A	N/A
1.4	Ed Harte, Stan Sinclair	N/A	N/A
1.5	Ed Harte, Stan Sinclair	N/A	N/A
1.6	Ed Harte, Stan Sinclair	N/A	N/A
1.7	Ed Harte, Stan Sinclair	N/A	N/A
1.8	Ed Harte, Stan Sinclair	N/A	N/A
2	Ed Harte, Stan Sinclair	N/A	N/A
3	Ed Harte, Stan Sinclair	N/A	N/A
4	Ed Harte, Stan Sinclair	N/A	N/A
5	Ed Harte, Stan Sinclair	N/A	N/A
6	Ed Harte, Stan Sinclair	N/A	N/A
7	Ed Harte, Stan Sinclair	N/A	N/A
7.1	Ed Harte, Stan Sinclair	N/A	N/A
7.2	Ed Harte, Stan Sinclair	N/A	N/A
8	Ed Harte, Stan Sinclair	N/A	N/A

## GLOSSARY

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

<b>Acronym</b>	<b>Definition</b>
ARFVT	Alternative and Renewable Fuel and Vehicle Technology Program
ARRA	American Recovery and Reinvestment Act
AVAQMD	Antelope Valley Air Quality Management District
AVCCC	Antelope Valley Clean Cities Coalition
CARB	California Air Resources Board
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CNG	Compressed Natural Gas
CO2E	Carbon dioxide equivalent
CPR	Critical Project Review
CPUC	California Public Utilities Commission
DWP	Department of Water and Power
FTD	Fuels and Transportation Division
GGE	Gallons Gasoline Equivalent
GHG	Greenhouse Gas
Gm/mi	Grams/Mile
HDC	High Desert Corridor
HDV	Heavy-Duty Vehicle
LDV	Light-Duty Vehicle
MDV	Medium-Duty Vehicle
MSRC	Mobile Source Reduction Committee
NGV	Natural Gas Vehicle
NTP	Notice to Proceed
OEM	Original Equipment Manufacturers
PSIG	Pounds per square inch
SCAQMD	South Coast Air Quality Management District
SCFM	Standard Cubic Feet per Minute
SoCalGas	Southern California Gas Company

### **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-11-602 to provide funding opportunities under the ARFVT Program for projects which develop infrastructure necessary to store, distribute, and dispense electricity, E-85, propane, diesel substitutes, and natural gas. To be eligible for funding under PON-11-602, the projects must also be consistent with the Energy Commission's ARFVT Investment Plan updated annually. In response to PON-11-602, the Recipient submitted application #8, which was proposed for funding in the Energy Commission's Notice of Proposed Awards on April 24, 2012, and is incorporated by reference to this Agreement in its entirety.

**Problem Statement:**

This fueling station will initially provide convenient, clean, publicly-accessible Compressed Natural Gas (CNG) service for a high-growth region of southern California. The station will initially supply 37 vehicles, offsetting 28,200 gasoline gallons equivalent (GGE) per year. Throughput is projected to increase to 69,900 GGE/year by 2015; Southern California Gas Company account executives will implement corporate marketing strategies to increase throughput over the next several years beyond 2015 in order to reach the station maximum capacity of 1,000,000 GGE/year.

The main barriers to widespread use of CNG are as follows:

Scientific and technological: In the early years of natural gas vehicle (NGV) implementation, engine and vehicle product availability was extremely limited and a major barrier to widespread use of NGVs. Today, however, original equipment manufacturers (OEMs) produce light-, medium- and heavy-duty vehicles and engines that operate on natural gas, offering a range of products to meet customer demand. Many stations statewide operate reliably, and the technology continues to evolve and improve. These factors demonstrate that the technology is ready to be fully deployed.

Market: The primary barrier for CNG is lack of customer familiarity with the product and the limited supply infrastructure. Without a substantial and convenient fueling infrastructure,

customers are less likely to purchase vehicles. Fuel providers and public agencies, through investments in fueling stations, are gradually mitigating this barrier.

Institutional/regulatory: Air and energy agencies strongly support natural gas as a transportation fuel, although California Air Resources Board (CARB) certification presents significant hurdles in cost and time to achieve certification. Local permitting agencies now have strong familiarity with CNG; barriers at this level are no longer a concern. The California Public Utilities Commission (CPUC) also supports CNG as a transportation fuel through natural gas rate proceedings.

Environmental: There are no environmental barriers to broad use of CNG as a transportation fuel. In fact, the opposite is true: CNG's clear benefit to the environment is the very reason it is supported by regulatory agencies.

Cost and financial hurdles: New fueling stations are expensive to install, operate, and maintain, which has caused delay in expanding the infrastructure system. As the market grows, station construction becomes more cost-effective. Current high gasoline and diesel prices will encourage more drivers/fleets to transition to natural gas vehicles. Southern California Gas Company fueling stations offer a unique cost benefit to customers. CNG station fuel prices are based on a tariff approved by the CPUC, and are not based on petroleum costs or market prices. This pricing structure ensures stability and fairness for CNG customers.

The barriers described above should be addressed now. A broad consortium of regulators, fuel providers, fleet operators and the public need to reduce carbon emissions associated with transportation. Atmospheric CO<sub>2</sub> concentrations increased 2 ppm per year over the last decade; at 393.09 ppm in January 2012, they are now well above the upper safety limit of 350 ppm.<sup>1</sup> In 2010, carbon emissions increased by the largest amount ever recorded: 5.9%.<sup>2</sup> At the same time, gasoline prices at the pump have increased by 13%, or 40 cents, just since the beginning of this year. Diesel price increases are comparable.<sup>3</sup> However, natural gas prices have fluctuated only 9% over the last year.<sup>4</sup> Increased carbon emissions show a strong need for public and private

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<sup>1</sup> CO2 Now, <http://co2now.org/Current-CO2/CO2-Trend/> and <http://co2now.org/>. Accessed 2/27/12.

<sup>2</sup> Justin Gillis, "Carbon Emissions Show Biggest Jump Ever Recorded." New York Times. <http://www.nytimes.com/2011/12/05/science/earth/record-jump-in-emissions-in-2010-study-finds.html>. Accessed 2/27/12.

<sup>3</sup> U.S. Energy Information Administration. <http://www.eia.gov/petroleum/gasdiesel/>. Accessed 2/27/12.

<sup>4</sup> U.S. Energy Information Administration. [http://www.eia.gov/dnav/ng/ng\\_pri\\_sum\\_dcunusm.htm](http://www.eia.gov/dnav/ng/ng_pri_sum_dcunusm.htm). Accessed 2/27/12.

sources to aggressively increase access to lower carbon fuels. Increasing prices of petroleum-based fuels will drive market demand for lower cost alternatives like natural gas, but the fueling infrastructure must be available to meet the demand.

This station will be operational in early- to mid-2013, and will be ready to meet increasing local demand. Area population is expected to grow by 54% over the next few decades.<sup>5</sup> There are currently an estimated 6,800 people from Lancaster commuting to central Los Angeles, a 150-mile drive round trip. An additional 8,000 people commuted from Lancaster to the San Fernando Valley and the South Bay, averaging a 125 mile round trip.<sup>6</sup> As of June 2011, only about 500 people from Lancaster rode Metrolink.<sup>7</sup> Assuming commuters to these increase proportionally to other new residents, there would be about 17,000 people making this commute in 2015, and as many as 32,000 driving an average of 135 miles round trip in 2030. It is highly likely that the demand for alternative-fueled vehicles will increase rapidly in this area. This increase in population will cause a corresponding increase in services, bringing more medium- and heavy-duty vehicles to the area for local services and for goods movement. The proposed High Desert Corridor/E220 will also bring additional traffic to the region.

A robust alternative-fueled vehicle market provides substantial societal benefits, including improved air quality, reduced air toxics emissions, reduced greenhouse gas emissions, reduced petroleum use, and reduced cost compared to petroleum-based fuels. It is important that this region, with its many long-distance commuters, have early access to alternative-fueled vehicles. Using public and private funds, we can expand the infrastructure and assure vehicle operators that alternative-fueled vehicles are convenient and cost-effective now.

### **Goals of the Agreement**

The primary operational goal of this project is to increase availability of CNG infrastructure in order to enhance California's energy independence by reducing petroleum product consumption. Secondary operational goals include the reduction of criteria, air toxic, and greenhouse gas emissions, as well as providing a more stable fuel source in times of high petroleum-based fuel costs. Because Gas Company CNG prices are rate-based rather than market based, and are set and reviewed by the California Public Utilities Commission (CPUC), customers can be assured of the most fairly priced, affordable fuel available.

### **Objectives of the Agreement:**

The objectives of this project are to:

1. Meet projected throughput estimates, initially displacing 28,200 GGE/year. This value will be calculated based on measured station throughput.

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<sup>5</sup> Greater Antelope Valley Economic Alliance, 2011 Economic Roundtable Report. <http://www.aveconomy.org/files/2011%20GAVEA%20RTR.pdf>. Accessed 2/27/12.

<sup>6</sup> Callifornia Land. Exploring the Antelope Valley. <http://www.californialand.co.uk/antelopevalleyinformation.html>. Accessed 2/27/12.

<sup>7</sup> Metrolink. [http://www.metrolinktrains.com/pdfs/Facts&Numbers/Fact\\_Sheets/AVL\\_Demographics\\_Fact\\_Sheet\\_2011.pdf](http://www.metrolinktrains.com/pdfs/Facts&Numbers/Fact_Sheets/AVL_Demographics_Fact_Sheet_2011.pdf). Accessed 2/27/12.

2. Reduce greenhouse gas emissions by about 76 tons/year. This value will be calculated from measured station throughput.
3. Reduce criteria and air toxics pollutant emissions.
4. Increase awareness, accessibility, and market penetration of natural gas as a transportation fuel, thus contributing to reduced dependence on foreign oil and reduced greenhouse gas emissions. This goal will be accomplished through the efforts of the SoCalGas local account executive and Marketing Department, as well as local efforts.

## **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 a discussion of the following:

- The terms and conditions of the Agreement
- 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 (Task 1.7)
- Subcontracts needed to carry out project (Task 1.8)

The technical portion of the meeting shall include a discussion of the following:

- The Commission Project Manager’s expectations for accomplishing tasks described in the Scope of Work
- An updated Schedule of Products
- Progress Reports (Task 1.4)
- Technical Products (Product Guidelines located in Section 5 of the Terms and Conditions)
- Final Report (Task 1.5)

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 (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 Lead Commissioner for Transportation activities 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 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 Agreement 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 Agreement Manager.
- Present at the technical portion of the meeting 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.
- Discuss with the Commission Agreement Manager and the Grants Officer the following Agreement closeout items at the administrative portion of the meeting:
  - 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.

The Commission Agreement Manager will determine the appropriate meeting participants.

**Recipient 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 the Terms and Conditions of this Agreement.
- In the first Monthly Progress Report and first invoice, document and verify 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.

**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 Fuels and Transportation Division (FTD) 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 and that the budgeted expenditures are reasonable and consistent with applicable cost principles.

### **The Recipient shall:**

- Manage and coordinate subcontractor activities.
- Submit a draft of each subcontract required to conduct the work under this Agreement to the Commission Agreement Manager for review.
- Submit a final copy of the executed subcontract.
- If Recipient decides to add new subcontractors, it shall notify the Commission Agreement Manager.

### **Products:**

- Draft subcontracts
- Final subcontracts

## **TECHNICAL TASKS**

### **Task 2 DESIGN SYSTEM**

The goal of this task is to complete project design specifications to guide construction. This task will also provide design review.

### **The Recipient shall:**

- Prepare mechanical, electrical, civil and structural designs, specifications and plans.
- Review and approve all designs.
- Submit copies of final design specifications to the Commission Agreement Manager

### **Products:**

- Design specifications

**[CPR will occur during this Task. See Task 1.2 for details.]**

### **Task 3 INSTALL UTILITY SERVICE**

The goal of this task is to provide natural gas and electrical utility service to the station.

### **The Recipient shall:**

- Manage work with Gas Company field personnel to install natural gas service lines, metering, and service stubs as needed.

- Coordinate work with Department of Water and Power (DWP) to provide electrical transformer and service.
- Report the completion of natural gas and electrical service installation in the required monthly progress reports.

**Products:**

- None

#### **Task 4 PROCURE EQUIPMENT AND MATERIALS**

The goal of this task is to order and purchase equipment and materials needed to complete project construction.

**The Recipient shall:**

- Purchase compressor
- Purchase priority panel
- Purchase storage vessels
- Procure other materials and equipment as needed to complete construction.

**Products:**

- None

#### **Task 5 PLAN CHECK**

The goal of this task is to obtain project approval from the City of Lancaster.

**The Recipient shall:**

- Submit plans and specifications to the City of Lancaster for review and approval.
- Submit a copy of stamped drawings or a letter of approval to the Commission Agreement Manager.

**Products:**

- Copy of stamped drawings or letter of approval.

#### **Task 6 CONSTRUCT STATION**

The goal of this task is to construct the natural gas compressor and storage systems and the fueling stations.

**The Recipient shall:**

- Oversee subcontractor in charge of construction.
- Submit photographs of completed station to the Commission Agreement Manager.
- Report the station construction completion in the monthly progress reports.

**Products:**

- Letter describing completion of system and station, with photographs

**Task 7 FACILITY START-UP AND TRAINING**

**Task 7.1 Facility Start-up**

The goal of this task is to ensure facility is operational and safe.

**The Recipient shall:**

- Pre-start equipment
- Calibrate equipment
- Identify and correct problems
- Complete start-up
- Describe start-up operations, problems encountered, and corrections made in the monthly progress reports.

**Products:** None

**Task 7.2 Equipment Training**

The goal of this task is to train personnel who will operate and maintain the fueling station and associated equipment.

**The Recipient shall:**

- Conduct training for employees
- Submit a copy of the DVD, script, or Training Manual to the Commission Agreement Manager.

**Products:**

- Submit DVD, Script or Training Manual

**[CPR will occur during this Task. See Task 1.2 for details.]**

**Task 8 DATA COLLECTION AND ANALYSIS**

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

**The Recipient shall:**

- Develop data collection test plan.
- Troubleshoot any issues identified.
- Collect at least 6 months of throughput, usage, and operations data from the project including, but not limited to:
  - Number of vehicles fueled per day per station
  - Comparison of public vs. fleet transactions per day
  - Comparison of public vs. fleet consumption per day in GGE
  - Number of days or hours per year that each station was inoperative
  - Maximum capacity of the new fueling system
  - Electricity required to power CNG compression equipment on a daily basis.
  - Gallons of gasoline and/or diesel fuel displaced by using natural gas (with associated mileage information)
  - Expected air emissions reduction, for example:
    - Non-methane hydrocarbons
    - 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.

**Products:**

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