

New Agreemen	t <u>ARV-17-021</u> (	To be completed	d by CGL Office)			
					-	
600 Fuels and	Transportation Division	n	Jane Berner		6	916-651-9077
Air Liquide Adv	anced Technologies U	J.S. LLC			75-31747	747
Operation and I	Maintenance Support	for Hydrogen	Refueling Station	Located in Anaheim,	CA on E	. La Palma Ave.
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	03 / 01 / 2018		02 / 28 / 2021	\$ 165	5,000	
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	agreements \$75K and ness Meeting Date	02 / 21 / 2		Director.  Consent		Discussion
Business Meeti		Christophe		Time Need		
	ne list serve. Altfuels			1	<u> </u>	
	Subject and Descripti		,			
\$165,000 grant		d maintenand		uide Advanced Techno sting hydrogen refuelin		
	he environment becaunt is considered a "Programment IS exempt. (Attitutory Exemption. List number: egorical Exemption. I number: mmon Sense Exemption	nsidered a "Fohysical chanuse oject" under Ctach draft NOt PRC and/or List CCR	No (composition of the continued us 15061 (b) (3)	olete the following (PRO nent or a reasonably for fornia Code of Regulat e of facilities) and 153	oreseeab	le indirect physical
Explain reason why Agreement is exempt under the above section:  The grant will fund a portion of the operation and maintenance of existing hydrogen refueling equipment at an existing gas station. Operation and maintenance will include, but is not limited to, ensuring utility access; repairing equipment; and replacing dispensed hydrogen and other gases. This project involves negligible or no expansion of the existing use at the existing facilities, because the use, i.e., hydrogen refueling equipment operation, is already occurring and the operation and maintenance conducted as a part of this project will ensure continued use of the facility.						
Data is being collected on the fueling equipment, fueling operation and the quality of the fuel being dispensed as part of a larger state-wide data collection effort to monitor the progress of establishing the State's hydrogen fueling infrastructure						
Check all th		t. (Consult w	_	to determine next ste	,	
☐ Neg	gative Declaration gated Negative Decla	ration		tatement of Overriding		erations

# STATE OF CALIFORNIA GRANT REQUEST FORM (GRF) CEC-270 (Revised 10/2015)





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List all subcontractors (major and minor) and equipment vendors: (attach additional sheets as necessary)  Legal Company Name:  Budget								
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Legal Com	pany	Name:						
	Fund	ling Source	Funding Year of Appropriation	Budg	jet Lis	t No.		Amount
ARFVTP			17/18	601.118JF	1		\$165,000	
Funding So	ource						\$	
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Funding So	ource						\$	
R&D Progr		rea: Select Progr	ram Area				\$165,000	
Explanatio	n for '	'Other" selection						
		Contract #:		Federal Agreement #:				
Name:		David Edwards		Name:		Bob Oest	orreich	
Address: Air Liquide Advanced Technologies		Technologies	Address: Air Liquide Advanced Technologies			l Technologies		
200 GBC Drive		rediffologics	9811 Katy Freeway,					
011 01 1				0		•	, ,	
		Newark, DE 19702	1000 000	City, State				
Phone:		286-5491 Fax:	302-286-5583	Phone:		402-2161	Fax:	713-402-2053
E-Mail:	david	l.edwards@airliquide.	com	E-Mail:	bob.	oesterreici	h@airliquide	e.com
Compe	etitive	Solicitation		0 11 11 11		050.47	004	
First C	ome l	First Served Solicitation	on	Solicitation	n #:	GFO-17-	601	
4	^ C-							N Attack and
		ope of Work						
<ol> <li>Exhibit B, Budget Detail</li> <li>CEC 105, Questionnaire for Identifying Conflicts</li> </ol>								
4. Recipient Resolution						· · · · · · · · · · · · · · · · · · ·	√A ☐ Attached	
5. CEQA Documentation								√A ⊠ Attached
Agreement Ma	nager	Date	Office Manager	Date	!	Denut	v Director	Date

## Exhibit A SCOPE OF WORK

#### **TASK LIST**

Task #	CPR	Task Name
1		Attend Kick Off Meeting
2		Operate and Maintain the Hydrogen Refueling Station
3	Х	Attend Critical Project Review (CPR) Meetings
4		Data Collection and Reporting

#### **GLOSSARY**

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

Term/ Acronym	Definition
ARFVTP	Alternative and Renewable Vehicle and Technology Program
CAM	Commission Agreement Manager
CPR	Critical Project Review
Energy Commission	California Energy Commission
FTD	Fuels and Transportation Division

#### **BACKGROUND**

Assembly Bill (AB) 118 (Nùñez, Chapter 750, Statutes of 2007), created the ARFVTP. The statute 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. AB 8 (Perea, Chapter 401, Statutes of 2013) re-authorized the ARFVTP through January 1, 2024, and specified 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 ARFVTP has an annual budget of approximately \$100 million and provides financial support for projects that:

- Reduce California's use and dependence on petroleum transportation fuels and increase the use of alternative and renewable fuels and advanced vehicle technologies.
- Produce sustainable alternative and renewable low-carbon fuels in California.
- Expand alternative fueling infrastructure and fueling stations.
- Improve the efficiency, performance and market viability of alternative light-, medium-, and heavy-duty vehicle technologies.
- Retrofit medium- and heavy-duty on-road and non-road vehicle fleets to alternative technologies or fuel use.
- Expand the alternative fueling infrastructure available to existing fleets, public transit, and transportation corridors.
- Establish workforce training programs and conduct public outreach on the benefits of alternative transportation fuels and vehicle technologies.

The Energy Commission issued solicitation GFO-17-601 Light Duty Vehicle Hydrogen Refueling Infrastructure Operation and Maintenance Support Grants to provide Operation and Maintenance (O&M) support funding for publicly accessible hydrogen refueling stations that did

not receive O&M support funding or received a portion of the potential \$300,000 in O&M support funding under PON-13-607. The purpose of this solicitation is to ensure the stations remain operational during the predicted large-scale roll-out of Fuel Cell Electric Vehicles (FCEVs). In response to GFO-17-601, Air Liquide Advanced Technologies U.S. LLC (Recipient) submitted application #16, which was proposed for funding in the Energy Commission's Notice of Proposed Awards dated January 8, 2018. The Recipient's application and the Notice of Proposed Award issued are incorporated by reference to 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 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.

#### **Goals of the Agreement:**

The goal of this Agreement is to continue the operation and maintenance of existing hydrogen refueling stations and gather information to improve understanding of needs and uses of hydrogen refueling.

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

The objectives of this Agreement are to support the operation and maintenance costs of the hydrogen fueling station at 3731 East La Palma Avenue, Anaheim, CA 92806, and gather data on the operation and maintenance of the station.

#### **TASK 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 Commission Agreement 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,
  - The CAM's expectations for accomplishing the tasks described in the Scope of Work.
- Prepare and submit written notification of the date that the station is operational.
- Document that the station is operational in accordance with the requirements in GFO-17-601, Section II.B.2, including, but not limited to, the submittal of the following:
  - All required permits.

- Documentation that the station's hydrogen purity test results demonstrate that the station is in compliance with SAE International J2719: 2015 "Hydrogen Fuel Quality for Fuel Cell Vehicles."
- Photograph evidence (with distinguishing elements to demonstrate the station's location), written description of the process, and results of fueling at least one fuel cell electric vehicle.
- A written certification that:
  - the station has a hydrogen fuel supply;
  - all station/dispenser components are installed;
  - the hydrogen refueling station has a working, functional utility connection and service; and,
  - the station is open to the public, meaning that no physical barriers exist which would preclude the public from entering and using the refueling station.

#### **Recipient Products:**

- Written notification of the operational date of the station.
- Documentation and evidence that the station is operational.

#### **Commission Agreement Manager Product:**

Kick-Off Meeting Agenda

#### TASK 2 Operate and Maintain the Hydrogen Refueling Station

The goal of this task is to operate and maintain the hydrogen fueling station.

#### The Recipient shall:

- Operate and maintain the hydrogen refueling station
- Prepare Monthly Progress Reports which summarize all Agreement activities conducted by the Recipient for the reporting period verifying operation of the hydrogen refueling station. This shall include the number of fills and kg of throughput for the month.

#### **Recipient Products:**

 Monthly Progress Reports provided to the CAM by the 10<sup>th</sup> of the month following the reporting period.

#### TASK 3 Attend Critical Project Review (CPR) Meetings

The goal of this task is to provide the opportunity for frank discussions between the Energy Commission and the Recipient. The CAM may schedule CPR meetings as necessary, and meeting costs will be borne by the Recipient. Meeting participants include the CAM and the Recipient and may include the Commission Agreement Officer, the Fuels and Transportation Division (FTD) program lead, other Energy Commission staff and Management as well as other individuals selected by the CAM to provide support to the Energy Commission.

#### 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 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 will 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.

#### **CAM Products:**

- Agenda and a list of expected participants
- Schedule for written determination
- Written determination

#### **Recipient Product:**

2/1/18

CPR Report(s)

#### **TASK 4 Data Collection and Reporting**

The goal of this task is to periodically collect and deliver data related to the operation of the hydrogen refueling station, and to 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 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 and submit a Report of Renewable Hydrogen Dispensed (Exhibit E) every six months during the approved term of the agreement.
- Prepare and submit the National Renewable Energy Laboratory (NREL) Data Collection Tool (Exhibit F) every calendar quarter during the approved term of the agreement.
- Perform and submit results of purity using hydrogen collected, at the nozzle, at the station address. Purity tests will be performed:
  - o at the time the station becomes operational (to meet the operational definition);
  - every six months after the station becomes operational during the approved term of this agreement; and,
  - o as needed when the hydrogen lines are potentially exposed to contamination due to maintenance or other activity.

Hydrogen purity readings shall be collected according to CCR Title 4 Business Regulations, Division 9 Measurement Standards, Chapter 6 Automotive Products Specifications, Article 8 Specifications for Hydrogen Used in Internal Combustion Engines and Fuel Cells, Sections 4180 and 4181. The Recipient shall also include the date the hydrogen quality reading(s) is taken and any special condition(s) used while the reading(s) is taken.

#### **Recipient Products:**

2/1/18

- Biannual Report of Renewable Hydrogen Dispensed (Exhibit E)
- Quarterly NREL Data Collection Tool (Exhibit F)
- Initial, biannual and as needed hydrogen purity test results

**RESOLUTION NO: 18-0221-10b** 

#### STATE OF CALIFORNIA

### STATE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION - RE: AIR LIQUIDE ADVANCED TECHNOLOGIES U.S. LLC

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

**RESOLVED,** that the Energy Commission approves Agreement ARV-17-021 from GFO-17-601 with Air Liquide Advanced Technologies U.S. LLC for a \$165,000 grant to cover operation and maintenance costs of the existing hydrogen refueling station located at 3731 East La Palma Avenue, Anaheim, CA 92806; 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 February 21, 2018.

AYE: [List of Commissioners]
NAY: [List of Commissioners]
ABSENT: [List of Commissioners]
ABSTAIN: [List of Commissioners]

Cody Goldthrite, Secretariat