STATE OF CALIFORNIA

GRANT REQUEST FORM (GRF)

CEC-270 (Revised 12/2019) CALIFORNIA ENERGY COMMISSION

A)New Agreement # ARV-20-003

B) Division	Agreement Manager:	MS-	Phone
600 Fuels and Transportation Division	Sebastian Serrato	6	916-654-4815

C) Recipient's Legal Name	Federal ID #
Equilon Enterprises LLC (d/b/a Shell Oil Products US)	52-2074528

D) Title of Project
Shell Neptune–Building a Reliable Network of Hydrogen Stations

E) Term and Amount

Start Date	End Date	Amount
12 / 9 / 2020	8 / 17 / 2023	$ 7,318,398

F) Business Meeting Information

☐ ARFVTP agreements $75K and under delegated to Executive Director

Proposed Business Meeting Date 12 / 9 / 2020 ☐ Consent ☒ Discussion

Business Meeting Presenter Jane Berner Time Needed: 5 minutes

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

Agenda Item Subject and Description:

EQUILON ENTERPRISES, LLC. Proposed resolution approving Agreement ARV-20-003 with Equilon Enterprises LLC (d/b/a Shell Oil Products US) for a grant up to $40,575,712 to develop hydrogen refueling stations in California, and adopting staff's determination that this action is exempt from CEQA. The CEC is currently providing $7,318,398 in grant funds to develop eight hydrogen refueling stations, and additional funds may be added up to $40,575,712 at future dates to develop more stations, subject to future appropriations and Clean Transportation Program Investment Plan funding allocations and CEC approval of subsequent batches of stations. (Clean Transportation Program funding) Contact: Jane Berner

G) 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.

   ☐ Statutory Exemption. List PRC and/or CCR section number:

   ☒ Categorical Exemption. List CCR section number: Cal. Code Regs., tit. 14, sections 15301, 15303, 15304

   ☐ Common Sense Exemption. 14 CCR 15061 (b) (3) Explain reason why Agreement is exempt under the above section:

   The project is to develop hydrogen refueling stations by adding hydrogen storage, compression, and dispensing equipment with an estimated maximum footprint of 2,000 square feet and trenching of up to 100 feet at existing retail gasoline stations.

As to the equipment to be installed, the storage tanks will hold 600 and 1,200 kg of hydrogen at 55 bar. The hydrogen station will dispense at 770 and 1,420 kg per 24 hour period. Control valves will be pneumatically operated. All control valves fail in the safe direction (closed) after loss of utility power or instrument gas supply. All system alarms and shutdowns are displayed on the control panel face. Critical alarms are hard wired in addition to being connected through the Programmable Logic Controller. This adds an extra layer of safety to the system.

Cal. Code Regs., tit. 14, sect. 15301 provides that projects which consist of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, and which involve negligible or no expansion of use beyond that existing at the time of the lead agency's determination, are categorically exempt from the provisions of the California Environmental Quality Act.

The proposed project adds equipment to existing gasoline stations that covers an area which is approximately 800 to 2,000 square feet, with some excavation to accommodate the replacement equipment. This square footage is far less than that specified in one example provided in the Regulations (i.e., 14 C.C.R. § 15301(e)) of a minor addition to existing structures. Because the proposed sites are existing gas stations; the proposed addition of a hydrogen refueling facility will not significantly expand the use beyond that already existing; and the square footage of equipment installation is relatively small, the project falls within section 15301 and will not have a significant effect on the environment.

Cal. Code Regs., tit. 14, sect. 15303 provides that projects which consist of construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures; and the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure, are categorically exempt from the provisions of the California Environmental Quality Act.

The proposed project consists of installation of small new equipment, including hydrogen storage of 600 and 1,200 kg capacity, and compression and dispensing equipment, at each site. Therefore, the proposed project falls within section 15303 and will not have a significant effect on the environment.

Cal. Code Regs., tit. 14, sect. 15304 provides that projects which consist of minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry or agricultural purposes, are categorically exempt from the provisions of the California Environmental Quality Act.

For the installation of the equipment in this project, there will be up to 100 feet of trenching to connect storage and compression equipment to dispensers. No trees will be removed and the surface will be restored. This reflects exactly the example given in section 15304(f). Therefore, the proposed project falls within section 15304 and will not have a significant effect on the environment.

b) ☐ Agreement **IS NOT** exempt. (consult with the legal office to determine next steps)

Check all that apply

- ☐ Initial Study
- ☐ Negative Declaration
- ☐ Mitigated Negative Declaration
- ☐ Environmental Impact Report
- ☐ Statement of Overriding Considerations

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

Legal Company Name:	Budget
Maximator Hydrogen Inc	$ 5,005,717
Teneris	$ 2,052,681
CoreStates Construction Services, Inc.	$ 0.00

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

Legal Company Name:
Pacific Northwest National Laboratory

J) Budget Information

Funding Source	Funding Year of Appropriation	Budget List Number	Amount
ARFVTP	18/19	601.118K	$7,318,398
Funding Source			$
Funding Source			$
Funding Source			$
Funding Source			$

R&D Program Area: Select Program Area TOTAL: $

Explanation for “Other” selection

Reimbursement Contract #: Federal Agreement #:

K) Recipient’s Contact Information

1. Recipient’s Administrator/Officer

Name: Wayne Leighty, Shell

Address: 650 California St., Suite 2250

City, State, Zip: San Francisco, CA 94108

Phone: (832) 680-9825

E-Mail: W.Leighty@shell.com

2. Recipient’s Project Manager

Name: Joseph Lewis , Shell

Address: 650 California St., Suite 2250

City, State, Zip: San Francisco, CA 94108

Phone: (530) 615-7070

E-Mail: Joseph.Lewis@shell.com

L) Selection Process Used

STATE OF CALIFORNIA

GRANT REQUEST FORM (GRF)

CEC-270 (Revised 12/2019) CALIFORNIA ENERGY COMMISSION

☒ Competitive Solicitation Solicitation #: GFO-19-602

☐ First Come First Served Solicitation Solicitation #: - -

M) The following items should be attached to this GRF

1.	Exhibit A, Scope of Work		☒ Attached
2.	Exhibit B, Budget Detail		☒ Attached
3.	CEC 105, Questionnaire for Identifying Conflicts		☒ Attached
4.	Recipient Resolution	☒ N/A	☐ Attached
5.	CEQA Documentation	☐ N/A	☒ Attached

Sebastian Serrato — 10/30/2020

Agreement Manager **Date**

Mark J Wenzel — 10/30/20

Office Manager **Date**

John P. Butler II — 10/30/2020

Deputy Director **Date**

Exhibit A
SCOPE OF WORK

TECHNICAL TASK LIST

Task #	CPR	Task Name
1		Administration
2		Hydrogen Safety Plan
3	X	Development of the Initial Batch of Stations

KEY NAME LIST

Task #	Key Personnel (none are paid with CEC funds)	Key Subcontractor(s)	Key Partner(s)
1	Jarred Guthrie – Shell Hydrogen – Global Projects Manager Omar Shkeir – Shell Hydrogen – Projects Team Lead Cristina Chinea – Shell Hydrogen – Project Manager Joseph Lewis – Shell Hydrogen – Project Manager	Station Equipment Supplier - Maximator Hydrogen Inc.	Engineering, Civil, Electrical Contractor – Core States Construction Services, Inc
2	Jarred Guthrie – Shell Hydrogen – Global Projects Manager Omar Shkeir – Shell Hydrogen – Projects Team Lead Manfred Becker – Shell Hydrogen – Global Operations James Jessup – Shell Hydrogen – Senior Technical Safety Engineer Cristina Chinea – Shell Hydrogen – Project Manager Joseph Lewis – Shell Hydrogen – Project Manager	Station Equipment Supplier - Maximator Hydrogen Inc.	

Task #	Key Personnel (none are paid with CEC funds)	Key Subcontractor(s)	Key Partner(s)
3	Jarred Guthrie – Shell Hydrogen – Global Projects Manager Omar Shkeir – Shell Hydrogen – Projects Team Lead James Jessup – Shell Hydrogen – Senior Technical Safety Engineer Cristina Chinea – Shell Hydrogen – Project Manager Joseph Lewis – Shell Hydrogen – Project Manager Taimoor Isani – Shell Hydrogen – Contracts and Procurements Lead – Core States Halenur Figen – Shell Hydrogen Contracts and Procurements Lead - Maximator	Station Equipment Supplier - Maximator Hydrogen Inc.	Retail Station Owners Engineering, Civil, Electrical Contractor – Core States Construction Services, Inc

GLOSSARY

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

Term/ Acronym	Definition
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
Clean Transportation Program	Formerly known as the Alternative and Renewable Fuel and Vehicle Technology Program
CPR	Critical Project Review
FCEV	Fuel Cell Electric Vehicle
FTD	Fuels and Transportation Division
HSP	Hydrogen Safety Panel

Term/ Acronym	Definition
HRS	Hydrogen Refueling Station
NREL	National Renewable Energy Laboratory
PNNL	Pacific Northwest National Laboratory
Recipient	Equilon Enterprises LLC (dba Shell Oil Products US)

Background

Assembly Bill (AB) 118 (Nùñez, Chapter 750, Statutes of 2007), created the Clean Transportation Program, formerly known as the Alternative and Renewable Fuel and Vehicle Technology Program. The statute authorizes the California Energy Commission (CEC) to develop and deploy alternative and renewable fuels and advanced transportation technologies to help attain the state's climate change, clean air, and alternative energy policies. AB 8 (Perea, Chapter 401, Statutes of 2013) re-authorizes the Clean Transportation Program through January 1, 2024. The Clean Transportation Program 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 CEC issued solicitation Grant Funding Opportunity (GFO)-19-602, Hydrogen Refueling Infrastructure, to provide grant funds to expand the network of publicly accessible hydrogen refueling stations that serve California's light duty fuel cell electric vehicles (FCEVs). The solicitation offered up to $115.7 million as available funds, subject to future appropriations and the Clean Transportation Program Investment Plan allocations. To be eligible for funding under GFO-19-602, the projects shall also be consistent with the CEC's Clean Transportation Program Investment Plan updated annually.

In response to GFO-19-602, Equilon Enterprises LLC (d/b/a Shell Oil Products US) (Recipient) submitted application number 5, which was proposed for funding in the CEC's Notice of Proposed Awards on September 4, 2020. Recipient's application, the Notice of Proposed Awards for GFO-19-602, and GFO-19-602 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 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:

Both large-scale adoption of hydrogen fuel cell electric vehicles (FCEV) and supply of low-carbon hydrogen are needed for material contribution to state goals for emission reduction of greenhouse gas and criteria pollutants. The three key achievements in hydrogen infrastructure to accomplish these goals are increasing refueling station coverage and capacity and performance for convenient and reliable availability of fuel, increasing production of low-carbon hydrogen, and reducing total cost to the customer to be competitive with alternatives to gasoline. The multi-year funding available to complete this project can support an effective programmatic approach to hydrogen station development by the Recipient, thus enabling FCEVs to become a competitive transportation option for widespread adoption and significant emission reduction in California.

Commercial success for hydrogen mobility in California faces challenges which can be overcome with commitment and collaboration from Clean Transportation Program funding, Recipient's innovation, resources and expertise to deliver a statewide program of hydrogen fueling stations in California, and FCEV manufacturers' continuing commitments of vehicle sales in California.

The tranche of hydrogen stations from the Recipient will help address the following barriers:

Technical barriers including the reliability of gaseous compressors and sustained fueling performance, contributing to a better understanding of overall system performance and reliability drivers, for common standards for delivery that can be applied across regions and companies. Efficient gaseous hydrogen storage, distribution and utilization will be enabled by this project with high-pressure high-capacity cost-optimized type 4 composite compressed gas storage tubes.

Market barriers for widespread adoption of FCEV including confidence in convenient and reliable access to hydrogen refueling. Exhibiting a viable business case in hydrogen

refueling stations, with the combination of funding awarded under GFO-19-602 to partially fund equipment capital expenditure and credits generated under the Low Carbon Fuel Standard (LCFS) Hydrogen Refueling Infrastructure (HRI) pathway, of critical importance to the viable business case in the current market phase. Development of low-carbon hydrogen production and distribution. Establishment of a sufficiently large workforce to maintain and service hydrogen fueling infrastructure will be enabled by this project with contracting new service providers in the California market to continue training and development of technical experts.

Institutional barriers at the local level will continue to be addressed in this project through further deployment and engagement, for example with familiarizing first responders within authorities having jurisdiction (AHJs) through training and drills occurring for each new station location.

Environmental barriers including the decarbonization of hydrogen supply produced from in-state renewable resources will be enabled by this project by significant improvements in gaseous hydrogen production, distribution, and export/off-load panels from the Shell Neptune station and storage solutions in combination with the LCFS HRI pathway. For local environments, station equipment will be designed and optimized to minimize noise and vibration, and has the potential to significantly reduce criteria pollutants with capacity to displace gasoline and diesel vehicles up to Class 6.

Cost and financial barriers have been the most significant hurdles to overcome for widespread adoption of hydrogen mobility. The development program enables cost reduction in hydrogen station capital and operating expenses; firmed commitments from two leading FCEV manufacturers to expand vehicle sales in California; entering cost-capacity optimized stations into the LCFS HRI pathway to partially offset cost of decarbonized hydrogen supply; establishing the initial infrastructure to support further cost reduction and expansion in scale; underpinning the remaining financial burden and risk sustained in a larger context of energy transitions and integration across new energies businesses.

Each of the above barriers is inter-connected, has contributed to relatively slower adoption of hydrogen mobility solutions, and can be overcome most effectively in a combined program of development as proposed by the Recipient.

Goals of the Agreement:
The goal of this Agreement is to develop hydrogen refueling stations using $7,318,398 in grant funding. This Agreement may be amended to add funding up to a total of $40,575,712 in grant funding. The additional funding is subject to future appropriations, Clean Transportation Program Investment Plan funding allocations, and CEC's approval of subsequent batches of stations. The hydrogen refueling stations will facilitate expansion of FCEV adoption in California for material and cost-effective emission reduction through a multi-year program of hydrogen refueling station development, that will provide reliable and convenient access to fuel and enable greater than 50% cost

reduction in hydrogen station capital and operating expenses while decarbonizing hydrogen supply. The goal is to use support from the Clean Transportation Program to overcome market barriers to a viable business case for further expansion of hydrogen infrastructure.

Objectives of the Agreement:

- The objective of this Agreement is to develop, continuously over several years, a hydrogen refueling station network of eight stations in the initial batch and up to 51 stations (subject to future appropriations, Clean Transportation Program Investment Plan funding allocations, and CEC's approval of subsequent batches of stations) in core California markets.

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 Commission Agreement Officer (CAO), and a representative of the Energy Commission Accounting Office. The Recipient shall bring their Project Manager, Agreement Administrator, Accounting Officer, and any others determined necessary by the Recipient or specifically requested 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 Products:

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

Commission Agreement Manager Product:

- Kick-Off Meeting Agenda

Task 1.2 Critical Project Review (CPR) Meetings

CPRs provide the opportunity for frank discussions between the Energy Commission and the Recipient. 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.

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, 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 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:

- 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.

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

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

- What to do with any equipment purchased with Energy Commission funds (Options)
- Energy Commission's request for specific "generated" data (not already provided in Agreement products)
- 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.

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 Commission Agreement Manager within 10 days of the end of the reporting period. The recommended specifications for each progress report are contained in Section 6 of the Terms and Conditions of this Agreement.
- 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 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 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, if requested by the CAM.
- Prepare a Final Report following the latest version of the Final Report guidelines which will 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.

Products:

- Outline of the Final Report, if requested
- 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 Agreement 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 Agreement Manager if during the course of the Agreement additional match funds are received.
- Notify the Commission Agreement 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 meeting.

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 Agreement 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 Agreement Manager.
- As permits are obtained, send a copy of each approved permit to the Commission Agreement Manager.

- If during the course of the Agreement permits are not obtained on time or are denied, notify the Commission Agreement 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)
- 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 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, then the Recipient shall notify the CAM.

Products:

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

TECHNICAL TASKS

TASK 2 HYDROGEN SAFETY PLAN

The goal of this task is to develop a detailed hydrogen safety plan that the Recipient and any subcontractors or individuals involved in station construction, operation, and

maintenance will follow throughout the project and as long as each station operates. The Recipient will collaborate with the Pacific Northwest National Laboratory (PNNL) Hydrogen Safety Panel (HSP) to ensure the plan is comprehensive and demonstrates a strong commitment to safety.

The Recipient shall:

- Develop a Preliminary Hydrogen Safety Plan.
- Submit the Preliminary Hydrogen Safety Plan to the PNNL HSP for assessment.
- Discuss the PNNL HSP's assessment with members of the PNNL HSP.
- Evaluate the PNNL HSP's comments and determine how to address them in the final plan.
- Inform the CAM of how it will address the PNNL HSP's comments.
- Collaborate with the PNNL HSP and CAM to resolve any questions or issues pertaining to the Hydrogen Safety Plan.
- Prepare a Final Hydrogen Safety Plan.

Products:

- A copy of the PNNL HSP's assessment of the Preliminary Hydrogen Safety Plan
- Memo describing how the PNNL HSP's comments will be addressed in the Final Hydrogen Safety Plan

TASK 3 DEVELOPMENT OF THE INITIAL BATCH OF STATIONS

The goal of this task is to develop, commission, and deploy hydrogen refueling stations by achieving open retail status. The Recipient shall also conduct ongoing testing and collect data for the initial batch of hydrogen stations at the following locations:

- *2051 W. 190th Street, Torrance, CA 90504*
- *1600 Jamboree Road, Newport Beach, CA 92660*
- *5164 W. Washington Boulevard, Los Angeles, CA 90016*
- *2589 N. Lakewood Boulevard, Long Beach, CA 90815*
- *2600 Pellissier Place, City of Industry, CA 90601*
- *17325 Pioneer Boulevard, Artesia, CA 90701*
- *705 West Huntington Drive, Monrovia, CA 91016*
- *7170 Avenida Encinas, Carlsbad, CA 92011*

Task 3.1 Early Hydrogen Station Design Review

The goal of this task is to work with the PNNL HSP in an early hydrogen station design review for the stations in Task 3, before the Recipient submits the station building plan to the AHJ for the "plan check."

The Recipient shall:

- Develop and provide the station design to the PNNL HSP.
- Provide the specifications for the hydrogen refueling equipment to the PNNL HSP.
- Solicit input from the PNNL HSP on the station design and specifications.
- Submit written notification of completion of the PNNL HSP design review to the CAM.

Products:

- Written notification of completion of PNNL HSP design review

Task 3.2 Station Engineering, Equipment Procurement, Site Installation

The Recipient shall:

- Prepare and submit an equipment list of components to be used in the stations, which may include, but is not limited to, dispensers, hydrogen storage technology, point of sale devices, compressors, chillers, and nozzles.
- Order the equipment for each station and submit written notification that the equipment has been ordered.
- Finalize the detailed engineering designs of the stations and equipment layouts. Develop and assemble the necessary engineering drawings and documentation for submission to the AHJs for the station "plan checks." Submit the documents to the AHJs and provide CAM with written notification that the plans have been submitted to the AHJs.
- Prepare and submit a notification for each station after the equipment is assembled by the manufacturer, integrator, or assembler and is ready to be shipped.
- Receive and accept the equipment for each station. Notify CAM that equipment has been received.
- Complete all station construction and equipment installations.
- Submit a written notification of the completion of construction of the stations and the equipment installations including photographic evidence and serial numbers for the equipment.

[A CPR will be held during this task.]

Products:

- Station equipment lists
- Written notifications of the equipment orders
- Written notifications of submission of the building plans to the AHJs
- Written notifications that the equipment to be used in each station is ready to be shipped
- Written notifications of the receipt and acceptance of the equipment for each station
- Written notifications regarding completion of construction and equipment installations for each station, including photographs of the equipment that was installed and the serial numbers of the equipment

Task 3.3 Station Commissioning and Operations Start-Up

The Recipient shall:

- Commission and make the hydrogen refueling stations operational.
- Achieve open retail status for each station.
- Certify that the Recipient will operate the stations, as open retail, for a minimum of five years.
- Complete and submit the Open Retail Station Checklists (Exhibit F) to the CAM.

Products:

- Written certifications that each station will be operated as Open Retail for a minimum of five years
- Completed, signed, and dated Open Retail Station Checklists (Exhibit F) for each station

Task 3.4 Project Fact Sheet

The goal of this task is to develop an initial and Final Project Fact Sheet that describes the CEC-funded project and the benefits resulting from the project for the public and key decision makers.

The Recipient shall:

- Prepare an Initial Project Fact Sheet at start of the project that describes the project and the expected benefits. Use the format provided by the CAM.

- Prepare a Final Project Fact Sheet at the project's conclusion that describes the project, the actual benefits resulting from the project, and lessons learned from implementing the project. Use the format provided by the CAM.
- Provide at least (6) six High Quality Digital Photographs (minimum resolution of 1300x500 pixels in landscape ratio) from the project.

Products:

- Initial Project Fact Sheet
- Final Project Fact Sheet
- High Quality Digital Photographs

Task 3.5 Data Collection and Analysis

The goal of this task is to collect operational data from the project and include the data and analysis in quarterly submittals of the National Renewable Energy Laboratory (NREL) Data Collection Tool, to perform and report hydrogen quality test results, and to collect and analyze data from the project for economic and environmental impacts. This information will be included in the Final Report (Task 1.5).

The Recipient shall:

- Prepare and submit the NREL Data Collection Tool for each station once the station becomes open retail and continue to do so every quarter until one year after the final station in the Recipient's tranche becomes open retail.
- Perform and submit results of purity using hydrogen collected, at the nozzle for each hose at each open retail station. Purity tests for each station in the Recipient's tranche will be performed:

    - at the time the station becomes open retail (to meet the open retail definition);
    - every six months after the station becomes open retail during the approved term of this Agreement; and,
    - as needed when the hydrogen lines are potentially exposed to contamination due to maintenance or other activity during the term of this Agreement.

    Hydrogen purity readings shall be collected according to California Code of Regulations 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.

- Once all the stations in the Recipient's tranche are open, collect at least 12 months of data for all of the stations in the tranche, including:
    - Normal operating hours, up time, down time, and explanations of variations
    - Gallons of gasoline and/or diesel fuel displaced (with associated mileage information)
    - Expected air emissions reduction, for example:
        - Non-methane hydrocarbons
        - Oxides of nitrogen
        - Particulate Matter
        - Formaldehyde
- Specific jobs and economic development resulting from this project.
- Report of total, all-in capital costs (including expenses outside the Agreement budget) and a summary of typical operation and maintenance costs of the station(s).
- Comply with the Petroleum Industry Information Reporting Act (PIIRA) and complete CEC Form A15 on an annual basis for submission to the CEC's PIIRA Data Collection Unit (https://a15.energy.ca.gov/).
- Describe any energy efficiency measures used in the facility that may exceed Title 24 standards in Part 6 of the California Code of Regulations.
- Provide a quantified estimate of the project's carbon intensity values or provide a California Air Resources Board approved pathway carbon intensity.
- Estimate annual life-cycle greenhouse gas emission reduction.
- Compare any project performance and expectations provided in the proposal to the CEC with actual project performance and accomplishments.

Products:

- Completed quarterly NREL Data Collection Tools for each station
- Initial, biannual and as needed hydrogen purity test results
- Data collection information and analysis will be included in the Final Report

RESOLUTION NO: 20-1209-07b

STATE OF CALIFORNIA

STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION - RE: EQUILON ENTERPRISES, LLC

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

RESOLVED, that the CEC approves ARV-20-003 with Equilon Enterprises LLC (DBA Shell Oil Products US) for a grant up to $40,575,712 to develop hydrogen refueling stations in California. The CEC is currently providing $7,318,398 in grant funds to develop eight hydrogen refueling stations, and additional funds may be added up to $40,575,712 at future dates to develop more stations, subject to future appropriations and Clean Transportation Program Investment Plan funding allocations and CEC approval of subsequent batches of stations; and

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

CERTIFICATION

The undersigned Secretariat to the CEC 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 CEC held on December 9, 2020.

AYE:
NAY:
ABSENT:
ABSTAIN:

_____
Cody Goldthrite
Secretariat