

GRANT REQUEST FORM (GRF)

CEC-270 (Revised 10/2015)

CALIFORNIA ENERGY COMMISSION

New Agreement ARV-17-050 (To be completed by CGL Office)

Division	Agreement Manager:	MS-	Phone
600 Fuels and Transportation Division	Matthew Ong	27	916-653-5285

Recipient's Legal Name	Federal ID Number
StratosFuel, Inc.	47-5270579

Title of Project
Zero Impact Renewable Hydrogen Production Facility

Term and Amount	Start Date	End Date	Amount
	6 / 13 / 2018	1 / 31 / 2022	\$ 3,965,665

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

Proposed Business Meeting Date	6 / 13 / 2018	<input type="checkbox"/> Consent	<input checked="" type="checkbox"/> Discussion
Business Meeting Presenter	Matthew Ong	Time Needed:	5 minutes

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

Agenda Item Subject and Description

Proposed resolution approving Agreement ARV-17-050 with StratosFuel Inc. for a \$3,965,665 grant to build a 5,000 kilogram per day electrolysis plant in Moreno Valley, CA. The facility shall produce and supply 100 percent renewable hydrogen fuel to California's network of public hydrogen refueling stations. (ARFVTP Funding). Contact: Matthew Ong

California Environmental Quality Act (CEQA) Compliance

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

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

Legal Company Name:	Budget
Fiedler Group	\$ 350,000
TBD	\$ 0
	\$ 0

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

Legal Company Name:
Hydrogenics USA, Inc.
Air Products and Chemicals, Inc.

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Budget Information			
Funding Source	Funding Year of Appropriation	Budget List No.	Amount
ARFVTP	16/17	601.118F	\$3,965,665
Funding Source			\$
R&D Program Area:	N/A	TOTAL:	\$3,965,665
Explanation for "Other" selection			
Reimbursement Contract #:		Federal Agreement #:	

Recipient's Administrator/ Officer				Recipient's Project Manager			
Name:	Jonathan Palacios-Avila			Name:	John Avila		
Address:	2601 N Del Rosa Ave Suite #200			Address:	2601 N Del Rosa Ave Suite #200		
City, State, Zip:	San Bernardino, CA 92404			City, State, Zip:	San Bernardino, CA 92404		
Phone:	323-804-5067	Fax:	888-371-8488	Phone:	909-317-0519	Fax:	888-371-8488
E-Mail:	jpa@stratosfuel.com			E-Mail:	jma@stratosfuel.com		

Selection Process Used	
<input checked="" type="checkbox"/> Competitive Solicitation	Solicitation #: GFO-17-602
<input type="checkbox"/> First Come First Served Solicitation	

The following items should be attached to this GRF	
1. Exhibit A, Scope of Work	<input checked="" type="checkbox"/> Attached
2. Exhibit B, Budget Detail	<input checked="" type="checkbox"/> Attached
3. CEC 105, Questionnaire for Identifying Conflicts	<input checked="" type="checkbox"/> Attached
4. Recipient Resolution	<input checked="" type="checkbox"/> N/A <input type="checkbox"/> Attached
5. CEQA Documentation	<input type="checkbox"/> N/A <input checked="" type="checkbox"/> Attached

Agreement Manager

Date

Office Manager

Date

Deputy Director

Date

Memorandum

FOR: ARV-17-050, StratosFuel LLC

Date : June 7, 2018

Telephone: CALNET (916) 653-5285

From : **Matthew Ong**
California Energy Commission
1516 Ninth Street
Sacramento CA 95814-5512

Subject: California Environmental Quality Act Analysis for ARV-17-050

I am an Air Pollution Specialist in Fuel and Transportation Division, California Energy Commission, and am the Commission's Agreement Manager for proposed Agreement ARV-17-050 ("Agreement"), the Hydrogen Electrolysis Plant, City of Moreno Valley, Riverside County, California (the "Project").

Pursuant to my work in developing the Agreement, including the Scope of Work for the Agreement, I have reviewed the lead agency, the City of Moreno Valley's (the "City"), California Environmental Quality Act ("CEQA") 2010 Initial Study and Negative Declaration, the resolution of the City adopting the Negative Declaration (Resolution No. 2010-07), the City's filed Notice of Determination, Addendum to the Negative Declaration prepared on May 31, 2018, and the scope of work for proposed Agreement ARV-17-050.

The Project will be located in the City of Moreno Valley within the Moreno Valley Industrial [Specific] Plan Area (SP #208) which was originally adopted on June 27, 1989 (Ordinance No. 204). The City prepared a programmatic EIR for the Specific Plan that considered the broad policy alternatives and program-wide mitigation measures at an early stage of planning. In 2010, the City of Moreno Valley prepared and adopted an Initial Study and Negative Declaration for Master Plot Plan PA07-0035, Plot Plan PA07-0039 and Tentative Parcel Map No. 35822 (PA08-0021) which included the development of six industrial buildings ranging in size from 23,700 square feet to 47,160 square feet on six parcels. Recently, the City prepared an Addendum to the Negative Declaration.

The Addendum identifies the modified project as comprising Parcels 1, 2, 3, 4 (APN 0485-230-030 – 033) spanning 8.82 acres of the approved project site within the Moreno Valley Industrial Area [Specific] Plan (SP #208) Master Plot Plan PA07-0035. The applicant proposes to change the use of those parcels from light wholesale, storage and distribution to heavy manufacturing and office, business, and professional in order to facilitate the proposed 100 percent renewable hydrogen electrolysis and steam reformation facility and associated professional office campus. The Agreement involves funding a portion of the project that will be constructed on Parcels 3 and 4.

Under CEQA the lead agency shall prepare an addendum to a previously adopted negative declaration if only minor technical changes or additions to the prior environmental document are necessary and none of the conditions calling for the preparation of a subsequent EIR or negative declaration have occurred under Cal. Code of Regulations sections 15162, 15164. The City evaluated the potential environmental impacts of the modified project and acting as the lead agency, the City has determined that none of the CEQA conditions, requiring the preparation of a subsequent EIR or negative declaration, listed in Section 15162 apply. The City has determined that an Addendum to the prior Negative Declaration is appropriate for the modified project and appropriate for compliance with CEQA as described in the CEQA guidelines (Cal. Code Regs. §§ 15000 et al).

It is my opinion that the work to be performed under the proposed Agreement falls within the scope of the lead agency's documents and the Agreement will not result in any new significant environmental impacts than those already considered by the lead agency. I have not found any new mitigation measures within the Energy Commission's authority that would lessen or further mitigate the Project's impacts. The reasons for my conclusion are as follows:

The Project includes the design, construction, and operation of a 5,000 kilogram per day, 100 percent renewable hydrogen electrolysis plant. The facility will be located at the Moreno Valley Business Park in an industrial zoned area. The hydrogen fuel product will be distributed to the state's public refueling station network and to StratosFuel, Inc.'s car-sharing program. The plant will receive most of its power from StratosFuel's in-state wind/solar 30-year power purchase agreement, and water from the Eastern Municipal Water District. There will be no or less than significant emissions generated from the production process and from the transportation of hydrogen. The Project is expected to have the same or substantially similar impacts to land use, biological resources, cultural resources, geology and soils, hazardous material, and water quality as identified in the lead agency's previously adopted Negative Declaration.

Air Quality:

The Project will consist of construction activities and is thus expected to generate short-term air pollutant emissions. In addition, operation of the proposed Project, particularly transportation of the hydrogen product, would generate air emissions over the long-term. However, the hydrogen production and handling equipment will be electrically driven, with the production process only consisting of the electro-chemical splitting of water into hydrogen and oxygen gas, and are therefore expected to generate zero or less than significant emissions.

The nearest sensitive receptors are single-family residential uses adjacent to the east of the project site, as well as the planned StratosFuel, Inc. corporate office campus. The Project is expected to comply with South Coast Air Quality Management District's (SCAQMD) Localized Significance Thresholds, including for receptors less than 82 feet away. Project-specific short-term construction and long-term criteria pollutant emissions would also be less than the emissions thresholds established in the SCAQMD CEQA Air Quality Handbook. The installation of equipment related to electrolysis, and cryogenic liquid hydrogen, or any other stationary equipment proposed as part of the Project would require a permit from the SCAQMD pursuant to Title V of the Clean Air Act and would be subject to SCAQMD regulations.

Although the previously approved project under the adopted Negative Declaration did not include a quantified greenhouse gas (GHG) emissions analysis, current analysis indicates that

GHG emissions from the Project's facility operations would be less than the SCAQMD threshold of 10,000 metric tons per year for industrial uses subject to Title V permitting, and be below the level of emissions for the previously approved land use that was included in the Moreno Valley Energy Efficiency and Climate Action Strategy and Western Riverside Council of Governments Sub-Regional Climate Action Plan.

Biological Resources:

The project site is within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The project site is not located within any MSHCP cellgroup or criteria cell and therefore has no conservation requirements toward building out the MSHCP Reserve. The project site is also not located within any amphibian, owl, criteria area, mammal, or narrow endemic plant survey areas. However, the vacant parcel adjacent to the north is located within a burrowing owl survey area, so it is possible that burrowing owls may be present on the project site. The project site is not located within or adjacent to land use designated as occupied foraging habitats by the Migratory Bird Treaty Act and the California Fish and Game Code. The site-specific conditions prescribed in the adopted Negative Declaration to complete a pre-construction survey for burrowing owls prior to any disturbance of the site would apply to this Project. Impacts to candidate, sensitive, or special status species from development of the Project are expected to be the same or substantially similar to those identified in the previously adopted Negative Declaration.

Cultural Resources:

The Cultural Resources Inventory for the City of Moreno Valley at the California Historical Resources Information System, Eastern Information Center did not reveal evidence of any known archaeological, historical, or paleontological resources on the site. Thus, there is no indication that archaeological, historical, or paleontological resources are present on the project site. However, the Project would be required to comply with all applicable regulations protecting archaeological, historical, and paleontological resources and would be conditioned to cease excavation or construction activities if archaeological, historical, or paleontological resources are identified during execution of the Project. Impacts to archaeological, historical, or paleontological resources from development of the Project would be the same or substantially similar to those identified in the previously adopted Negative Declaration.

Geology and Soils:

The proposed Project would not have a direct impact on creating geologic concerns. The site is currently designated for Industrial uses. The proposed plan does not increase the exposure of residences that might be exposed to ground shaking, since residences are not proposed as part of the plan. The project site is not located within or near a designated Alquist-Priolo Earthquake Fault zone or other designated fault hazard zone. Construction on the project site would be required to comply with applicable provisions of the latest editions of the International Building Code (IBC) and California Building Code (CBC) as well as the City's building regulations. Prior to issuance of a grading permit, the applicant shall provide evidence to the City that all project components have been designed, engineered, and constructed in conformance with the applicable provisions of the IBC and CBC. In accordance with the provisions of the 2016 CBC, the applicant shall also prepare a project specific, design-level geotechnical/soils/geologic investigation report as a condition of approval to build.

The development of the site will likely result in the reduction of erosion with the placement of buildings and landscaping on the site. During construction, there is the potential for less than significant impacts for short-term soil erosion from minimal excavation and gradation. This will

be addressed as part of standard construction, such as water to reduce dust and sandbagging, if required, during raining periods. Since development of the project site includes disturbance of more than one acre, the project applicant will be required to comply with the National Pollutant Discharge Elimination System General Construction Permit, including filing a Notice of Intent with the Santa Ana Regional Water Quality Control Board, preparing a Stormwater Pollution Prevention Plan for implementation during construction, and preparing a Water Quality Management Plan for implementation during operation of the Project. Impacts to geology and soils from the Project would be the same or substantially similar to those identified in the previously adopted Negative Declaration.

Hazards and Hazardous Materials

The Project would involve the production and storage of hazardous materials, namely hydrogen, during operation but shall comply with all applicable federal, state, and local laws and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous waste, including but not limited to the International Fire Code (IFC) for hydrogen applications, the International Building Code (IBC) and California Building Code (Title 24, CBC) for general construction requirements, the International Fuel Gas Code (IFGC), the NFPA 2 Hydrogen Technologies Code, the NFPA 55 for compressed gases and cryogenic fluids, the NFPA 70 for electrical infrastructure, the American Society of Mechanical Engineers (ASME) B31.12 standard on hydrogen piping and pipelines, and Title 49 of the Code of Federal Regulations implemented by Title 13 of the CCR, which describes strict regulations for the safe transportation of hazardous materials.

The Project also proposes to install and operate a hydrogen truck loading component. Hydrogen would be transported from the proposed Project site via trucks designed for the transport of hydrogen gas and in conformance with Hazardous Materials Transportation Act regulations. Hydrogen delivery trucks entering and exiting the project site would be provided specific travel directions to the hydrogen facility and for deliveries to hydrogen refueling stations, primarily utilizing arterial streets and unrestricted highways per the National Hazardous Materials Route Registry. Compliance with all applicable local, state, and federal laws would ensure operation of the proposed Project would implement redundant safeguards such as quality control of engineering, construction, and installation of equipment, leak detection devices, automatic shut-off valves, and 24/7 on-site and remote monitoring of the facility to prevent release of hazardous materials (i.e., hydrogen) into the environment.

Potential hazardous materials such as fuel, paint products, lubricants, solvents, and cleaning products may be used and/or stored on-site during construction of the Project. However, due to the limited quantities of these materials to be used during construction, they are not considered hazardous to the public.

Hydrology and Water Quality:

The Eastern Municipal Water District (EMWD) would provide the proposed Project with water supplies. No direct groundwater withdrawals would be required for the Project.

Pursuant to the requirements of the Santa Ana Regional Water Quality Control Board, a project specific Water Quality Management Plan (WQMP) is required for certain projects involving discretionary approval. This Project requires a WQMP to address pollutants of concern which include nutrients, oxygen demanding substances, and pathogens (bacteria and viruses). Site Design and Source Control best management practices (BMPs) are used throughout the Project. Treatment BMPs must be selected and implemented which are medium to highly

effective in treating pollutants of concern. On-site bioswales will be incorporated into the Project landscaping to ensure stormwater runoff from conversion of permeable surfaces to impermeable surfaces is managed in accordance with applicable regulations. The site-specific BMPs would therefore facilitate groundwater recharge within the EMWD's service territory, where water supply was deemed to be adequate, at a rate that would meet or exceed pre-development conditions.

Additionally, grading activities would temporarily expose soils to wind and water erosion that would contribute to downstream sedimentation. The proposed Project would comply with all permits and development guidelines associated with urban water runoff and discharge set forth by the City of Moreno Valley and the Regional Water Quality Control Board. With the approval of the storm drainage facilities by the City Engineer and Riverside County Flood Control District, as well as complying with all applicable storm water discharge permits, impacts would be less than significant.

Land Use and Planning:

The project site is currently undeveloped, designated as business park/light industrial, and is bounded to the north by vacant land, to the east by residential uses, to the south by a warehouse, and to the west by the March Air Reserve Base. No existing established community is located on the project site. The hydrogen production facility would be constructed in an area that permits "heavy manufacturing" and located in proximity to other industrial uses. StratosFuel, Inc. corporate headquarters office campus would be constructed within the 300-foot Residential Buffer Zone between the proposed hydrogen facility and the residential uses to the east to serve as a physical buffer that would protect residential surrounding areas from hazards, noise, odor, dust, smoke, truck traffic, and other objectionable influences. The proposed project site would be served by improved public streets and other infrastructure and does not involve the subdivision of land or the creation of streets that could alter the existing surrounding pattern of development or established community. The proposed Project is consistent with the site's existing Industrial Zone land use designation within the Moreno Valley Industrial [Specific] Area Plan (SP #208) and the City of Moreno Valley's General Plan. Associated impacts would be the same or substantially similar to those identified in the previously adopted Negative Declaration.

Noise:

The proposed Project, consistent with the previously adopted Negative Declaration, has the potential to impact surrounding sensitive uses associated with short-term construction, long-term off-site traffic, and long-term off-site operations. Although the project site is in a developing industrial district, there are existing residential uses to the east. However, City of Moreno Valley (City) standards require 8-foot-tall walls to screen the Project from view for aesthetic purposes, which would also provide noise attenuation to reduce levels at the nearby residences below the City's exterior standard of 65 decibels. Noise impacts are expected to be the same or substantially similar to those identified in the previously adopted Negative Declaration.

Specifically, noise impacts associated with construction activity are related to the noise generated by heavy construction equipment, location, sensitivity of nearby land uses, and the timing and duration of the noise-generating activities. The Project's short-term noise impacts during construction are considered less than significant through compliance with City Municipal Code limits on construction hours. Additionally, the Project will locate equipment at the farthest location possible from adjacent residences, as well as position stationary construction

equipment so that the emitted noise is directed away from adjacent residences. All construction equipment will be equipped with properly operating and maintained mufflers.

Pertaining to long-term off-site traffic noise impacts, the City of Moreno Valley requires that the exterior active use areas not exceed 65 dBA CNEL, with an accepted significance threshold of 5 decibels. The trip generation associated with the Project would be significantly less than the equivalent trip generation for the project previously approved under the Negative Declaration. Independent analysis concluded that the Project traffic would increase noise levels within 50 feet of the surrounding roadways by only 0.0 to 2.3 decibels.

Finally, for long-term off-site operational noise impacts, the noise associated with normal operations occurs when the compressors located at the transfill station are used to fill delivery trucks, as well as from the trucks themselves. Located approximately 660 feet west of the existing single-family residences, the noise associated with compressor operations would be attenuated down to 39 dBA Leq, and the noise from delivery truck operations would be attenuated down to 53 dBA Lmax. These noise levels are below both the daytime and nighttime standards for residential uses.

Transportation/Traffic:

The proposed Project would generate approximately 25 truck trips per day at full-capacity operations. The trip generation associated with the Project would be significantly less than the equivalent trip generation previously approved under the adopted Negative Declaration, which entailed approximately 730 trips per day with 146 trips attributed to trucks. As is the case with the previously approved project under the adopted Negative Declaration, the project would be conditioned to complete street improvements at Heacock Street and Revere Place to address unacceptable level of LOS at these intersections. In addition, the Project would be conditioned to pay standard development impact fees and Transportation Uniform Mitigation Fees. Project conditions of approval require improvement to the perimeter project streets, the installation of a median along the Project site's frontage, as well as fair share contribution towards the installation of a signal. At this time, no specific development proposal or site plan is available; therefore, specific site access information has not been determined. However, the design of roadways must provide adequate sight distance and traffic control measures in accordance with City standards. Furthermore, none of the roadways in the Project vicinity are included in Riverside County's Congestion Management Program system of roadways and highways.

Exhibit A SCOPE OF WORK

TECHNICAL TASK LIST

Task #	CPR	Task Name
1		Administration
2		Completion of Critical Milestones
3	X	Engineering, Procurement, and Site Preparation
4	X	Construction and Equipment Installation
5	X	Facility Start-Up & Commissioning
6		Data Collection

KEY NAME LIST

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
1	Jonathan Avila, John Avila, Jose Magana		
2	Jonathan Avila, John Avila, Jose Magana	Hydrogenics	Hydrogenics
3	Dale Dickson, John Avila, Jose Magana	Hydrogenics, Fiedler Group, TBD	Hydrogenics, Fiedler Group, TBD
4	Dale Dickson, John Avila, Jonathan Avila, Michel Archambault	Hydrogenics, TBD	Hydrogenics; Air Products and Chemicals, Inc., TBD
5	Dale Dickson, John Avila, Jonathan Avila, Michel Archambault	Hydrogenics	Hydrogenics

GLOSSARY

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

Term/ Acronym	Definition
AB	Assembly Bill
ARFVTP	Alternative and Renewable Fuel and Vehicle Technology Program
CAM	Commission Agreement Manager
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CPR	Critical Project Review
Energy Commission	California Energy Commission

Term/ Acronym	Definition
FCEV	Fuel Cell Electric Vehicle
FTD	Fuels and Transportation Division
kg/day	Kilogram(s) per day
LCFS	Low Carbon Fuel Standard
Recipient	StratosFuel, Inc.
SB	Senate Bill

Background

Assembly Bill (AB) 118 (Núñez, Chapter 750, Statutes of 2007), created the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP). The statute authorizes the California Energy Commission (Energy Commission) to develop and deploy alternative and renewable fuels and advanced transportation technologies to help attain the state’s climate change, clean air, and alternative energy policies. AB 8 (Perea, Chapter 401, Statutes of 2013) re-authorizes the ARFVTP through January 1, 2024. 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-17-602 for the construction and operation of a 100 percent renewable hydrogen production facility, with at least 1,000 kilograms per day of hydrogen production capacity dedicated to supplying California’s network of public hydrogen refueling stations. To be eligible for funding under GFO-17-602, projects must also be consistent with the Energy Commission’s ARFVTP Investment Plan, updated annually. In response to GFO-17-602, StratosFuel, Inc. (Recipient) submitted full application #3, which was proposed for funding in the Energy Commission’s Notice of Proposed Awards on May 1, 2018. GFO-17-602 and Recipient’s aforementioned applications are hereby incorporated by reference into this Agreement in their entirety.

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

inconsistency between the terms of this Agreement and the Recipient's Application, the terms of this Agreement shall control.

Problem Statement:

Senate Bill (SB) 1505 (Lowenthal, Chapter 877, Statutes of 2006) requires hydrogen refueling stations operating in California to dispense 33.3 percent renewable hydrogen. Hydrogen refueling stations receiving state funds must meet the requirement today as provided for in SB 1505. According to the California Air Resources Board's 2017 Annual Evaluation of Hydrogen Fuel Cell Electric Vehicle Deployment and Hydrogen Fuel Station Network Development, roughly 5,500 kg/day will be needed by 2021 to meet the SB 1505 requirement, although demand is expected to slightly exceed this. In addition, California's hydrogen refueling station network is currently experiencing fuel shortages and constraints on supplying enough hydrogen to the stations, demonstrating the expedited need for dedicated hydrogen production.

StratosFuel Inc.'s hydrogen production facility will strengthen the success and reliability of California's network of hydrogen refueling stations that support the greenhouse gas reduction and air quality improvement goals of the State of California and Governor Edmund G. Brown Jr., such as Senate Bill 1505 (Lowenthal, Chapter 877, Statutes of 2006). Hydrogen fuel will also contribute to the mix of alternative fuels needed to implement the Low Carbon Fuel Standard (LCFS), which is designed to reduce the carbon intensity of transportation fuels by 10 percent by 2020.

Goals of the Agreement:

The goal of this Agreement is to expand the currently planned Phase 1, 3,000 kilogram per day (kg/day) production capacity, 100 percent renewable production plant by an additional 2,000 kg/day production capacity. This project shall increase the availability of in-state renewable hydrogen vehicle fuel and reduce the cost associated with renewable hydrogen to help accelerate the adoption of fuel cell electric vehicles (FCEVs).

Objectives of the Agreement:

The objectives of this Agreement are to:

- Purchase, install, and operate 2,000 kg/day of hydrogen production capacity to augment existing 3,000 kg/day Phase 1 project.
- Utilize renewable power purchase agreement to produce 100 percent renewable hydrogen 24/7.
- Supply low-cost, renewable hydrogen, to hydrogen refueling stations and on-road FCEVs in California.
- Leverage off-take partnerships to supply up to 80 percent or more of publically funded, in-state hydrogen refueling stations.

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 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 Commission Agreement 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 Agreement Manager 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 Commission Agreement Manager 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 Grants Officer, the Fuels and Transportation Division (FTD) biofuel 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.
- A Monthly Progress Report shall contain updates on Critical Milestones.

- 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 COMPLETION OF CRITICAL MILESTONES

The goal of this task is to secure, control, and otherwise prepare the selected site for station installation. Recipient must complete the Critical Milestones identified below by the dates specified in the Schedule of Products and Due Dates, Exhibit A-1, in order to receive payment from the Energy Commission under this Agreement. Failure to complete the Critical Milestones by the dates specified in the Schedule of Products and Due Dates may also be cause for termination of this agreement. See also Exhibit D of this Agreement, Special Terms and Conditions.

- Critical Milestone 1: The Recipient must have held an in-person pre-application meeting for permit(s) approvals to build and operate the proposed hydrogen production facility with the authority that has jurisdiction over the project and entitlement process. The Recipient must provide to the Energy Commission proof of having met this Critical Milestone by submitting notes from a pre-application meeting with the authority that has jurisdiction, with a date, time, location, and list of meeting participants.

- Critical Milestone 2: The Recipient must have control or possession of the site at which the hydrogen production facility is to be constructed. The Recipient must provide to the Energy Commission proof of having met this Critical Milestone by submitting adequate documentation of site control.

The Recipient shall:

- Hold an in-person pre-application meeting, for permits to build and operate the hydrogen production facility, with the authority that has jurisdiction over the project and entitlement process by the date specified in the Schedule of Products and Due Dates.
- Obtain control and possession of the site at which the hydrogen production facility is to be constructed by the date specified in the Schedule of Products and Due Dates.

Products:

- Documentation of an in-person pre-application meeting with the authority that has jurisdiction over the project for permits to build and operate the hydrogen production facility
- Documentation of obtained site control

TASK 3 ENGINEERING, PROCUREMENT, AND SITE PREPARATION

The goal of this task is to finalize the engineering design, procure equipment, and prepare the project site for the development of the electrolyzer / hydrogen production system.

The Recipient shall:

- Design the hydrogen production facility with consideration of site-specific, equipment-specific, and operational conditions.
- Prepare and submit to the CAM an Equipment List for the hydrogen production facility, including cost estimates for all components consistent with Exhibit B, Budget.
- Submit purchase order for electrolyzer units and devices necessary for equipment delivery.
- Begin site preparation at the facility location, including electrical and water stubbing.
- Organize delivery setup.
- Coordinate delivery with development schedules.
- Prepare project site for equipment delivery and installation.

Products:

- Final Engineering and Design Plans
- Equipment List
- Purchase Order for Electrolyzers
- Written Notification of Installed Water Hot Tap for Equipment Supply

- Written Notification of Installed Electrical Connection for Equipment Power Supply
- Delivery Receipt for Electrolyzers
- Purchase Order for Two Low-Bed Trucks for Equipment Delivery
- Purchase Order for Crane for Equipment Delivery
- Skid Inspection for Equipment Readiness

[CPR WILL OCCUR DURING THIS TASK. See Task 1.2 for details.]

TASK 4 CONSTRUCTION AND EQUIPMENT INSTALLATION

The goal of this task is to install the electrolyzer system at the project site and integrate with existing electrolyzers, compression, and storage equipment. In addition all of the necessary electrical, water, and mechanical interconnections shall be completed.

The Recipient shall:

- Connect electrolyzers to existing power source.
- Perform electrical and plumbing connections.
- Perform mechanical installation and interconnections of piping, vent stacks, braces, and brackets.
- Perform pipe fitting and welding, as well as fabricate brackets/clamps to tie into existing infrastructure.
- Integrate electrolyzers with existing compression and storage system.
- Complete all construction and installation and the renewable hydrogen production and delivery system.
- Prepare and submit written notification that construction and installation is complete, which includes photographs of the equipment.

Products:

- Written Notification of Electrolyzer Installation
- Written Notification of Piping and Tubing Installation
- Written Notification of Completed Construction and Installation

[CPR WILL OCCUR DURING THIS TASK. See Task 1.2 for details.]

TASK 5 FACILITY START-UP & COMMISSIONING

The goal of this task is to test, commission, and start-up the electrolyzer system; confirm permits are in order and compliance with all safety codes and standards; and update any safety and training manuals and procedures.

The Recipient shall:

- Perform operational readiness inspection for the electrolyzer system.
- Verify electrolyzer system complies with existing permits.
- Commission and start-up the electrolyzer system.
- Provide written notification of start-up of the electrolyzers, including time and date of start-up, tests performed, and test results.
- Test and verify performance of the electrolyzer system.
- Test and certify that the product hydrogen purity complies with applicable California Code of Regulations (e.g., CCR Title 4, Division 9, Chapter 1, Article 1, Sections 4001 and 4002.9; and CCR Title 4, Division 9, Chapter 6, Article 8, Sections 4180 and 4181 which adopts the requirements of SAE International J2719: Hydrogen Fuel Quality for Fuel Cell Vehicles (Nov. 2015 revision, as of June 2017)).
- Provide documentation of renewable electricity source and quantities used to operate the electrolyzers.
- Provide training for station operators and first responders.

Products:

- Site Acceptance Testing Report
- Written Notification of Permit(s) Compliance
- Written Notification of Start-Up and Commissioning
- Certification of Hydrogen Purity Compliance with California Code of Regulations
- Documentation of Renewable Electricity Supply
- Safety Training Protocols

[CPR WILL OCCUR DURING THIS TASK. See Task 1.2 for details.]

Task 6 DATA COLLECTION AND ANALYSIS

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

The Recipient shall:

- Troubleshoot any issues identified.
- Develop a data collection plan and collect at least twelve (12) months of data, including, at a minimum, the following:
 - Throughput, usage, and operations data
 - Normal operating hours, up time, down time, and explanations of variations

- Renewable electricity feedstock supply summary, including source, volumes, and cost
 - Maximum capacity of the new hydrogen fuel production system in kilograms per day
 - Monthly volumes of renewable and non-renewable hydrogen produced and sold by the project facility.
 - List of hydrogen refueling stations served.
 - Record of co-products from production processes, including quantity
 - Record of wastes from production processes (waste water, solid waste, criteria emissions, etc.)
 - Electricity consumption
 - Expected air emissions reduction from the production facility, for example:
 - Non-methane hydrocarbons
 - Oxides of nitrogen
 - Non-methane hydrocarbons plus oxides of nitrogen
 - Particulate Matter
 - Formaldehyde
 - For any expected medium- and heavy-duty vehicle fleet use, duty cycle of the current fleet and the expected duty cycle of future vehicle acquisitions
 - Specific jobs and economic development resulting from this project
 - Finished hydrogen fuel price
 - Analysis of total facility costs, operation and maintenance costs, marginal abatement costs
- Provide a written record of registering with the Low Carbon Fuel Standard (LCFS) and Renewable Fuel Standard programs.
 - Identify any current and planned use of renewable energy at the facility.
 - 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 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 Energy Commission with actual project performance and accomplishments.
 - Collect data, information, and analysis described above and include in the Final Report.

Products:

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

California Energy Commission

June 13, 2018 Business Meeting – Agenda Item #11

**Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP)
Project: “Zero Impact Renewable Hydrogen Production Facility” (ARV-17-050)**

The full California Environmental Quality Act (CEQA) supporting documentation for ARV-17-050 can be obtained at: http://www.energy.ca.gov/business_meetings/2018_packets/2018-06-13/Item_11/CEQA_Documents/

STATE OF CALIFORNIA

STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION - RE: STRATOSFUEL, INC.

WHEREAS, the City of Moreno Valley is the Lead Agency for purposes of the California Environmental Quality Act (“CEQA”) for the Hydrogen Electrolysis Plant, City of Moreno Valley, Riverside County, California (hereinafter “Project”); and

WHEREAS, the City of Moreno Valley prepared an Initial Study, Negative Declaration, and Addendum to the Negative Declaration, evaluating the potential environmental impacts of implementing the Project, and all of which are on file with the Energy Commission; and

WHEREAS, the City of Moreno Valley, on January 26, 2010 considered and adopted the Negative Declaration for the Master Plot Plan PA07-0035, approved the Master Plot Plan PA07-0035, under resolution 2010-07 and filed a Notice of Determination; and

WHEREAS, the City prepared an Addendum to the Negative Declaration on May 31, 2018 to analyze the environmental impacts of the modified Project to change the use of the parcels in the Master Plot Plan from light wholesale, storage, and distribution to heavy manufacturing and office, business and professional for the site to facilitate the construction and operation of the Project; and

WHEREAS, the City, acting as lead agency, evaluated the potential environmental impacts of the modified project and determined that none of the CEQA conditions listed in California Code of Regulations section 15162 requiring the preparation of a subsequent EIR or negative declaration apply and that an Addendum to the prior Negative Declaration is appropriate for the modified project and appropriate for compliance with CEQA as described in the CEQA guidelines; and

WHEREAS, the Energy Commission has reviewed and considered the City’s Initial Study, Negative Declaration, resolution 2010-07, filed Notice of Determination and Addendum to the Negative Declaration, and staff’s findings are contained in the June 7, 2018 Memorandum, CEQA Analysis of ARV-17-050.

WHEREAS, the Energy Commission is considering proposed Agreement ARV-17-050, Zero Impact Renewable Hydrogen Production Facility (hereinafter “ARV-17-050”), a grant to build a 5,000 kilogram per day electrolysis plant in Moreno Valley that will produce and supply 100 percent renewable hydrogen fuel to public hydrogen refueling stations; and

Prior to acting on Agreement ARV-17-050, the Energy Commission desires to make certain findings pursuant to CEQA Guidelines, title 14, sections 15091 and 15096;

NOW THEREFORE, BE IT RESOLVED:

1. To the extent relevant to ARV-17-050, the Energy Commission has considered the information contained in the City of Moreno Valley’s Initial Study, Negative Declaration, resolution 2010-07, filed Notice of Determination and Addendum to

- the Negative Declaration (hereinafter City's CEQA Documents), identified above.
2. The Energy Commission finds the City's CEQA Documents are adequate for its use as the decision-making body for its consideration of ARV-17-050.
 3. Approval of ARV-17-050 is within the scope of the City's CEQA Documents.
 4. Since the City's CEQA Documents, there have been no substantial project changes and no substantial changes in the project circumstances that would require major revisions to these documents due to the involvement of new significant environmental effects or an increase in the severity of previously identified significant impacts, and there is no new information of substantial importance that would change the conclusions set forth therein.

BE IT FURTHER RESOLVED, that the Energy Commission finds, on the basis of the entire record before it, including the City's CEQA Documents and staff's June 7, 2018 Memorandum identified above, that the proposed project will not have a significant effect on the environment; and

BE IT FURTHER RESOLVED, that this document authorizes the Executive Director or his or her designee to prepare and file a Notice of Determination on behalf of the Energy Commission; and

BE IT FURTHER RESOLVED, that the Energy Commission approves Agreement ARV-17-050 with StratosFuel, Inc. for a \$3,965,665 grant to build a 5,000 kilogram per day electrolysis plant in Moreno Valley, CA. The facility shall produce and supply 100 percent renewable hydrogen fuel to California's network of public hydrogen refueling station; and

BE IT FURTHER RESOLVED, that the Executive Director or his or 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 June 13, 2018.

AYE: [*List Commissioners*]

NAY: [*List Commissioners*]

ABSENT: [*List Commissioners*]

ABSTAIN: [*List Commissioners*]

Cody Goldthrite, Secretariat