

CALIFORNIA ENERGY COMMISSION

**A)New Agreement** # ARV-20-004 (to be completed by CGL office)

B) Division	Agreement Manager:	MS-	Phone
600 Fuels and Transportation Division	Miki Crowell	6	916-653-0363

#### C) Recipient's Legal Name

Iwatani Corporation of America

Federal ID # 95-4153947

#### D) Title of Project

1: Shōri – Iwatani Light Duty Hydrogen Station Deployment

#### E) Term and Amount

Start Date	End Date	Amount
12 / 09 / 2020		\$ 1,919.597

#### F) Business Meeting Information

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

Proposed Business Meeting Date 12 / 09 / 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:

IWATANI CORPORATION OF AMERICA. Proposed resolution approving Agreement ARV-20-004 with Iwatani Corporation of America for a grant up to \$23,073,184.00 to develop hydrogen refueling stations in California and adopting staff's determination that this action is exempt from CEQA.The California Energy Commission is currently providing \$1,919,597.00 in grant funds to develop one hydrogen refueling station, and additional funds may be added up to \$23,073,184.00 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: 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 a hydrogen refueling station by adding



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hydrogen storage, compression, and dispensing equipment with an estimated maximum footprint of 1,000 square feet and trenching up to 50 feet at an existing retail gasoline station.

As to the equipment to be installed, the storage tanks will hold up to 1,358 kg of hydrogen. The hydrogen dispenser will dispense at 700 bar. 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 an existing gasoline station that covers an area which is less than 1,000 square feet, with an excavation area of no more than 1,000 square feet. 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 site is an existing gas station; 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 up to 1,358 kg capacity, and compression and dispensing equipment, at the 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 50 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



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Statement of Overriding Considerations

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

Legal Company Name:	Budget
Nel Hydrogen Inc.	\$ 1,889,840.00
Comdata Inc.	\$ 29,757.00
	\$ 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	FY18/19	601.118K	\$1,919,597
ARFVTP			\$
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: Hiroshi Kimura

Address: 3945 Freedom Circle, Suite 770

City, State, Zip: Santa Clara, CA 95054

Phone: (669) 236-4450

E-Mail: h-kimura@iwatani.co.jp

## L) Selection Process Used

- 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
- 2. Exhibit B, Budget Detail
- 3. CEC 105, Questionnaire for Identifying Conflicts
- 4. Recipient Resolution

Attached
Attached
Attached
Attached
Attached

2. Recipient's Project Manager

Address: 3945 Freedom Circle, Suite

City, State, Zip: Santa Clara, CA

E-Mail: sbrooks@iwatani.com

Name: Steven Brooks

Phone: (669) 236-4450

⊠ N/A

770

95054





**Agreement Manager** 

Date

**Office Manager** 

Date

**Deputy Director** 

Date

# Exhibit A SCOPE OF WORK

## **TECHNICAL TASK LIST**

Task #	CPR	Task Name
1		Administration
2		Hydrogen Safety Plan
3	Х	Development of One Station in the Initial Batch

#### **KEY NAME LIST**

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
1	Michael Hoban, ICA		
	Hiroshi Kimura, ICA		
2	Michael Hoban, ICA		
	Scott Hickes, ICA		
3	Michael Hoban, ICA	NEL (equipment vendor)	
		Comdata (equipment vendor)	

# GLOSSARY

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

Term/ Acronym	Definition
AB	Assembly Bill
AHJ	Authority Having Jurisdiction
CaFCP	California Fuel Cell Partnership
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CARB	California Air Resources Board
CEC	California Energy Commission
Clean Transportation Program	Formerly known as the Alternative and Renewable Fuel and Vehicle Technology Program
CPR	Critical Project Review

November 2020

Term/ Acronym	Definition
FCEV	Fuel Cell Electric Vehicle
FTD	Fuels and Transportation Division
HSP	Hydrogen Safety Panel
HRS	Hydrogen Refueling Station
ICA	Iwatani Corporation of America
KPI	Key Performance Indicator
NFPA	National Fire Protection Association
NREL	National Renewable Energy Laboratory
O&M	Operations & Maintenance
OEM	Original Equipment Manufacturer (i.e. Toyota, Honda, Hyundai)
PIIRA	Petroleum Industry Information Reporting Act
PNNL	Pacific Northwest National Laboratory
Recipient	An applicant awarded a grant under a California Energy Commission solicitation
RSA	Registered Service Agent

#### 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, Iwatani Corporation of America (ICA, Recipient) submitted application number 2, 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 CEC'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:**

Many barriers exist to commercializing hydrogen as a sustainable alternative fuel, including deployment of FCEVs and hydrogen refueling infrastructure. To further develop these technologies, the following issues and knowledge gaps must be addressed:

- <u>Cost and financial hurdles:</u> Hydrogen refueling station (HRS) equipment costs are still high. A public-private financial partnership between the CEC and ICA will allow the upfront burden of HRS equipment costs to be shared. As HRS projects continue to prove viable, technologies are scaled, and business models are proven, these costs will be mitigated and offset, ultimately motivating a larger adoption of FCEVs as the cost per kg of hydrogen decrease.
- <u>Institutional:</u> Emerging technologies, such as FCEVs, must overcome barriers of unfamiliarity which can cause project delays, lack of public confidence, and myths and misconceptions. For example, first responders may need to be trained and educated on National Fire Protection Association – Hydrogen Technologies Code (NFPA 2). Additionally, Industry standards must emerge for medium and heavy-duty fuel cell vehicle applications, such as a 700 Bar fueling protocol.

- <u>Environmental:</u> Although FCEVs produce zero tailpipe emissions, there are environmental impacts from the production of hydrogen. Increased production of renewable hydrogen is needed.
- <u>Market:</u> There are several market issues still existing today that may be slowing the adoption of the HRS and FCEV technologies. This project will increase hydrogen refueling station network coverage and fuel availability during peak hours. Additionally, the project will aim to address other market issues such as wait times, optimizing refueling experience, and training a hydrogen workforce.

ICA, in collaboration with the CEC, will address these issues and create headway towards a zero-emission light, medium, and heavy-duty hydrogen economy through this project.

## Goals of the Agreement:

The goals of this Agreement are to develop, commission, and deploy hydrogen refueling stations using a grant funding up to \$23,073,184, subject to future appropriations and Clean Transportation Program Investment Plan funding allocations and CEC's approval of subsequent batches of stations. This project will expand California's network of early commercial hydrogen refueling stations and advance technology for future fueling agreements with medium and heavy-duty fleets, such as commercial vehicles and transit buses. This project will also work to move the needle on problems identified in the problem statement. CEC is currently providing \$1,919,597 towards this goal.

## **Objective of the Agreement:**

The objective of this Agreement is to build one hydrogen refueling station in the initial batch, and additional stations in subsequent batches if approved, and open them for retail operation by 2027.

## 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 inkind 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 kickoff 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 ONE STATION IN THE INITIAL BATCH

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

• 16880 Slover Ave, Fontana, CA 92337

# 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 station in Task 3, before the Recipient submits the station building plan to the authority having jurisdiction (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 a 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 station, which may include, but is not limited to, dispensers, hydrogen storage technology, point of sale devices, compressors, chillers, and nozzles.
- Order the equipment and submit written notification that the equipment has been ordered.
- Finalize the detailed engineering design of the station and equipment layout. Develop and assemble all of the necessary engineering drawings and documentation for submission to the AHJ for the station "plan check." Submit the documents to the AHJ, and provide CAM with written notification that the plan has been submitted to the AHJ.
- Prepare and submit a notification after the equipment is assembled by the manufacturer, integrator, or assembler and is ready to be shipped.
- Receive and accept the equipment. Notify CAM that equipment has been received.
- Complete all station construction and equipment installation.
- Submit a written notification of the completion of construction of the station and the equipment installation including photographic evidence and serial numbers for the equipment.

## [A CPR will be held during this task.]

## Products:

- Station equipment list
- Written notification of the equipment order
- Written notification of submission of the building plans to the AHJ
- Written notification that the equipment to be used in the station is ready to be shipped

- Written notification of the receipt and acceptance of the equipment
- Written notification regarding completion of station construction and equipment installation, 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 station operational.
- Achieve open retail status.
- Certify that the Recipient will operate the station, as an open retail station, for a minimum of five years.
- Complete and submit the Open Retail Station Checklist (Exhibit F) to the CAM.

#### Products:

- Written certification that the station will be operated as an open retail station for a minimum of five years.
- Completed, signed, and dated Open Retail Station Checklist (Exhibit F) for the 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 <u>CEC Form A15</u> 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 Tool
- Initial, biannual and as needed hydrogen purity test results
- Data collection information and analysis, to be included in the Final Report

#### STATE OF CALIFORNIA

#### STATE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

**RESOLUTION - RE: IWATANI CORPORATION OF AMERICA** 

**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 Agreement ARV-20-004 with Iwatani Corporation of America for a grant up to \$23,073,184 to develop hydrogen refueling stations in California. The CEC is currently providing \$1,919,597 in grant funds to develop one hydrogen refueling station, and additional funds may be added up to \$23,073,184 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