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HYDROGEN DRAFT SOLICITATION CONCEPTS

Alternative and Renewable Fuel and Vehicle Technology Program

Subject Area – Light-Duty Hydrogen Refueling Infrastructure

No proposals are being accepted at this time. This is a draft compilation of solicitation concepts. Do not design or submit proposals according to this DRAFT. The actual solicitation is subject to change.

This Draft Solicitation Concepts document and comments on this draft will be discussed at the February 12, 2019 Energy Commission Workshop. At the latest, comments are due by February 22, 2019 to the Energy Commission Dockets Unit. See Notice of Staff Workshop for additional details on how to comment.

http://www.energy.ca.gov/contracts/index.html
State of California
California Energy Commission
January 2019

January 23, 2019 VERSION

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INTRODUCTION

This "Draft Solicitation Concepts" document details the concepts under consideration for the next hydrogen refueling station solicitation issued by the California Energy Commission's Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP). The goal of the next solicitation is to provide grant funds to projects to expand California's early commercial hydrogen refueling and fuel cell electric vehicle (FCEV) markets and to accommodate the projected FCEV roll-out in the 2021-2024 timeframe. This network of hydrogen refueling stations, hydrogen fuel supply, and FCEVs will support the carbon emissions reduction and air quality improvement goals of the State of California. Hydrogen is one of the alternative fuels that contributes to reducing the carbon intensity of transportation fuels. When the 2018 amendments to the LCFS regulation are put into effect, the Low Carbon Fuel Standard (LCFS) will have a goal of achieving a 20 percent carbon intensity reduction by 2030.

No proposals for hydrogen refueling stations are being accepted at this time. Readers of this document are cautioned to NOT DESIGN OR SUBMIT proposals according to this Draft Solicitation Concepts document as the final solicitation may change substantially. Comments on this Draft Solicitation Concepts document are due by February 22, 2019 to the Energy Commission Dockets Unit. Please refer to the Notice of Staff Workshop for additional details about how to submit comments. Individuals commenting are advised to number their comments consistent with these Draft Solicitation Concepts to facilitate effective review, evaluation, and consideration. Major changes relative to GFO-15-605, "Light Duty Vehicle Hydrogen Refueling Infrastructure," which was released in 2015, are noted throughout this document in bold-faced, italicized text.

NOTE: Potential Applicants to the next funding solicitation are strongly encouraged to discuss their proposed project(s) with the automobile original equipment manufacturers (OEMs), site owners, station owners, station operators, county and city governmental representatives involved with permitting, environmental review, and fire protection rules and regulations [e.g., the California Environmental Quality Act (CEQA) and National Fire Protection Association (NFPA) 2], and other key project partners. To the greatest extent possible, potential Applicants are strongly encouraged to begin discussions with key project partners, including utility companies that serve the proposed station location(s), and not wait for the final solicitation to be released. Potential Applicants are cautioned that the final solicitation may differ from this Draft Solicitation Concepts document. The Energy Commission cannot guarantee that an eligible project described in this document will be eligible under the final solicitation.

The Draft Solicitation Concepts follow:

1. **Available Funding**

Up to $110 million, ***subject to future appropriations and ARFVTP Investment Plan funding allocations*.** The Energy Commission, at its sole discretion, reserves the right to increase or decrease the amount of funds available under this solicitation.

Differences from GFO-15-605:

- ✓ ***Future ARFVTP funds are subject to future appropriations and ARFVTP Investment Plan funding allocations.***

2. **Tranches and Batches of Stations**

For the purposes of this solicitation, the terms "Tranches" and "Batches" will be used to refer to stations being funded. "Tranches" refers to the entire number of stations proposed for construction by an Applicant. "Batches" refers to a subset of stations within the tranche that are approved and in progress at any given time. The "Initial Batch" of stations is the first set of stations undertaken. The addresses for each station in the Initial Batch of stations shall be submitted at the time of application. Subsequent batches may follow.

If selected for an award, an agreement for the Applicant's entire proposed tranche of stations will be approved at an Energy Commission Business Meeting. However, only the Initial Batch of stations and the amount of funding needed for the Initial Batch of stations will be encumbered in the agreement. Subsequent batches of stations may be authorized in accordance with the requirements within the solicitation. Subsequent batches of stations will be approved through amendments to the agreement.

The Energy Commission may authorize subsequent batches of stations (one batch at a time) on a first-come, first-served basis if:

A. All stations under previously-approved batches have approval to build from their respective authorities having jurisdiction (AHJs) within 18 months of the Energy Commission authorizing the station(s) under the agreement.

B. All stations under previously approved batches have become, or are expected to become, open-retail within 30 months of the Energy Commission authorizing the station(s) under the agreement.

C. Funding is available.

D. The Recipient has met Critical Milestones 1 and 2 for a batch under consideration for approval.

E. All station locations in a batch are in the eligible areas in the Map of Area Classifications (Figure 1).

If any of these conditions are not met, the Energy Commission may exercise the right to not authorize subsequent batches of stations. If the Energy Commission does not authorize a subsequent batch of stations, the funding may be used for other eligible hydrogen refueling station developers or may be used in a new funding solicitation.

After the Initial Batch of stations, the Energy Commission reserves the right to modify the minimum technical requirements of stations to reflect the current state-of-the-art within the hydrogen refueling industry.

Differences from GFO-15-605:

- ✓ ***Applicants propose batch(es) of stations to be constructed over time (a.k.a. a tranche of stations).***
- ✓ ***The Initial Batch of stations shall contain an address for each proposed location, which shall be submitted at the time of the application.***
- ✓ ***Funding for subsequent batch(es) of stations will be approved after the Applicant achieves specified progress for the previously-approved batches.***
- ✓ ***The Energy Commission reserves the right to modify the Minimum Technical Requirements of subsequent batches of stations, such as those in Section 20, to reflect the state-of-the-art of the hydrogen refueling industry.***

3. **Grant Award Amount**

The Energy Commission will evaluate the cost-effectiveness of proposed station(s) based on the Energy Commission dollar-per-station requested and the Energy Commission dollar-per-kilogram requested over a funding allocation tranche.

The minimum 24-hour total station throughput, in kilograms, for one batch of stations will determine the amount of funding to be awarded to the batch. For example, if a batch provides 5,000 kilograms per day and if the Energy Commission dollar-per-kilogram over the funding allocation tranche is $2,000 per kilogram, the funding for the batch is $10,000,000.

Differences from GFO-15-605:

- ✓ ***Instead of specifying the maximum award per station, the award amount per batch will be determined using the Energy Commission dollar-per-kilogram over a funding allocation tranche.***

4. **Eligible Costs**

Eligible costs are limited to allowable ***equipment expenditures only*** for light-duty hydrogen refueling stations. Other project expenses (labor, fringe, travel, subcontracted labor, materials/supplies, and overhead) are NOT eligible under agreements resulting from this solicitation.

Differences from GFO-15-605:

- ✓ ***Eligible Costs (reimbursable or match share) restricted to allowable equipment expenditures only.***

5. **Match Funding Requirements**

Applicants shall provide at least 50% of the eligible ***equipment costs*** as match funding. Other project expenses (labor, fringe, travel, subcontracted labor, materials/supplies, and overhead) are ***NOT*** eligible as match funding.

All match share expenditures shall conform to the terms and conditions of the grant agreement. Grant Recipients will be required to document and verify all match share expenditures.

A. Applicants shall disclose the source and provide verification and documentation for the match share funding for each batch, starting with the Initial Batch at the time of application.

B. Match share funding may be in the form of cash and/or in-kind contributions such as donated equipment. Equipment may count as match funds as long as the value of the contribution is based on documented market values or book values, prorated for its value to the project, and depreciated or amortized over the term of the project using standard accounting principles.

C. Funding from other non-state government agencies may be used as match share.

D. Funding recipients are allowed to incur match share expenditures only after the Energy Commission notifies the Applicant that its project has been proposed for an award through the release of a notice of proposed awards (NOPA). Match expenditures incurred prior to the full execution of a funding agreement are at the Applicant's own risk. The Energy Commission is not liable for an Applicant's incurred match share costs if the grant is not approved, if approval is delayed, or if the match share expenditure is not allowable under the terms and conditions of the grant or applicable federal cost principles incorporated by reference into the agreement.

Differences from GFO-15-605:

- ✓ ***The minimum match funding requirement changes from 15% of total station cost to 50% of equipment costs.***

6. **Single Applicant Cap**

A single Applicant is eligible for no more than 33.3% of the total funds awarded under this solicitation. This is referred to as the "Single Applicant Cap." The Single Applicant Cap shall not exceed 33.3% of all available funding at any given time. The Energy Commission reserves the right, at its sole discretion, to modify the Single Applicant Cap.

Up to $22.6 million of the total $110 million available under this solicitation (Section 1) is expected to be available in 2019. Therefore, the Single Applicant Cap will be $7.53 million for the initial NOPA. As additional funds become available over time, the maximum total funds awarded for a single applicant will increase commensurate with the increase in total funding and the NOPA will be revised. The Energy Commission reserves the right, at its sole discretion, to increase or decrease the amount of funds available under this solicitation.

Differences from GFO-15-605:

- ✓ ***Decreases the Single Applicant Cap from 60.0% to 33.3%.***
- ✓ ***The maximum total funds awarded to a single applicant will increase as additional funds become available and the revised NOPA is released.***

7. **Staged Reimbursement of Energy Commission Funds**

Energy Commission funds will only be available to reimburse a Recipient for actual, allowable, and allocable ***equipment*** costs under an agreement resulting from this solicitation. The Energy Commission will stage equipment reimbursements, as follows:

Stage 1: Recipient has completed all Critical Milestones; completes the preliminary station design plans; and orders the necessary equipment. Up to 25 percent of the Energy Commission funding allocated to the station or the actual, allowable, and allocable equipment costs incurred (whichever is less) will be reimbursed.

Stage 2: Recipient has submitted documentation to the Energy Commission showing they have submitted an entitlement application or initial permit applications for the station. Up to 50 percent of the Energy Commission funding allocated to the station or the actual, allowable, and allocable equipment costs incurred (whichever is less) will be reimbursed.

Stage 3: Recipient provides documentation that equipment is assembled and ready for shipping, and the station developer has received a permit to build from the AHJ. Up to 75 percent of the Energy Commission funding allocated to the station or the actual, allowable, and allocable equipment costs incurred (whichever is less) will be reimbursed.

Stage 4: Station achieves open retail status from the Energy Commission. Up to 90 percent of the Energy Commission funding allocated to the station or the actual, allowable, and allocable equipment costs incurred (whichever is less) will be reimbursed.

Stage 5: Recipient completes the required five years of data collection using the National Renewable Energy Laboratory (NREL) Data Collection Tool and submits a Final Report. The first page of the NREL Data Collection Tool is in Appendix C and the entire tool is located at https://www.energy.ca.gov/contracts/GFO-15-605/Attachment-11_NREL_Data_Collection_Tool_2016-06-02.xlsx. Up to 100

percent of the Energy Commission funding allocated to the station or the actual, allowable, and allocable equipment costs incurred (whichever is less) will be reimbursed. This includes the release of 10 percent retention.

Difference from GFO-15-605:

- ✓ ***The Energy Commission Reimbursement Requirement stipulates five different stages under which the Energy Commission will reimburse the Recipient, after the Recipient provides documentation.***

8. **Operation and Maintenance Funding**

This solicitation will provide no operation and maintenance funding due to the potential availability of hydrogen refueling infrastructure credit support from the California Air Resources Board (CARB)'s Low Carbon Fuel Standard (LCFS) program: https://ww2.arb.ca.gov/rulemaking/2018/low-carbon-fuel-standard-and-alternative-diesel-fuels-regulation-2018.

Difference from GFO-15-605:

- ✓ ***No operation and maintenance funding support will be provided.***

9. **Agreement Execution Deadline**

Funding agreements shall be executed by the funding Recipient within 90 days following project approval at an Energy Commission Business Meeting. If this deadline is missed, the Energy Commission reserves the right to cancel a proposed award and recommend awarding funds to the next eligible Recipient.

10. **Critical Milestones and Monthly Progress Reports**

Applicants will be required to complete Critical Milestones 1 and 2, described below, for the Initial Batch of hydrogen refueling stations at the time of application, and for the subsequent batches of stations when the Applicant submits specific station addresses to the Energy Commission. Should an Applicant receive an award, they will be required to complete Critical Milestones 3, 4, and 5 prior to receiving reimbursement for eligible expenses for a given station in either the Initial Batch of stations or the second or subsequent batches of stations.

Award recipients will be required to submit monthly progress reports containing updates on Critical Milestones. Failure to submit accurate or timely monthly progress reports may be grounds for agreement termination.

Critical Milestone 1. The Applicant shall participate in an in-person, pre-application meeting for permits to build and operate each proposed hydrogen refueling station, with the AHJ. The meeting topics should include, but are not be limited to, the purpose and design of the hydrogen refueling station, zoning requirements, California Environmental Quality Act (CEQA), and any local aesthetics requirements. The Applicant shall provide the Energy Commission with meeting notes, including date, time, location, meeting participants, and reports of all topics discussed.

Critical Milestone 2. The Applicant shall have site control for the purpose of installing and operating a hydrogen refueling station and a proof of site control (such as a signed lease agreement) for at least five years after the station is planned to become open retail.

Critical Milestone 3. Should an Applicant receive an award, they shall meet with a representative of the Office of the Fire Marshal in the AHJ. The meeting should include, but is not limited to, discussion about how to obtain compliance with the local fire code requirements and the National Fire Protection Association (NFPA) 2 requirements. The Recipient shall provide the Energy Commission with meeting notes, including date, time, location, meeting participants, and reports of all topics discussed.

Critical Milestone 4. Should an Applicant receive an award, they shall meet with representatives of the utility company that will serve the proposed station(s) to arrange the utility connection. The Recipient shall provide the Energy Commission with meeting notes, including date, time, location, meeting participants, and reports of all topics discussed.

Critical Milestone 5. Should an Applicant receive an award, they shall meet with representatives of the hydrogen fuel supplier that will serve the proposed station(s) to arrange the supply chain and hydrogen delivery. The Recipient shall provide the Energy Commission with meeting notes, include date, time, location, meeting participants, and reports of all topics discussed.

Differences from GFO-15-605:

- ✓ **Critical Milestones 1 and 2 shall be met when the Initial Batch of stations and second and subsequent batches of stations are applied for whereas in GFO-15-605, they were required after the Energy Commission agreements were executed.**
- ✓ **Critical milestones 3, 4 and 5 are used for the first time.**

11. **Area Classifications**

The Area Classification map in Figure 1 contains eligible (printed in green, purple, blue, and orange) and ineligible (printed in grey) station locations. The map is taken from the California Hydrogen Infrastructure Tool (CHIT).

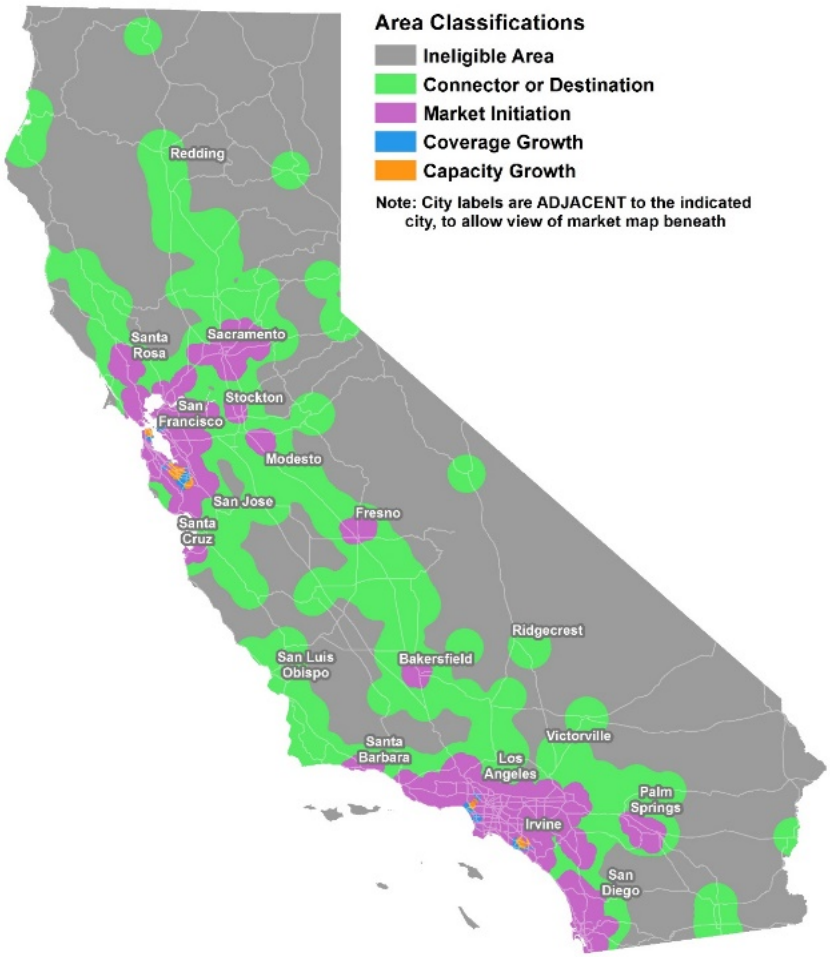
The Applicant shall obtain verification of the Area Classification(s) for their Initial Batch of proposed station location(s) from CARB for inclusion in their application. The Applicant shall repeat this process when they submit subsequent batches to the Energy Commission for approval. The Energy Commission will verify the Area Classification(s) with CARB and resolve any discrepancies in consultation with CARB.

CARB will update the Area Classification map as station locations are approved. Applicants are encouraged to obtain further information on Figure 1 and CHIT from:

Andrew Martinez, Ph.D.
(916) 322-8449
ECARS/Advanced Clean Cars Branch, ZEV Infrastructure
California Air Resources Board (CARB)
1001 I Street
Sacramento, CA 95814
Andrew.Martinez@arb.ca.gov

The interactive map of area classifications will be available at http://californiaarb.maps.arcgis.com/apps/webappviewer/index.html?id=99be905d3127405e81851fd60b19cda2

Figure 1. Map of Area Classifications



Source: CARB

NOTE: CHIT scores are not required, as in past solicitations. However, CARB is available to help for analysis of potential sites using the latest CHIT tool. Applicants who make use of this option are encouraged to include discussion of the CHIT analyses in their narrative.

Difference from GFO-15-605:

- ✓ ***CHIT generates the Area Classifications.***
- ✓ ***CHIT scores are not required.***

12. **HySCapE, Station Classifications, and Station Throughput**

The solicitation will incorporate, by reference, the Hydrogen Station Capacity Evaluation (HySCapE) model. The solicitation uses the same HySCapE model as the CARB LCFS program.[1]

Applicants that apply for Hydrogen Refueling Infrastructure (HRI) credits under LCFS shall apply to this solicitation with the CARB review decisions. For further information about LCFS, please contact:

James Duffy, Ph.D. (Manager)
(916) 323-0015
Transportation Fuels Branch, Alternative Fuels Section
California Air Resources Board (CARB)
1001 I Street
Sacramento, CA 95814
jduffy@arb.ca.gov

Should an Applicant forgo the HRI LCFS crediting provision, they can still apply for funding under this solicitation. The HySCapE documentation is available at: https://www.arb.ca.gov/fuels/lcfs/ca-greet/2018-0813_hyscape_documentation.pdf and the model and system can be downloaded from: https://www.arb.ca.gov/fuels/lcfs/ca-greet/2018-0813_hyscape1.zip. Alternatively, HySCapE is available online at https://openei.org/apps/hyscape/.[2] In this case, the following assumptions shall be used:

A. One hydrogen delivery by truck per day.
B. Ambient temperature that complies with SAE International J2601.
C. Dispenser flow rate that complies with SAE International J2601.

In both cases (if an Applicant applies for HRI credits or does not), the Applicant shall submit the following information to the Energy Commission (which will be managed confidentially) with their application:

[1] Information about HySCapE and the Low Carbon Fuel Standard (LCFS) can be found here: https://www.arb.ca.gov/fuels/lcfs/rulemakingdocs.htm

[2] To run HySCapE from a computer application, users are encouraged to download MATLAB™ Runtime Version 9.2 from: https://www.mathworks.com/products/compiler/matlab-runtime.html.

A. The Applicant's HySCapE setup including the input file, the "Storage Level Trigger for Delivery or Production" and the "Time Between Fills."

Any discrepancy between information submitted by an Applicant and the Energy Commission's analysis related to the 24-hour throughput will be resolved by the Energy Commission and scored based solely on Energy Commission Evaluation Team analysis and results in consultation with CARB.

B. Each proposed station's HySCapE estimated fueling capacity shall meet the requirements of a Station Classification (Time Between Fills, 24-Hour Demand, Minimum Number of Fueling Positions, and the Minimum 24-Hour Total Station Throughput) shown below in Table 1.

C. An Applicant may elect to propose a Station Classification that is different from the Area Classification (in Figure 1) with a reasonable justification.

Table 1: HySCapE Estimated Fueling Capacity Requirements

Station Classification	HySCapE Time Between Fills (s)	HySCapE 24-Hour Fueling Position Demand (kg)	Minimum Number of Fueling Positions	Minimum 24-Hour Total Station Throughput (kg)
Connector or Destination	427	300	1	300
Market Initiation	427	300	2	600
Coverage Growth	427	300	2	600
Capacity Growth	427	300	3	900

Source: California Energy Commission staff

NOTE: The HySCapE model's graph of station throughput matches the Chevron Friday Profile: https://www.energy.gov/sites/prod/files/2014/03/f11/delivery_infrastructure_analysis.pdf.

Differences from GFO-15-605:

- ✓ ***HySCapE is used for the first time.***
- ✓ ***Proposed stations are classified according to the Station Classification in Table 1.***
- ✓ ***The HySCapE estimated fueling capacity requirements are set for each Station Classification.***

13. **Coordination with Existing and Planned Hydrogen Refueling Stations**

The Applicant shall explain how their proposed project(s) will work within the network and be coordinated with the existing and planned hydrogen refueling stations shown in the maps in Appendix A. Appendix B lists the actual station addresses.

14. **Public Agency Contact Information for Some Station Locations**
The solicitation will provide public agency contact information from various locations (Redding, Walnut Creek, California State University, and others) that expressed interest in station locations.

15. **Description of the Need for Funding Under this Solicitation**
In their application, the Applicant shall describe and explain their plan to use the LCFS credit revenue, if any, and the need for the ARFVTP funding requested by the Applicant under this solicitation.

The ARFVTP vision reflects Executive Order B-48-18, namely, the goal of establishing 200 hydrogen refueling stations by 2025. Applicants are encouraged to justify the need for LCFS credit revenue and the need for funding under this solicitation with Executive Order B-48-18 in mind.

16. **Project Requirements and Eligibility**
The following requirements apply to all stations in each tranche proposed by an Applicant. To be eligible under this solicitation, each project shall meet each of the following criteria:

A. The project is for the construction of a new hydrogen refueling station(s) at a gasoline station, shopping mall, other facility, or on a greenfield site previously undeveloped. Alternatively, funding may be for the upgrade that includes the addition of dispensing capacity of a public, open retail hydrogen refueling station. Upgrades to the stations in Coalinga, Santa Nella, Truckee, and Santa Barbara are not eligible.

B. Each proposed station is located in California in an eligible area as defined in Section 11.

C. Each proposed station's HySCapE estimated fueling capacity shall meet the requirements of a Station Classification (Time Between Fills, 24-Hour Demand, Minimum Number of Fueling Positions, and the Minimum 24-Hour Total Station Throughput) listed in Section 12.

D. The project includes at least one station in each batch of stations proposed within a tranche to be located within a disadvantaged community or within a 15-minute drive of a disadvantaged community.

E. Each proposed station meets the Minimum Technical Requirements for Open Retail Stations in Section 20.

Differences from GFO-15-605:
- ✓ ***Upgrades allowed with the exception of connector or destination stations.***
- ✓ ***Stations shall be located in eligible areas and meet minimum capacity requirements.***

- ✓ ***At least one station per batch of stations, within a tranche, is required to be within a disadvantaged community or within a 15-minute drive time of a disadvantaged community.***
- ✓ ***The Minimum Technical Requirements (Section 20) are updated.***

17. **Eligible Applicants**

This solicitation is open to public and private entities.

To be eligible, Applicants (or major subcontractors) shall:

A. Employ key personnel to the proposed project with a minimum of three (3) years of experience designing, planning, constructing, testing, operating, or maintaining hydrogen refueling stations or other pressurized gaseous fueling stations.

B. Have proven experience, with examples (to be submitted with the application), under existing or previous grants or contracts funded by the Energy Commission for alternative and renewable fuels, or other Energy Commission agreements, which may or may not include hydrogen refueling stations: (i.) with implementing effective cost accounting controls, (ii.) with the completion of one or more agreement Scopes of Work, including acceptable deliverables, prior to the agreement funding liquidation date, (iii.) with adhering to Schedules of Products and Due Dates, and (iv.) with the completion and submission of unambiguous Monthly Progress Reports and the agreement's Final Report which successfully communicates the development of the project, and the completion and future plans for the project. If an Applicant has no past experience with Energy Commission grants or contracts, they shall submit examples of the previously-listed items with an another organization's grant or contract.

C. Not owe the Energy Commission or any other public agency money.

D. Be authorized to conduct business in California (i.e., registered and in good standing with the California Secretary of State).

E. Not be delinquent on taxes.

F. Not be in active litigation with the Energy Commission or other public agency/entity.

Difference from GFO-15-605:

- ✓ ***Eligibility includes demonstration of substantive past performance.***
- ✓ ***Eligibility includes not owing money to or being in active litigation with the Energy Commission or other public agency, and not being delinquent on taxes.***

18. **Required Application Information**

In addition to typical solicitation submittal requirements, Applicants will be required to provide the following information to apply for funding:

A. **Tranche and batch description.** A description of the proposed tranche of stations and batch(es) of stations that includes the total number of station batches and number of stations within each batch, a development schedule for the tranche of stations and each batch, and the cumulative minimum 24-hour total station throughput (see Table 1) of the tranche and each batch. There is no limit to the number of batches in a tranche or the number of stations in a batch.

B. **Station selection approach.** A description of the approach and criteria that the Applicant used to select stations in the Initial Batch of stations and how the Applicant will apply the same approach and criteria to future batches of stations, if any. This description should explain how subsequent batches of stations would be equivalent to the Initial Batch of stations per the Evaluation Criteria (Section 32).

C. **Adherence to current codes and standards.** A description of the approach taken to keep up with the state-of-the-art in hydrogen production, hydrogen refueling protocols and standards, and requirements for compliance with codes and standards for hydrogen safety to avoid technological obsolescence and to maintain optimal hydrogen refueling station performance.

NOTE: The Energy Commission reserves the right to amend this solicitation as new standards and operating procedures are released. The Energy Commission also reserves the right to amend this solicitation if major technological transitions in hydrogen refueling occur that impact the station supply chain, the stations themselves, or the FCEV requirements for refueling.

D. **Initial Batch of stations.** A list of eligible station addresses (Figure 1) and station classifications (Table 1) for those stations that can be completed within 30 months of agreement execution. This is the Initial Batch of stations for each Applicant.

Station addresses for all proposed stations in the Initial Batch should be included in a single Excel (.xlsx or .xls) file or a Comma Separated Value (.csv) file, with separate columns denoting Street Address, City, State, and 5-digit ZIP code for each address. All parts of all addresses shall be complete and correct in order to be evaluated. Addresses with missing information, including ZIP code, will not be able to be evaluated.

NOTE: The Initial Batch is subject to the established Single Applicant Cap (Section 6). All awards will be subject to the Single Applicant Cap. If two or more Applicants propose stations that are within 1 linear mile of one another, the higher ranked Applicant (or after the use of tie-breakers, if necessary) will be awarded the station. The Applicants that have stations disqualified based on proximity will be allowed to submit a list of

replacement stations within 60 days after the Notice of Proposed Awards (NOPA) is issued. Replacement stations shall meet Critical Milestones 1 and 2 when submitted to the Energy Commission.

Alternatively, an Applicant may elect to not provide a list of replacement stations and proceed with fewer station(s) in the Initial Batch of stations. In any case, the Energy Commission dollar-per-kilogram for the tranche shall remain the same.

E. **Second and subsequent batches of stations.** The Applicant shall submit the second batch of stations after they receive approval to build from each respective AHJ for all stations within the Initial Batch of stations. The Applicant shall submit a second batch of station addresses, with evidence of meeting Critical Milestones 1 and 2 for all of the stations in the second batch. The same process will be used for submitting subsequent batches.

NOTE: The second and subsequent batches, cumulatively, are also subject to subject to the established Single Applicant Cap (Section 6). All awards will be subject to the Single Applicant Cap (Section 6). The Evaluation Team will assess the second and subsequent batches using an updated map in Figure 1.

The second and subsequent batches will be evaluated on a first-come, first-served basis. If two identical locations are proposed, or were deemed too close (within 1 linear mile on a map), the first application received will be prioritized. If two Recipients submit their subsequent batches on the same day, then the Recipient with a higher score on the initial NOPA will be prioritized. The Recipient who did not get the location due to a location conflict shall propose another location or proceed with one fewer station in that batch of stations. In any case, the Energy Commission dollar-per-kilogram for the tranche shall remain the same.

19. **California Environmental Quality Act (CEQA)**

Applicants shall complete the CEQA form included with the solicitation for each station address. An Applicant shall provide an estimate of the potential or actual impacts the project has on the surrounding environment. For CEQA compliance purposes, the Energy Commission encourages proposed stations to be sited at an existing fueling station.

For all hydrogen refueling stations the Energy Commission funds, the Energy Commission acts as a responsible agency in terms of CEQA. The Energy Commission makes a CEQA determination on each station before the Business Meeting approval to comply with CEQA. Local AHJs are the lead agency for all these stations and the Energy Commission's findings are not binding on AHJs.

The Governor's Office of Business and Economic Development is available to provide CEQA assistance. For further information, please contact:

Gia Vacin
(916) 730-6107
ZEV Infrastructure Project Manager
Governor's Office of Business and Economic Development (GO-Biz)
1325 J Street, Suite 1800
Sacramento, CA 95814
gia.vacin@gobiz.ca.gov

20. **Minimum Technical Requirements for Open Retail Hydrogen Refueling Stations**

To be eligible for funding under this solicitation, hydrogen refueling stations shall, at a minimum, meet each of the following Minimum Technical Requirements for Open Retail Stations. Projects exceeding requirements may score higher in accordance with the Evaluation Criteria (Section 32). All requirements shall be met at the exact station address after all of the hydrogen refueling equipment is installed.

A. The open retail hydrogen refueling station shall dispense hydrogen that meets California Code of Regulations (CCR) Title 4 Business Regulations, Division 9, Chapter 6 Automotive Products Specifications, Article 8, Hydrogen Fuel Sections 4180 and 4181 which adopts Society of Automotive Engineers (SAE) International J2719 Hydrogen Fuel Quality for Fuel Cell Vehicles. The hydrogen quality tests shall be taken at the hydrogen refueling station, at a minimum, every six months. The station developer shall report the date the hydrogen quality reading(s) is taken and any special condition(s) to the Energy Commission Agreement Manager in the Monthly Progress Reports they submit regularly to the Energy Commission. Additionally, the hydrogen quality shall be tested each time the hydrogen lines are either exposed or potentially exposed to contamination due to maintenance or other activities.

B. All hydrogen dispensers used at open retail hydrogen refueling stations shall meet CCR, Title 4, Division 9, Chapter 1, Article 1, Section 4002.9 Hydrogen Gas-Measuring Devices (3.39). The hydrogen dispensers used at Open Retail Hydrogen Refueling Stations shall comply with the most current version of the Uniform Regulation for the Method of Sale of Commodities Section 2.32 as published in U.S. Department of Commerce, National Institute of Standards and Technology (NIST) Handbook 130, Uniform Laws and Regulations in the Areas of Legal Metrology and Engine Fuel Quality.

Prior to dispensing hydrogen for retail sale, all dispensers installed in open retail hydrogen refueling stations shall undergo type evaluation according to the California Type Evaluation Program (CTEP) administered by the California Department of Food and Agriculture (CDFA) Division of Measurement Standards (DMS), which includes compliance with SAE J2719 (hydrogen gas quality), and shall have either a Temporary Use Permit or a type approval Certificate of Approval issued by DMS.

1. The Recipient shall receive approval from DMS on their dispensers. CDFA adopts, by reference, the most current version of the NIST Handbook 44 Specifications,

Tolerances, and other Technical Requirements for Weighing and Measuring Devices except as otherwise modified, amended or rejected by the Secretary of the U.S. Department of Commerce. CCR Title 4, Division 9, Chapter 1, Article 1, Sections 4001 and 4002, Additional Requirements, adopts California-specific amendment and modifications to NIST Handbook 44.

2. When installing a type-approved hydrogen dispenser at any hydrogen refueling station funded under this solicitation, the Recipient shall notify the local county department of weights and measures of the installed device within 24 hours after the device has been placed in service. The newly installed dispenser shall successfully pass initial verification of accuracy class tests to receive the county weights and measures seal approving the device for retail use. Installed and approved dispensers will thereafter be subject to annual inspection and testing to ensure the device operates within its designated maintenance tolerance as indicated on the type approval certificate.

3. The Applicant shall include a plan in their application for DMS or a Registered Service Agency (RSA) to conduct initial verification of accuracy class tests with the local county official(s) present to witness the testing of the dispenser(s) they plan to place in commercial service. If the Applicant plans to use a RSA, that RSA shall be registered by DMS and their employees (Agents) shall be licensed by DMS before performing any installation, repair, or maintenance on any weighing or measuring device.

4. The open retail hydrogen refueling station and dispenser(s) shall be designed to fuel all light duty compressed hydrogen storage system (CHSS) capacity categories. If the station(s) is planned to fill other than a light duty CHSS, the application shall describe the procedures for the fill, perhaps after the normal hours of operation without interfering with fueling light duty vehicles, i.e., the fueling of light duty vehicles will not be affected.

C. The open retail hydrogen refueling station shall comply with the most recent version of SAE International J2601 (fueling protocols). Each dispenser at a station shall dispense fuel using SAE International J2601 “Table-Based Protocol” or “MC Formula-Based Protocol” at H70-T40 with communications and, optionally, H35.

The open retail hydrogen refueling station compliance with SAE International J2601 shall be verified using the most recent version of ANSI/CSA Group HGV 4.3 (test methods for hydrogen fueling parameter evaluation) by working with State of California employees who use the U.S. Department of Energy HyStEP device, or a functionally equivalent hydrogen station test apparatus. Should HyStEP or a functionally equivalent test apparatus be unavailable, hydrogen refueling stations shall be evaluated for compliance with SAE International J2601 using best practices with automobile OEMs. The data

collected/generated during station evaluations shall be made available to State of California employees.

Appendix E contains the HyStEP checklist of minimum requirements, which could be modified in the future, for a station undergoing testing.

D. The open retail hydrogen refueling station design and operation shall comply with the most recent version of ANSI/CSA HGV 4.9 (hydrogen refueling stations).

E. The open retail hydrogen refueling station shall conform to the most recent version of SAE International J2799 (station communications), verified through CSA HGV 4.3.

F. The open retail hydrogen refueling station shall conform with the fueling connectors, nozzles, and receptacle requirements in the most recent version of SAE International J2600 or ISO 17268 without requiring additional funding from the State of California.

G. The open retail hydrogen refueling station dispenser(s) shall sell hydrogen fuel to the public through a dedicated point of sale (POS) terminal or a centralized POS terminal that is used by more than one dispenser at the station. The POS terminal shall accept, read, and process all commercially available credit and debit cards and gift cards with magnetic stripes. Each POS terminal shall read EMV™ chips embedded in credit cards and debit cards and perform financial payment transactions.

H. The open retail hydrogen refueling station components shall be installed and the station shall have a hydrogen fuel supply and a hydrogen supply and delivery agreement from a hydrogen production plant (on or off-site), with available capacity, and a second supply arrangement as backup.

I. The open retail station shall have an energized utility connection and source of system power.

J. The open retail hydrogen station shall have lighting for the dispenser(s) and the station area to provide a well-lit area that is safe, convenient, and accessible for station users.

K. The open retail hydrogen refueling station shall display a sign or logo to acknowledge public funding received for a hydrogen refueling station. The open retail station shall also have onsite signage that explains the method of sale requirements per https://www.cdfa.ca.gov/dms/hydrogenfuel.pdf.

The open retail hydrogen refueling station shall be identified by trailblazer signage on local roads leading to the refueling station (directional sign, usually with an arrow panel, off the freeway system to advise motorists where to turn to the station) as considered and accepted by the city and county.

The open retail hydrogen refueling station shall be identified by state highway system signage according to the Caltrans Traffic Operations Policy Directive (13-01) available at: http://www.dot.ca.gov/hq/tpp/offices/orip/pev/EV%20Hydrogen%20factsheet.pdf.

L. The open retail hydrogen refueling station shall connect with the California Fuel Cell Partnership Station Operational Status System (SOSS): available at www.cafcp.org. At a minimum, the following information shall be included in the data files transmitted to SOSS: H35 status (if part of the station design), H70-T40 status, the currently available H35 capacity (if included in the station design), the currently available H70-T40 capacity, the station name, and the station address.

M. The Recipient shall have received all required state, local, county, and city permits to build the station and to operate the open retail hydrogen refueling station.

N. The open retail hydrogen refueling station shall have a cover installed over the emergency shutdown system switch to prevent unintentional station shutdown.

O. The open retail hydrogen refueling station shall be accessible to the public, meaning that no obstructions or obstacles exist to preclude vehicle operators from entering the station premises, no access cards or personal identification (PIN) codes are required for the station to dispense fuel, and no formal or registered station training shall be required for individuals to use the hydrogen refueling station.

Differences from GFO-15-605:

- ✓ ***Compliance with CSA HGV 4.9 is required.***
- ✓ ***Hydrogen quality readings are required every six months instead of every three months.***
- ✓ ***Open retail includes the presence of a station emergency shutdown system switch cover, station lighting, and signage.***

21. **Open Retail Checklist**

The Recipient shall submit to the Energy Commission a completed, signed, and dated Open Retail Station Checklist (Appendix D) for each station as it becomes open retail. Should the open retail hydrogen refueling station become out of compliance with the Checklist, or should the design change, the Recipient shall submit to the Energy Commission a new completed, signed, and dated Open Retail Station Checklist.

22. **Letter(s) of Support, Letters of Commitment, and Referrals**

Letter(s) of support, letters of commitment, and referrals are required for all proposed stations when the station addresses are provided. These documents will not be counted against the page limitations in the Final Solicitation.

- Site Owner/Operator (MANDATORY): Proposals shall include a current letter of support from the owner/operator of the site where the hydrogen fueling station or upgrade

project is proposed for any stations for which the Applicant is providing the address. The letter shall be signed and dated by the site owner or representative who is duly authorized to commit the site to building a hydrogen fueling station (or to implement an upgrade) at their site in collaboration with the project developer. The letter shall also contain a telephone number to allow the Energy Commission to contact the site owner or representative to confirm the commitment and authority to commit to the proposed project.

- Match Share Commitment (MANDATORY, either third party or Applicant): For committed match share, the Applicant shall submit a letter of commitment from each match share source including the amount and confirming the availability of match funding.

- Key Project Partners (MANDATORY, if applicable): Proposals shall include a letter of commitment from every key project partner. The letter of commitment shall include complete contact information so the Energy Commission is able to efficiently contact the letter writer, as necessary.

- Referrals (MANDATORY): Applicants shall provide two or three referrals from subcontractors. This can include referrals based on construction agreements in the past or those under development.

- Third-Party Letters of Support (OPTIONAL): Applicants are encouraged to submit additional letter(s) of support that further substantiate the estimated demand and/or the potential benefits of the proposed station. Third-party letters of support can be provided by, but are not limited to: air districts, state or federal agencies, automobile OEMs, renewable hydrogen fuel providers, local safety officials, elected officials, community groups, and fleet operators.

Differences from GFO-15-605:

- ✓ ***Match share commitment letter is required, regardless of the source.***
- ✓ ***Referrals are required.***

23. **Data Collection and Reporting Requirements**

The Recipient shall collect data and submit the data about the operation and maintenance of the station(s) to the Energy Commission for a minimum of five years once a station becomes Open Retail. The Recipient shall use the NREL Data Collection Tool for the data collection activity.

If Applicants consider any of the information to be collected in the NREL Data Collection Tool confidential, per California Code of Regulations Section 2505 et. Seq., Applicants shall submit an Application for Confidential Designation prior to executing an agreement. A decision will be made by the Energy Commission's Executive Director, in consultation with the Chief Counsel, as to whether the Energy Commission will keep the information confidential.

Difference from GFO-15-605:

✓ ***The duration of data collection increases from three years to five years.***

24. **Invoices and Photographic Evidence**

Recipients will be required to provide photographs of system components and equipment under assembly or as a completed system at each stage of equipment reimbursement, with the exception of the first stage (see Section 7) as evidence to support the payment of invoices. Recipients will also be required to provide the serial numbers of system components or equipment with the photographs.

Difference from GFO-15-605:

✓ ***This concept is new with these draft concepts.***

25. **Preliminary Hydrogen Safety Plan**

A. The Applicant shall develop and submit a confidential Preliminary Hydrogen Safety Plan for each proposed hydrogen refueling station design. The Pacific Northwest National Laboratory (PNNL) Hydrogen Safety Panel (HSP) will provide guidance to applicants who are interested in understanding safety considerations of a hydrogen refueling station design.

The PNNL HSP will assess the preliminary plan(s) for adherence to the public guidelines, *Safety Planning for Hydrogen and Fuel Cell Projects*, available at: https://h2tools.org/sites/default/files/Safety_Planning_for_Hydrogen_and_Fuel_Cell_Projects-November2017_0.pdf

The Preliminary Hydrogen Safety Plan should follow the outline specified in the Guidelines:

I. DESCRIPTION OF WORK
II.ORGANIZATIONAL SAFETY INFORMATION
- Organizational Policies and Procedures
- Hydrogen and Fuel Cell Experience

III.PROJECT SAFETY
- Safety Reviews
- Identification of Safety Vulnerabilities (ISV)
- Risk Reduction Plan
- Procedures
- Sample Handling and Transport
- Equipment and Mechanical Integrity
- Management of Change (MOC) Procedures
- Project Safety Documentation

IV.COMMUNICATIONS PLAN
- Training

Safety Events and Lessons Learned
Emergency Response
Self-Audits

The Applicant shall also include in the Preliminary Hydrogen Safety Plan:

- A description of how they will implement and oversee the hydrogen safety best practices for the entire tranche of stations and adhere to the PNNL HSP guidelines for the station design phase, station construction, station commissioning, and station operation throughout the life of the station.
- An explanation of how they will continuously adhere to NFPA 2 and local safety codes in the station design phase, station construction, station commissioning, and station operation throughout the life of the station for the entire tranche of stations.
- A description of how they will provide realistic, timely, comprehensive, and ongoing safety training for the station's initial operation and safety retraining for all station operators over the life of the station.

B. The HSP will forward their assessment of the Applicant's Preliminary Hydrogen Safety Plan to the Energy Commission and the Applicant.

Difference from GFO-15-605:

✓ ***The Preliminary Hydrogen Safety Plan will be confidential.***

26. **Operation and Maintenance Plan**

Operation and maintenance funding is not available under this solicitation. Applicants shall submit an Operation and Maintenance Plan for the tranche of stations and shall update the Operation and Maintenance Plan as needed over the agreement term. The Plan shall describe:

A. How the station owner, station operator, or a third party plans to pay for operation and maintenance costs and, potentially, rely on the receipt of LCFS throughput and Hydrogen Refueling Infrastructure (HRI) credits. (Applicants shall discuss budgetary contingencies with and without the HRI credits, should the LCFS program's quarterly cap exclude one or more of the Applicant's stations from HRI eligibility.)

B. How station maintenance and "up-time" will be optimized.

C. The response process and time needed for unscheduled maintenance and planned maintenance, and how maintenance will be coordinated with nearby stations.

D. The response process and time needed when the station fails, including due to the loss of the hydrogen supply.

Differences from GFO-15-605:

✓ ***An Operation and Maintenance Plan is required.***

✓ ***Operation and maintenance funding is not available under this solicitation.***

27. **Plan for Dispensing Renewable Hydrogen**

Applicants shall provide a Plan for Dispensing Renewable Hydrogen at the hydrogen refueling stations with detail about how each station or the collection of an Applicant's awarded stations (including those stations previously awarded by the Energy Commission) will dispense at least 33 percent renewable hydrogen, on a per kilogram basis. Eligible renewable feedstock includes biomethane or biogas such as: biomass digester gas, sewer (wastewater) gas, municipal solid waste gas from pre-landfilled material, or other waste fuels, excluding landfill gas. Systems using other waste biomass feedstocks, such as biomass waste or residues, may be eligible if the application demonstrates that the proposed system and feedstock comprise a sustainable approach and reduces greenhouse gas (GHG) emissions compared to the relevant petroleum baseline. Carbon intensity benchmarks for gasoline and diesel are found in Table 1 and Table 2, respectively, of the Low Carbon Fuel Standard regulation. Further information can be found at https://ww2.arb.ca.gov/rulemaking/2018/low-carbon-fuel-standard-and-alternative-diesel-fuels-regulation-2018.

Eligible renewable electricity sources include fuel cells using eligible renewable feedstocks, geothermal, small hydroelectric (30 megawatts or less), ocean wave, ocean thermal, tidal current, photovoltaics (PV), solar thermal, biomass digester gas, municipal solid waste conversion (non-combustion thermal process), and wind, as outlined in Section 25741(a)(1) of the California Public Resources Code, but excluding landfill gas[3]. The renewable electricity shall either go directly to the hydrogen production system or be connected via the grid from an in-state generation facility that has its first point of interconnection within the metered boundaries of a California balancing authority area.

Renewable hydrogen can also be acquired through Renewable Energy Certificates (RECs). RECs shall be retired in the Western Renewable Energy Generation Information System (WREGIS) for the production of hydrogen in the proposed system. For further information, see www.wecc.biz/WREGIS.

The Plan for Dispensing Renewable Hydrogen shall include the calculation of the project's benefit-cost in terms of "well to wheel" GHG emissions reduction. The Applicant shall provide the name of the LCFS pathway and assumptions about the annual amount of hydrogen dispensed in kilograms, the biogas/renewable feedstock used in standard cubic feet, and the estimated monthly use of renewable electricity in kilowatt hours. Applicants should use the 2.5 energy economy ratio (EER) relative to gasoline from the LCFS regulation to account for the fuel cell vehicle efficiency. For further information, see: http://www.arb.ca.gov/fuels/lcfs/lcfs.htm.

Applicants planning to use renewable electricity for system power shall describe how the renewable electricity will either go directly to the hydrogen station or be connected to the station via the grid within the Western Electricity Coordinating Council - WECC. Applicants

[3] California Public Resources Code, Section 25741(a)(1)
https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=25741.&lawCode=PRC

planning to use renewable electricity for system power shall describe how the electricity will be dedicated and used for the hydrogen station in the sustainability section of their application.

The proposed stations that adequately document a higher use of renewable electricity or that use on site hydrogen production facilities capable of load balancing to accommodate the electricity grid may score higher in accordance with the Evaluation Criteria (Section 32).

Difference from GFO-15-605:

- ✓ ***A Plan for Dispensing Renewable Hydrogen is required.***

28. **Participation in Hydrogen Safety Panel Reviews**

The Applicant shall include a statement of commitment to participate in early station design reviews for each station, before the station's building plans are submitted for AHJ plan check, as well as annual safety evaluations with the PNNL HSP, at the cost of the Applicant, for three years after each station becomes open retail.

Difference from GFO-15-605:

- ✓ ***This is a new application screening criterion.***

29. **Participation in Governmental Research and Development Projects**

The Applicant shall include a statement of commitment to participate in U.S. DOE, national, state, and local research and development projects (e.g., implementation of pressure consolidation strategy to reduce capital costs of station compression). At a minimum, the station development should purposefully do nothing to preclude participating in such projects.

Difference from GFO-15-605:

- ✓ ***This is a new application screening criterion.***

30. **Retention**

Each grant will be subject to a 10 percent retention amount per station as described in Section 7, Stage 5 (after 5 years of NREL Data Collection Tool data and Final Report submission).

Differences from GFO-15-605:

- ✓ ***Retention amount is decreased from 15% to 10%.***
- ✓ ***Station shall report 5 years of NREL Data Collection Tool data prior to release of retention.***

31. **Screening Criteria**

Applications will be screened according to the following criteria. Applications that do not meet one or more of the following requirements will be disqualified and not eligible for funding:

A. Proposed project is eligible in accordance with the solicitation (Section 16).

B. Applicant is eligible to apply under the solicitation (Section 17).

C. Applicant includes a statement of commitment to participate in PNNL HSP early design reviews and annual safety evaluations for each station (Section 28).

D. Applicant includes a statement of commitment to participate in U.S. DOE, national, state, and local research and development projects (Section 29).

Additional screening criteria may be included in the solicitation.

32. **Evaluation Process, Evaluation Criteria, and Points**

The Energy Commission will evaluate and recommend for funding the proposals utilizing the following guidelines:

A. Proposals will be scored in accordance with the Evaluation Criteria.

B. To be eligible for funding, projects shall achieve the minimum passing score of 70% (or 70 out of 100 points as shown in Table 2).

C. Proposals will be ranked according to score.

D. If the funding is not sufficient to fund the full Initial Batch of stations, or the full tranche of stations, proposed in an application, the Applicant will receive partial funding. In this case, the Applicant shall identify which stations will be eliminated without changing the Energy Commission dollar per kilogram of the proposed funding allocation tranche.

E. Ties in the scores, if any, will be broken in the following order:

1. Proposal with highest “Tranche Budget” score.
2. Proposal with highest “Project Readiness” score.
3. Proposal with highest “Hydrogen Refueling Station Performance” score.
4. If still tied, an objective tie-breaker will be utilized.

F. Proposals will be recommended for funding in ranked order until funds in this solicitation have been exhausted.

Table 2: Summary of the Evaluation Criteria and Possible Points

Evaluation Criteria	Possible Points
Tranche Budget	20
Project Readiness	15
Hydrogen Refueling Station Performance	15
Approach to Station Selection	10
Qualifications of the Applicant/Project Team	10
Safety Protocols and Procedures	10
Hydrogen Refueling Station Operation and Maintenance	10
Social and Environmental Benefits	10
TOTAL POSSIBLE POINTS:	**100**

Tranche Budget (20 points). The proposed Project Budget covering the entire tranche of stations will be evaluated on the degree to which:

- The cost-effectiveness of the proposed station(s) is realistic and highly cost effective on an Energy Commission dollar-per-station basis and an Energy Commission dollar-per-kilogram basis, over the proposed funding allocation tranche.
- The benefit-cost score, defined as the project's expected greenhouse gas emissions reduction per Energy Commission dollar awarded to the project, is realistic and highly cost effective (based on the entire tranche).
- The declared match funding is corroborated with evidence of the source and amount of match funding.
- The budget includes estimates of and accounts for payment of the California Use Tax for equipment.[4]
- For applications that propose hydrogen refueling station upgrades, the bullet points in this criterion shall address the difference between the existing hydrogen refueling station and the proposed hydrogen refueling station upgrade.

Project Readiness (15 points). Proposals will be evaluated on the degree to which:

- The application contains information and documentation about each station location's zoning requirements (i.e., steps and timeline to achieve AHJ planning approval, including land use entitlements and CEQA determination, or evidence of approval if already given by the AHJ) for the Initial Batch of stations. The application will be evaluated in terms of how much progress has made towards AHJ planning approval, and the strength of supporting documentation. This information will be required for subsequent batches of stations when they are submitted for approval.
- The application describes the hydrogen refueling station design for the Initial Batch of stations and the design includes traffic entrance to and exit from the proposed stations,

[4] https://www.cdtfa.ca.gov/taxes-and-fees/sutprograms.htm

and the circulation within the stations for FCEVs, hydrogen delivery trailers, and foot traffic. This description will be required for subsequent batches of stations when they are submitted for approval.
- The application includes a reasonable and realistic plan for connecting utilities for the entire tranche of stations.
- The application includes information about the anticipated primary and secondary (backup) supply of hydrogen for the entire tranche of stations.
- The proposed schedule for completing the batch(es) of stations and the entire tranche of stations is justified and reasonable.

Hydrogen Refueling Station Performance (15 points). Proposals will be evaluated on the degree to which the hydrogen refueling station performance for the entire tranche:

- Exceeds the fueling capacity requirements of the Station Classification(s) (Section 12) (demonstrated through HySCapE).
- Exceeds the Minimum Technical Requirements for Open Retail in this solicitation (Section 20) without the need for additional funding from the State of California.
- Provides scalable fueling capacity to meet increased local fueling demand without additional State of California funding.
- Maximizes the hours of station operation and exceeds the lighting and signage standards.
- Optimizes the customer refueling experience.

Approach to Station Selection (10 points). Proposals will be evaluated on the degree to which the Applicant's approach to station selection:

- Demonstrates a high probability of financial self-sufficiency.
- Provides fuel to FCEV customers so they can conveniently drive and fuel in and between the various Area Classifications in Figure 1.
- Complements the network of hydrogen refueling stations in California.
- Aligns with the most current version of the OEM Priority Hydrogen Station Location Recommendations and provides the fuel to the areas and the locations in the Recommendations. The current version is available at https://cafcp.org/sites/default/files/2017-Priority-Station-Location-Letter.pdf.
- Provides hydrogen refueling for FCEV fleets or any other specific customer base.

Qualifications of the Applicant/Project Team (10 points). Proposals will be evaluated on the degree to which the team:

- Has experience with high pressure gaseous hydrogen and/or liquid hydrogen that will be used in the proposed stations. Experience in other high pressure gases will be considered if the team adequately articulates and explains the relevance.
- Has experience with cost accounting and financial controls.

- Has experience with commercial real estate transactions.
- Has experience with hydrogen (or other alternative fuel) refueling station permitting, hydrogen station equipment procurement, hydrogen station supply chain logistics and management, and hydrogen station commissioning.
- Demonstrates strong project management experience in hydrogen purchasing, receipt, and dispensing, including truck delivery logistics.
- Has experience in planning for and managing station down time and maintenance.
- Has experience communicating status information to customers, and in responding to customer questions and complaints.
- Receives positive referrals from subcontractors, including from construction agreements in the past or for projects under development.

Safety Protocols and Procedures (10 points). Applications will be evaluated on the degree to which:

- The Preliminary Hydrogen Safety Plan is robust and sets the stage for fine tuning during station design, equipment specification and procurement and station opening.
- The Applicant demonstrates experience working with First Responders with hydrogen, or other pressurized gases, in a wide range of emergency situations.
- The Applicant describes plans and methods to continually improve safety protocol and procedure implementation to meet and exceed the PNNL HSP Guidelines.
- The Applicant describes plans and methods to enhance and improve or make more effective and efficient existing safety norms to maintain technological relevance.

Hydrogen Refueling Station Operation and Maintenance (10 points). Applications will be evaluated on the degree to which the Operation and Maintenance Plan (Section 26) submitted by the Applicant:

- Reasonably addresses the operation and maintenance costs and explains, with details, the costs for labor, equipment, rent or other site costs.
- Reasonably describes how the Applicant will rely on the potential receipt of LCFS throughput and Hydrogen Refueling Infrastructure (HRI) credits to fund operation and maintenance, as applicable. Applicants shall discuss budgetary contingencies with and without the HRI credits, should the LCFS program's quarterly cap exclude one or more of the Applicant's stations from HRI eligibility.
- Reasonably addresses and explains how the Applicant will optimize station "up-time."
- Reasonably explains its response process and time needed for planned and unplanned maintenance, and how it will be coordinated with stations in proximity.
- Reasonably explains its response process and time needed when the station fails, including due to the loss of the hydrogen supply.

Social and Environmental Benefits (10 points). Applications will be evaluated on the degree to which the proposed project:

- Provides realistic social and environmental benefits to California-based businesses.

- Provides new full-time and part-time jobs generated to design, build, operate, and maintain hydrogen refueling stations as a result of receiving funding under this solicitation.
- Provides air quality and employment benefits to California's disadvantaged communities.
- Has a detailed Plan for Dispensing Renewable Hydrogen (Section 27) and exceeds the required 33% renewable hydrogen content.
- Uses renewable electricity for system power, low- or zero-emission technology for hydrogen delivery to the stations, or includes other emissions savings features.
- Incorporates practices to optimize the use of natural resources and reduce greenhouse gas emissions and criteria air pollutant emissions during station construction and operation.
- Implements reuse and recycle programs.
- Integrates energy storage for the electricity grid and/or uses curtailed renewable energy as a source for renewable hydrogen.

33. **Regulations and Standards**

Applicants shall comply with the following California Code of Regulations (CCR):

- CCR Title 4: Business Regulations, Division 9 Measurement Standards, Chapter 1 Tolerances and Specifications for Commercial Weighing and Measuring Devices, Article 1 National Uniformity, Exceptions and Additions, Sections – 4001. Exceptions and 4002. Additional Requirements, Subsection 4002.9, Hydrogen Gas-Measuring Devices (3.39): 2018.

- CCR Title 4: Business Regulations, Division 9 Measurement Standards, Chapter 6 Automotive Products Specifications, Article 8 Specifications for Hydrogen Used in Internal Combustion Engines and Fuel Cells, Sections 4180 and 4181: 2018.

- CCR Title 24: 2016, California Building Code, Part 2, Volume I, Chapter 11B, Accessibility to Public Buildings, Public Accommodations, Commercial Buildings and Public Housing.

The proposed stations shall comply with the following regulation:

- California Health and Safety Code Section 25510(a).

Applicants shall:

- Submit report(s) of any unintended hydrogen releases to the Certified Unified Program Agency (CUPA), http://cersapps.calepa.ca.gov/Public/Directory.
- Complete the required Federal reporting related to hydrogen transportation available at www.ntsb.gov.

The proposed stations shall comply with the most recent version of the following standards.

- CSA Group (formerly the Canadian Standards Association, CSA), Toronto, Canada. CSA Hydrogen Gas Vehicle (HGV) 4.3 Test Methods for Hydrogen Fueling Parameter Evaluation: 2016.

- CSA Hydrogen Gas Vehicle (HGV) 4.9, Hydrogen Fueling Stations: 2016.

- Compressed Gas Association, CGA G-5.3-2017, Commodity Specification for Hydrogen, 7th Edition, November, 2017. https://www.cganet.com/customer/publication_detail.aspx?id=G-5.3

- National Fire Protection Association (NFPA) 2, Hydrogen Technologies Code: 2016. Quincy, MA.

- SAE International, Detroit, MI. SAE J2600 Compressed Hydrogen Surface Vehicle Fueling Connection Devices: 2015.

- SAE International, Detroit, MI. SAE J2601 Fueling Protocols for Light Duty Gaseous Hydrogen Surface Vehicles: 2016.

- SAE International, Detroit, MI. SAE J2719 Hydrogen Fuel Quality for Fuel Cell Vehicles: 2015.

- SAE International, Detroit MI. SAE J2799 Hydrogen Surface Vehicle to Station Communications Hardware and Software: 2014.

- U.S. Department of Commerce/National Institute of Standards and Technology (NIST), Specifications, Tolerances, and other Technical Requirements for Weighing and Measuring Devices as adopted by the 102nd National Conference on Weights and Measures 2017, NIST Handbook 44: 2018.

Applicants are encouraged to use the following tools, programs, codes, and handbooks when applying for funding under this solicitation:

- California Environmental Protection Agency (EPA), Office of Environmental Health Hazard Assessment, Sacramento, CA. Cumulative Impacts: Building a Scientific Foundation, Cal EnviroScreen. https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30

- California Type Evaluation Program (CTEP). https://www.cdfa.ca.gov/dms/programs/ctep/CTEPInfoGuide.pdf

- California Type Evaluation Program (CTEP) Certificates of Approval Database Search. https://www.CDFA.CA.GOV/dms/ctep.html

- Division of the State Architect (DSA) 2016 Code Access Compliance Advisory Manual – Intervening Code Adoption Cycle Supplement. 2018. http://www.dgs.ca.gov/dsa/Programs/progAccess/accessmanual.aspx

- Hydrogen Station Capacity Evaluation (HySCapE) Model. 2018. https://www.arb.ca.gov/fuels/lcfs/rulemakingdocs.htm

- U.S. Department of Commerce/National Institute of Standards and Technology (NIST), Uniform Laws and Regulations in the Areas of Legal Metrology and Engine Fuel Quality as adopted by the 102nd National Conference on Weights and Measures 2017, NIST Handbook 130: 2018. https://nvlpubs.nist.gov/nistpubs/hb/2018/NIST.HB.130-2018.pdf.

Applicants are encouraged to familiarize themselves with the following documents, which are available online, and available for review in the Energy Commission Library located at: California Energy Commission, 1516 Ninth Street, Sacramento, CA 95814, (916) 654-4292. Library hours are Monday - Friday from 8:30 a.m. to 4:30 p.m., closed for lunch: 12:00-1:00 p.m.

- Code of Federal Regulations (CFR) 225, Cost Principles for State, Local, and Indian Tribal Governments (OMB Circular A-87). https://www.gpo.gov/fdsys/granule/CFR-2012-title2-vol1/CFR-2012-title2-vol1-part225

- California Air Resources Board (CARB), Sacramento, CA. 2018 Annual Evaluation of Fuel Cell Electric Vehicle Deployment and Hydrogen Fuel Station Network Development. https://www.arb.ca.gov/msprog/zevprog/ab8/ab8_report_2018_print.pdf

- CARB, Sacramento, CA. Low Carbon Fuel Standard Program. http://www.arb.ca.gov/fuels/lcfs/lcfs.htm

- California Department of Transportation, Sacramento, CA. Plug-in Electric Vehicle Charging Station and Hydrogen Fuel Cell Electric Vehicle Fueling Station Signage Fact Sheet, August 2018. http://www.dot.ca.gov/hq/tpp/offices/orip/pev/EV%20Hydrogen%20factsheet.pdf

- California Energy Commission, Sacramento, CA. Alternative and Renewable Fuel and Vehicle Technology Program Investment Plans. https://www.energy.ca.gov/transportation/arfvtp/investmentplans.html

- California Energy Commission, Sacramento, CA. Joint Agency Staff Report on Assembly Bill 8: 2018 Annual Assessment of Time and Cost Needed to Attain 100 Hydrogen

Refueling Stations in California (CEC-600-2018-008). https://www.energy.ca.gov/2018publications/CEC-600-2018-008/CEC-600-2018-008.pdf

- Governor's Office of Business and Economic Development, Sacramento, CA. Hydrogen Station Permitting Guidebook, Best Practices for Planning, Permitting and Opening a Hydrogen Fueling Station: 2015. https://gobiz.app.box.com/HydrogenPermittingGuidebook

- Pacific Northwest National Laboratory (PNNL), Richland, WA. Safety Planning for Hydrogen and Fuel Cell Projects. November 2017. PNNL-25279-1. https://h2tools.org/sites/default/files/Safety_Planning_for_Hydrogen_and_Fuel_Cell_Projects-November2017_0.pdf

34. **Written and Oral Comments**

Comments on this Draft Solicitation Concepts document are due by February 22, 2019**,** 5:00 p.m. Comments should be numbered according to these Draft Solicitation Concepts to facilitate effective evaluation.

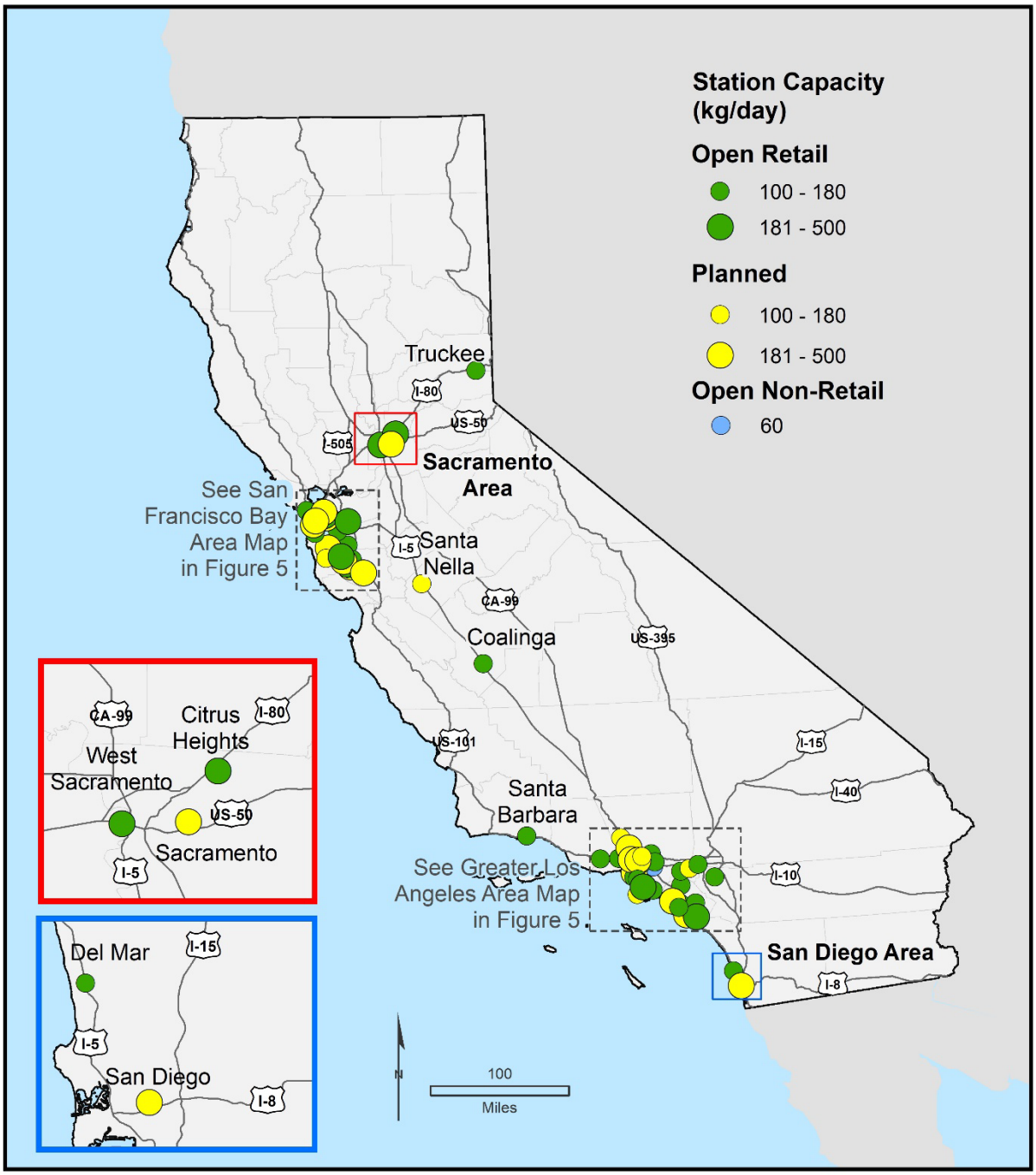
Please submit comments to the Energy Commission using the e-commenting feature by accessing https://efiling.energy.ca.gov/EComment/EComment.aspx?docketnumber=18-HYD-04. Name, e-mail address, comment title, and either a comment or an attached document (.doc, .docx, or .pdf) are mandatory. Please include "Hydrogen Draft Solicitation Concepts" in the comment title. After the system uses a challenge-response test to ensure responses are generated by a human user and not a computer, click on the "Agree & Submit Your Comment" button to submit the comment to the Energy Commission's Docket Unit.

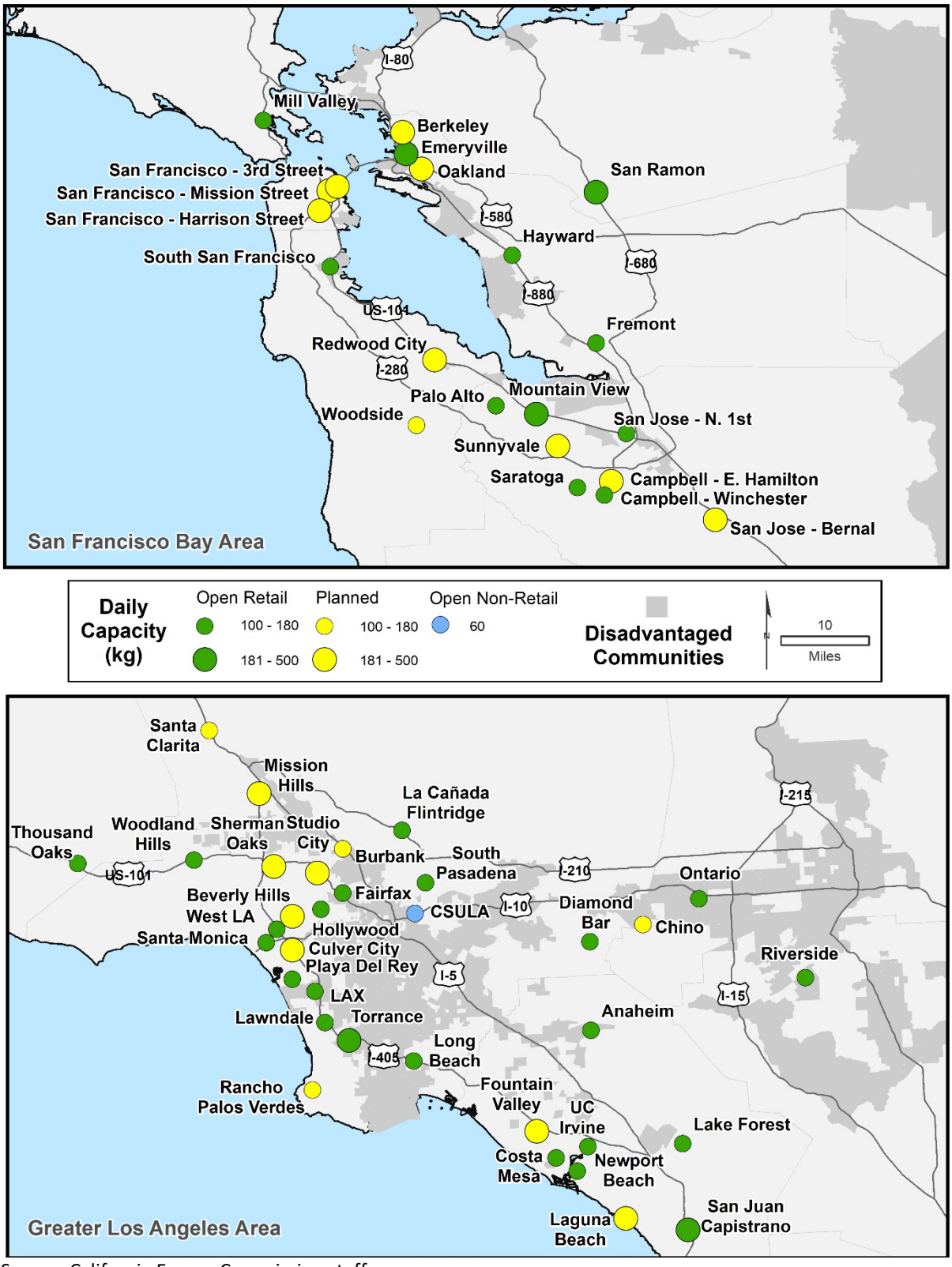
Written comments, attachments, and associated contact information included in the documents and attachments, e.g., your address, phone, email, etc., become part of the viewable public record and may become available via Google, Yahoo and any other search engines. Interested stakeholders are encouraged to use the electronic filing system described above to submit comments. If you are unable to submit electronically, a paper copy of your comments postmarked by February 22, 2019 at 5:00 p.m. may be sent to:

California Energy Commission
Dockets Office, MS-4
Docket No. 18-HYD-04
1516 Ninth Street
Sacramento, CA 95814-5512

Or by e-mail to: DOCKET@energy.ca.gov. include "Hydrogen Draft Solicitation Concepts" in the subject line.

Appendix A: Planned and Existing Hydrogen Refueling Stations in California





Source: California Energy Commission staff

Appendix B: Planned and Existing Hydrogen Refueling Station Addresses

	Station Addresses
1	3731 E. La Palma Ave., Anaheim, 92806
2	1250 University Ave., Berkeley, 94702
3	9988 Wilshire Blvd., Beverly Hills, 90210
4	145 W. Verdugo Ave., Burbank, 91502
5	2855 Winchester Blvd., Campbell, 95008
6	337 E. Hamilton Ave., Campbell, 95008
7	12600 East End Ave., Chino, 91710
8	6141 Greenback Lane, Citrus Heights, 95621
9	24505 W. Dorris Ave., Coalinga, 93210
10	2050 Harbor Blvd., Costa Mesa, 92627
11	11284 Venice Boulevard, Culver City, 90230
12	21865 E. Copley Drive, Diamond Bar, 91765
13	1172 45th Street, Emeryville, 94608
14	18480 Brookhurst St., Fountain Valley, 92708
15	41700 Grimmer Blvd., Fremont, 94538
16	391 W. A Street, Hayward, 94541
17	19172 Jamboree Road, Irvine, 92612
18	550 Foothill Blvd., La Cañada Flintridge, 91011
19	104 North Coast Highway, Laguna Beach, 92651
20	20731 Lake Forest Drive, Lake Forest, 92630
21	15606 Inglewood Ave., Lawndale, 90260
22	3401 Long Beach Blvd., Long Beach, 90807
23	11261 Santa Monica Blvd., Los Angeles, 90025
24	7751 Beverly Blvd., Los Angeles, 90036
25	5700 Hollywood Blvd., Los Angeles, 90028
26	8126 Lincoln Blvd., Los Angeles, 90045
27	10400 Aviation Blvd., Los Angeles, 90045
28	570 Redwood Highway, Mill Valley, 94941
29	15544 San Fernando Mission Blvd., Mission Hills, 91345
30	830 Leong Drive, Mountain View, 94043
31	350 Grand Ave., Oakland, 94610
32	1850 E. Holt Blvd., Ontario, 91761
33	3601 El Camino Real, Palo Alto, 94306
34	28103 Hawthorne Blvd., Rancho Palos Verdes, 90275
35	503 Whipple Ave., Redwood City, 94063
36	8095 Lincoln Ave., Riverside, 92504
37	3510 Fair Oaks Blvd., Sacramento, 95864
38	3060 Carmel Valley Road, San Diego, 92130
39	5494 Mission Center Road, San Diego, 92108
40	551 Third Street, San Francisco, 94107

	Station Addresses
41	3550 Mission Street, San Francisco, 94110
42	1201 Harrison Street, San Francisco, 94103
43	2101 N. 1st Street, San Jose, 95131
44	101 Bernal Road, San Jose, 95119
45	26572 Junipero Serra Road, San Juan Capistrano, 92675
46	2451 Bishop Drive, San Ramon, 94583
47	150 S. La Cumbre Road, Santa Barbara, 93105
48	24551 Lyons Ave., Santa Clarita, 91321
49	1819 Cloverfield Blvd., Santa Monica, 90404
50	12754 State Highway 33, Santa Nella, 95322
51	12600 Saratoga Ave., Saratoga, 95070
52	14478 Ventura Blvd., Sherman Oaks, 91423
53	1200 Fair Oaks Ave., South Pasadena, 91030
54	248 S. Airport Blvd., South San Francisco, 94080
55	3780 Cahuenga Blvd., Studio City, 91604
56	1296 Sunnyvale Saratoga Road, Sunnyvale, 94087
57	3102 Thousand Oaks Blvd., Thousand Oaks, 91362
58	2051 W. 190th Street, Torrance, 90501
59	12105 Donner Pass Road, Truckee, 96161
60	1515 S. River Road, West Sacramento, 95691
61	5314 Topanga Canyon Road, Woodland Hills, 91364
62	17287 Skyline Blvd., Woodside, 94062
63	5151 State University Dr., Los Angeles, 90032[5]
64	1600 Jamboree Road, Newport Beach, 92660[6]
65	Mobile Refueler

[5] The station at California State University, Los Angeles (CSULA) received capital expense funding from CARB and operation and maintenance funding from ARFVTP.

[6] The Newport Beach station was originally a demonstration station funded in part by CARB. The station was upgraded by Shell from a nonretail station to full open retail status.

Appendix C: NREL Data Collection Tool

Attachment 11
Data Collection Tool

This workbook contains templates for reporting data from hydrogen infrastructure.

-Please fill out the sheets with data that pertain to the specific application.
-Data submission is expected each quarter
-If an item or sheet is not applicable to the specific operation, leave blank, or insert N/A.
-For multiple compressors, reformers, etc, make an additional copy of the sheet and label it Compressor2, etc.
-The sheets that have an orange tab are only needed if the station has that equipment.
-You may delete or ignore orange tab sheets if they don't apply to your station.
-This workbook contains optional fields under GFO-15-605. These fields are designated with a purple color.

Templates were developed at the National Renewable Energy Laboratory.

Templates last upated May 4, 2016 (NREL)

Original 12/2/2011			
Revision thru 5/4/2016	**Fields designated with a purple color are OPTIONAL under GFO-15-605.**		
	"Fuel Log Tab"		
	5/4/2016	Added Start Pressure column	
	"Fill Performance Tab"		
	5/4/2016	Added new sheet for fill data	
	5/4/2016	Added Note to report all fills including incomplete fills and failed attempts	
	"Maintenance Tab"		
	5/4/2016	Added new columns with picklists for consistency to replace the previous columns	
	5/4/2016	Added columns for Subsytem, Component, Action, Cause and Effect	
	5/4/2016	Added columns for duration of unavailability of station components and affected performance	
Revisions thru 4/5/2012	Site Summary		
		Changed example diagram	
		Changed diagrams wording in row 4 slightly	
		Added Electrolyzer output pressure	
	Site Log		
		Added this sheet	
	Fuel Log		
		Changed heading slightly on Fill Communications	
		Added Amb Temp, Pre-cool Temp, Fill Description	
		Added column for #	
	Maintenance		
		Added column for #	
	Safety		
		Added Non-Event and definition	
		Added column for #	
	Electrolyzer		
		Added output pressure	

Appendix D: Open Retail Station Checklist

Check	Open Retail Station Requirements
	Dispenses hydrogen that meets California Code of Regulations (CCR) Title 4 Business Regulations, Division 9 Chapter 6 Automotive Products Specifications, Article 8, Hydrogen Fuel Sections 4180 and 4181 which adopts SAE International J2719 (fuel quality).
	Passed a hydrogen quality test and complies with CCR, Title 4, Division 9, Chapter 1, Article 1, Section 4002.9 Hydrogen Gas Measuring Devices which adopts the most recent version of SAE J2719 (fuel quality).
	Underwent DMS type evaluation for hydrogen refueling station dispensers which includes compliance with SAE J2719 (fuel quality).
	Conforms with the most recent version of SAE J2601 (fueling protocols) using the HySTEP device or another functionally equivalent device, or if no device is available, by using automobile OEM best practices, to test in accordance with the most recent version of HGV 4.3.
	Complies with the most recent version of ANSI/CSA HGV 4.9 (hydrogen refueling stations).
	Conforms to the most recent version of SAE International J2799 (station communications).
	Conforms to the most recent version of SAE J2600 (nozzles) or ISO 17268 (nozzles).
	Sells fuel to the public through a dedicated point of sale (POS) terminal or a centralized POS terminal. The POS terminal shall accept, read, and process all commercially available credit and debit cards and gift cards with magnetic stripes, and read EMV™ chips that are embedded in commercially available credit cards and debit cards, and perform financial payment transactions.
	Includes a dedicated hydrogen fuel supply and delivery agreement, and a backup agreement.
	Includes installed and energized utility connection and source of system power.
	Includes installed lighting for the consumer to use the dispenser and the station area.
	Installed signage to advise and educate the public on hydrogen refueling, the station location, and to acknowledge the receipt of public funding for the station, and submitted evidence of communication and progress for obtaining trailblazer signage and **s**tate highway system signage.
	Includes a connection with the California Fuel Cell Partnership Station Operational Status System (SOSS).
	Obtained all required state, local, county, and city permits to build and operate, and has submitted the permits to the Energy Commission.
	Has a cover installed over the station emergency shutdown system switch.
	No obstructions or obstacles exist to preclude the public from fueling.

*Self-Certification

Certifications:

I hereby authorize the California Energy Commission to make any inquiries necessary to verify the information presented in this checklist.

I hereby certify to the best of my knowledge that the station has been constructed and equipment has been installed consistent with the California Energy Commission agreement and the information contained in this checklist is correct and complete.

Signature of Authorized Representative		Date:	

Appendix E: HyStEP Checklist
(may change for technical reasons)

Station Name and Address			
Station Name		City	
Street Address		Zip	
Station Hours			
Station Engineer/Technician		Back up Contact Name	
Cell Phone		Cell Phone	
Technician Email		Back up Contact Email	
Station Developer Information			
Developer Name		Engineer/Technicia	
Developer Address		Cell Phone	
Station Type		Email	
Dispenser Supplier Information			
Dispenser Supplier			
Dispenser Name		Software Version or Latest Update	
Dispenser Serial #			
Dispenser Engineer/Technician		Cell Phone	
Email			
Major Equipment Supplier Information			
Equipment Supplier		Email	
Equipment Description & Info			
Equipment Engineer/Technicia		Cell Phone	
Contacts during HyStEP Testing			
Main Contact		Back up Contact	
Main Contact Cell Phone		Back up Cell Phone	
Main Contact Email		Back up Contact	

		Yes	No	NA	Estimated Completion Date & Notes
Quantity	Number of H70 dispensers:	H70 nozzles per dispenser:			
	Station Rated Performance	kg/hr:			kg/day:
	H35 Dispensing?				Number of nozzles:
	Fuel Delivery Temperature Category (e.g. T40)	H70:			H35:
	County Weights and Measures or Division of Measurement Standards approval to sell fuel?				What is the Type Certification?
POS	Point of sale working?				
	Ability to override payment during testing?				
H2 Quality	Station passed SAE J2719, including Particulates Concentration?				Please provide latest hydrogen quality analysis test results prior to HyStEP testing.
	Dispenser Filter?				Circle filter size. 5ų 10ų Other_____
	H2 Source (e.g. Liquid/Gaseous Delivered, On-site				
	Is hydrogen quality continuously monitored within station?				How?
Equipment	Pressure sensors & relief valves at each pressure rate?				Show locations on Site Plan # P sensors____ # Relief Valves____
	Provided gas pressure, gas temperature, and ambient temperature accuracies & tolerances?				
	Indicate which method is used for Temperature Tolerance.				
	Mass Average Fuel Delivery Temperature Tolerance?				If yes, provide equation.
	Instantaneous Fuel Delvery Temperature Tolerance?				
	Is IrDA receiver compatible to SAE J2799?				
	Nozzle Type Identified?				
	Is nozzle attachment compliant with SAE J2600?				
	Ambient Temperature Sensor? Redundant? Accuracy?				
	Process Flow Diagram or PI&D provided?				
Protocol	What version of SAE J2601 station fueling protocol is				
	Table-Based or MC Formula-Based fueling protocol?				
	Please provide test fills, including tank specifications, hose pressure, fuel supply temperature, tank pressure, and tank temperature vs. time				
	Parameters Max Flow Rate: _____ Startup Mass Transferred: _____Target SOC: _____				
	Any SAE J2601, J2799 and/or HGV 4.3 features not programmed in the dispenser? (e.g., Restricted Non-Comm. Fill, Fallback, Cold Dispensing, Top-Off?)				
	Terminate fueling when fuel delivery temperature under -40C?				
	Terminate fueling when pressure out of APRR tolerance bounds?				
	Any dispenser/fueling programming limitations or changes that we should know about? (e.g., loss of communcation fill reverts to the most conservative non-comm fill table)				
Safety & Logistics	Are you able to provide dispenser break-away data each testing day in excel format in 1.0 second increments per the attached required data sheet? *If not, data analysis may be delayed.*				Explanation:
	Map provided showing Emergency stop locations and location of nearest 120 VAC with distance from dispenser?				
	Can HyStEP vent through station vent stack?				
	Can HyStEP be stored onsite overnight?				