

State of Connecticut
Department of Energy and Environmental Protection
And
Connecticut Center for Advanced Technology, Inc.

HYDROGEN REFUELING INFRASTRUCTURE DEVELOPMENT PROGRAM

Request for Proposals

New Haven Area Hydrogen Fueling Station

Date Issued: February 1, 2018

Due Date: April 30, 2018

Date Created: December 27, 2017

Version: 1.0

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I. Background and Funding Opportunity Description

On June 01, 2015, the State of Connecticut, in partnership with the Connecticut Center for Advanced Technology (CCAT), sought responses to a funding opportunity to implement a “Hydrogen Refueling Infrastructure Development” (H2Fuels Grant) Program. Unfortunately, no responses met the entirety of the proposed requirements. As such, the State of Connecticut, in partnership with CCAT is seeking to award up to \$840,000 under a revised H2Fuels Grant Program as specified herein. The Connecticut Department of Energy and Environmental Protection (DEEP) and CCAT are seeking qualified vendors to establish, operate and maintain a single retail hydrogen refueling station in Southern Connecticut. The goal of the H2Fuels Grant Program remains unchanged - to promote the use of fuel cell electric vehicles (FCEV); increase public confidence and awareness for hydrogen as a transportation fuel; and reduce dependence on fossil fuel and emissions of greenhouse gases. To that end, the hydrogen refueling station must be able to dispense hydrogen at H70-T40 (700 bar). The ability of the station to dispense hydrogen at H35-T20 (350 bar) is an additional option that can be installed, but it is not required.

II. Administrative Structure

The H2Fuels Grant is administered by CCAT with guidance and assistance from DEEP. Applicants may seek assistance through the H2Fuels Grant Program, subject to available funding. Funding, in the form of a grant through the H2Fuels Grant Program, will be provided on a reimbursement basis after the refueling station is operational and open for retail use. The Awardee will be responsible for operating the hydrogen refueling station in a manner consistent with the terms and conditions of the Hydrogen Refueling Infrastructure Agreement (Agreement) for the H2Fuels Grant project. CCAT and DEEP reserve the right to inspect the hydrogen refueling station once it is operational and when it’s declared open for retail use.

III. Eligible Activities

Acceptable uses of funding provided through the H2Fuels Grant Program include the purchase of hydrogen production, storage, and/or dispensing equipment for a new, retail hydrogen refueling station and reasonable costs associated with site preparations, engineering, construction and commissioning of the operational hydrogen refueling station. See definitions below:

- *“hydrogen production, storage, and/or dispensing equipment”* means equipment related to the production, storage, and/or dispensing of hydrogen;
- *“engineering costs”* means the financial costs associated with the design of site preparation and construction plans of the hydrogen refueling station and do not include costs associated with product development;
- *“construction”* means building or assembling of buildings and/or infrastructure on a site for the purpose of supporting hydrogen production and/or dispensing equipment, including any safety/equipment inspections;
- *“new”* means a hydrogen refueling station constructed after the solicitation for proposals opens;
- *“operational hydrogen refueling station”* means the station has a hydrogen fuel supply, has an energized utility connection and source of system power, has installed all necessary hydrogen refueling station/dispenser components, has passed a test for hydrogen quality that meets SAE J2719-2015 (or subsequent published version), has a permit to operate, has successfully fueled

one FCEV with hydrogen, and dispenses hydrogen at the mandatory H70-T40 (700 bar) and H35-T20 (350 bar) (if this option is being installed); and

- “*retail hydrogen refueling station*” means the station conforms to all applicable codes, regulations, and approved interface standards (fueling protocols, fuel quality, metrology, and permits); it uses a public point of sale terminal that accepts major credit, debit and fleet cards; it does not require the use of any specialized access cards or personal identification (PIN) codes; and it meets the mandatory proposal requirements outlined in Section VIII. B.

IV. Ineligible Activities

Unacceptable uses of H2Fuels Grant Program funds include:

- travel, debt restructuring, loan payments, or lobbying;
- reimbursement of costs incurred prior to the execution of the Agreement specified in Part VIII A. of this document;
- proposal preparation costs; and
- operating costs which includes, but are not limited to, maintenance of hydrogen refueling station equipment, insurance on the hydrogen refueling station and equipment, utility costs, rental/lease costs, and hydrogen production and/or delivery costs.

V. Notice Requirements

Public notices will include the Americans with Disabilities Act and Title VI Publication Statement.

VI. Comments and Information Posting

A public informational meeting was held on January 24, 2018 at 10:00am, at DEEP Headquarters at 79 Elm Street in Hartford. All interested parties had the opportunity to comment until January 31, 2018. Comments received will be posted on the H2Fuels Grant Program web page. Interested parties may access the H2Fuels Grant Program web page through the EVConnecticut website (www.evconnecticut.com). DEEP has published on the H2Fuels Grant Program web page a schedule of required submittal dates for the H2Fuels Grant Program.

VII. Funding

The H2Fuels Grant Program will provide \$840,000 in grant funding to design and build a single retail hydrogen refueling station in New Haven County at a location that complies with the siting requirements outlined in these guidelines, and zoning requirements provided under the local municipal land use regulations. The H2Fuels Grant Program will provide grant funding to design and build a single retail hydrogen refueling station within a preferred five-mile radius, not to exceed an eight mile radius, of the I95/I91 interchange in New Haven, CT. This station must effectively serve the public as well as municipal, private and state fleet FCEVs. In order to ensure that any grant is utilized in the most effective manner possible, mandatory proposal requirements and evaluation criteria have been established to guide the decision-making process. Providing all program requirements are met, funding will be disbursed as follows:

Project Status Achieved	Deadlines	Funds Disbursed*
Station Operational	24 months following award date	\$600,000
Station Open for Retail Use	180 days following operational date	\$240,000

**Actual funds disbursed will be reduced by \$5,000 for each week that the project remains incomplete beyond the above deadlines.*

VIII. Grant Application Process, Evaluation Criteria and Review

A. Application Schedule and Process

The schedule and process for receiving and evaluating applications for funding under the H2Fuels Grant Program is presented below and will be posted on the website. Qualified hydrogen producers and/or developers are encouraged to submit their proposal(s) for funding to CCAT at 222 Pitkin Street, Suite 101, East Hartford, CT 06108, ATTN: Joel Rinebold, or by electronic mail at jrinebold@ccat.us, no later than 4:00 pm Eastern Time, on April 30, 2018. No late submissions will be accepted. The key events and deadlines for the application process are as follows, some of which are yet to be determined.

Date	Event
February 1, 2018	Solicitation Opens
February 1 – 16, 2018	Submission of Written Questions
February 1 – 28, 2018	Response to Written Questions are Posted
April 30, 2018	Proposals Due
May 1, 2018	Commencement of Proposal Evaluation Process
On or before June 1, 2018	Agreement Negotiations Begin

B. Mandatory Proposal Requirements

Applicants must offer a proposed plan that demonstrates the technical, economic and siting capacity to build, operate and maintain the hydrogen refueling station. To be considered for funding, a proposed plan to construct a hydrogen refueling station through the H2Fuels Grant Program must show that the Applicant and/or station meets the following minimum parameters:

1. The proposed station must be located at a site in New Haven County with direct or close access to I-95 or I-91 and within a preferred 5 mile radius, not to exceed an 8 mile radius, of the I-95/I-91 interchange;
2. Applicant must have site control over any property to be used for the project prior to the execution of an agreement with CCAT;
 - a. Site Control means:
 - i. ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the hydrogen refueling station,
 - ii. an option to purchase or acquire a leasehold site for such purpose, or
 - iii. an exclusivity or other business relationship between the Applicant and the entity having the right to sell, lease or grant the Applicant the right to possess or occupy a site for such purpose;
 - b. Documentation for verification is required;
 - c. Preference will be given to a proposed station that is sited at an existing fueling station;
3. The proposed site must be accessible to the general public; and state, municipal and private fleet vehicles;
4. The proposed site must meet the requirements of the 2010 Americans with Disabilities Act (ADA) Standards for Accessible Design;
5. The proposed refueling station must be capable of dispensing, at a minimum, 200 kg/day:
 - a. The original system design shall be scalable to allow future expansion of the ground storage capacity to be capable to fuel, at least, 400 kg in a 12 hour period, where allowable by site layout constraints.
 - b. The capacity is determined by the total kg of hydrogen that can be delivered to fuel cell vehicles, in a manner consistent with the requirements of SAE J2601, over a 12 hour period;
 - c. Proposed stations with an initial capacity that is less than 200 kg/day will be considered, provided that the proposal outlines how the smaller capacity is beneficial to the state and how the 200kg/day capacity will be achieved within 24 months of the station becoming operational. Any proposed station with an initial capacity less than 200 kg/day that has not achieved said 200 kg/day capacity within 24 months of becoming operational will be required to return a prorated amount of the funds disbursed for that station. Proration will be based on the current capacity of the station. See Appendix C.
6. The proposed station must be able to deliver the rated daily capacity over a 12 hour period each day from 6 a.m. to 6 p.m. with a preference for automated operation to extend service to 24 hours/day, 7 days/week;
7. The proposed station must be able to dispense hydrogen at the mandatory H70-T40 (700 bar). In addition to the mandatory H70-T40 dispensing, the proposed station may also be equipped to dispense hydrogen at H35-T20 (350 bar). However, H35-T20 dispensing is not required;;
8. The proposed station must be able to dispense back-to-back refills, as specified in Appendix A, providing a minimum of:
 - a. five 4kg H70-T40 fills per hour; and,
 - b. four 4kg H35-T20 fills per hour (if option installed);
9. The proposed station must provide hydrogen at a quality consistent with SAE J2719: Hydrogen Fuel Quality for Fuel Cell Vehicles. Fuel quality sampling is required upon station commissioning and every 3 months thereafter, as well as after any potential exposure to contamination due to maintenance or other activities;
10. The proposed station must have the ability to allow for integration with existing hydrogen uses;

11. The proposed station must provide a point of sale terminal that accepts major credit, debit, and fleet card payment;
12. The proposal shall specify that the station's fuel dispenser(s) will be evaluated using the U.S. Department of Energy Station Equipment Performance (HyStEP) device, or other acceptable evaluation method as practicable, for commissioning the station;
13. The Applicant shall provide a Safety Plan for the proposed hydrogen refueling station.
 - a. The Safety Plan shall be developed in accordance with the Pacific Northwest National Laboratory's (PNNL) Hydrogen Safety Panel's (HSP) Safety Planning for Hydrogen and Fuel Cell Projects guidance, dated March 2016, (https://h2tools.org/sites/default/files/Safety_Planning_for_Hydrogen_and_Fuel_Cell_Projects-March_2016.pdf), or subsequent published version;
14. The Applicant shall post, at the refueling station, the signage required acknowledging public funding received for the station. Additional signage being proposed should be discussed in the proposal;
15. The Applicant shall provide station performance data to the National Fuel Cell Technology Evaluation Center (NFCTEC) through the Department of Energy's National Renewable Energy Laboratory (NREL) as part of national efforts to compile hydrogen station data such as hydrogen dispensed, maintenance, component reliability, etc., through standard data templates. Data is compiled without company attribution to help identify issues and provide guidance back to national and state R&D programs.¹ Data shall be collected for no less than 5 years following station becoming operational;
16. The proposal shall include a plan for becoming a retail hydrogen refueling station within 180 days of becoming an operational hydrogen refueling station;
17. Applicant shall collaborate with CCAT and DEEP regarding publication of any information related to the hydrogen refueling station; and
18. The Applicant shall commit to operating the station for no less than 5 years following the date the station becomes operational.

C. Proposal Format

Applicants must submit at least six (6) copies of the proposal printed using standard 8.5" by 11" paper with 1 inch margins (top, bottom, left, and right). Do not include any Internet addresses (URLs) that provide information necessary to review and evaluate the proposal. In addition, applicants must submit an electronic copy of the entire proposal in pdf format.

All proposals must include the following technical and operational information as it pertains to the proposed hydrogen refueling station:

1. Project Summary and Approach

- a. Project plan for the development, operation and maintenance of the proposed hydrogen refueling station including:
 - i. Tasks,
 - ii. Deliverables,
 - iii. Timeline and Milestones;
- b. Roles and responsibilities, including collaboration with CCAT and DEEP regarding publication of information related to the hydrogen refueling station;

¹ See: http://www.nrel.gov/hydrogen/proj_infrastructure_analysis.html

2. Technical and Operational Information

- a. Location:
 - i. Proposed site for the refueling station in New Haven County;
 - ii. Potential market associated with the proposed project site, including private and state fleet vehicles, and existing hydrogen users, as well as the site's proximity and direct or close access to I95, I91 and the I-95/I-91 interchange;
 - iii. The ability of the proposed project to expand capacity at the proposed site, as needed, and to other recognized sites and/or businesses within Connecticut; and
 - iv. Documentation of site control.
- b. Hydrogen Fueling Technologies:
 - i. Confirmation of compliance with the elements of the Hydrogen Refueling Station Interface Specification Checklist in Appendix A;
 - ii. A detailed site plan depicting significant features of the proposed station, including but not limited to: fuel production (if applicable), fuel delivery, storage, dispensing, signage, traffic flow, security features, public services, etc.;
 - iii. Technology and methods to be used to generate, store, and dispense 200 kg of hydrogen per day (or, if proposed, alternate initial capacity for the first 24 months of operation);
 - iv. Method to ensure that the hydrogen dispensed complies with SAE J2719, including required fuel quality sampling upon station commissioning and every 3 months thereafter as well as after any potential exposure to contamination due to maintenance or other activities;
 - v. Method for the measurement and payment of hydrogen fuel: how the proposed station will accept payment, including the use of major credit and/or debit cards, and fleet cards;
 - vi. Technology that will be used to ensure that hydrogen can be consistently delivered to fuel cell vehicles, in a manner consistent with the requirements of SAE J2601, over a 12 hour period. Proposal shall clearly specify the number of dispensers that will be installed, the number of hoses to be installed on each dispenser, and the ability of the dispenser(s) and hoses to accommodate simultaneous fueling;
 - vii. Technology that will be used to ensure the proposed station can, at a minimum, deliver the rated daily capacity over a 12 hour period from 6 a.m. to 6 p.m. with a preference for automated operation and automated payment to extend service to 24 hours/day 7 days/week;
 - viii. Technology that will be used to ensure the proposed station is reliable, includes planned redundancy, and the capacity to dispense back-to-back refills, at a minimum of five 4kg H70-T40 fills per hour, (or four 4kg H35-T20 fills per hour, if option installed);
 - ix. Security measures and related protocols for station accessibility by the general public and state, municipal and private fleet vehicles;
 - x. Demonstrate that station readiness will be ascertained, through evaluation of station/fuel dispenser using the HyStEP device;
 1. Should the HyStEP device be unavailable, the station's fuel dispenser (s) fueling protocol shall be evaluated using best practices with automobile Original Equipment Manufacturers (OEMs) or other acceptable evaluation methods, and

2. The application shall include milestones and due dates for the possibility of using HyStEP and automaker best practices, and
 - xi. Demonstrate that the Safety Plan was developed in accordance with the HSP's *Safety Planning for Hydrogen and Fuel Cell Projects* (March 2016, or subsequent published version);
 - c. A description of how the proposed project will use renewable energy technologies, on any variety of fuel sources and through multiple pathways, to produce and deliver hydrogen;
 - d. A description of the Applicant's efforts to integrate the proposed station with hydrogen producers and hydrogen users to leverage resources of existing hydrogen producers and hydrogen users to enhance economic viability;
 - e. Confirmation that station performance data will be collected and provided to NFCTEC; and,
 - f. A plan for becoming a retail hydrogen refueling station within 180 days of becoming an operational hydrogen refueling station.
3. Non-Technical Information
 - a. Impact on the local/regional supply chain, including economic impact and the potential for local job creation;
 - b. A description of the Applicant's readiness to proceed, including staff resources;
 - c. A description of the Applicant's commercial partners, if any, that may support the effort through a commitment to deliver FCEVs into the Connecticut market;
 - d. A description of the Applicant's efforts to leverage the resources of existing hydrogen producers and hydrogen users to enhance economic viability; and
 - e. A description of all private and/or federal cost sharing to complete the proposed project.
4. Financial Information
 - a. Evidence of financial resources to complete the proposed project, including commitment letters or other proof of access to capital, and identification of other funding partners;
 - b. A detailed project budget including, but not limited to, a description of financing details and funding sources, the amount of funding the applicant is providing, the amount of funds requested under the H2Fuels Grant Program, and how such funds will be used;
 - c. A 5 year business plan for the project including, but not limited to, market assumptions, revenue and cost assumptions, including the projected wholesale cost and retail price of hydrogen to consumers, financing structure, and company infrastructure;
 - i. The plan should include a break-even pricing (BEP) calculation, and the hydrogen sales volume associated with the BEP; as well as a comparison of the project's BEP to market prices and trends;
 - d. A certificate of good standing in the state of incorporation; and
 - e. A Dun and Bradstreet (D&B) business report that identifies potential issues including, but not limited to, outstanding, unresolved or anticipated litigation in which the Applicant and/or the business's management team is a named party, UCC filings and credit history.
5. Business Background and Experience
 - a. Organizational Structure
 - i. Names, titles and biographies of the Applicant's key management team,
 - ii. Documented experience with hydrogen refueling station development and operation and ability of the Applicant and key partners or subcontractors to complete the proposed project, and
 - iii. Commitments from public and/or private fleets to purchase FCEVs;

- b. Any environmental matters (litigation, investigations, regulatory agency correspondence) associated with the Applicant or the proposed hydrogen refueling station property;
- c. Types of insurance coverage and their corresponding limits; and
- d. Affirmation of Due Diligence.

D. Proposal Review Process

All proposals received by CCAT will be reviewed by CCAT and potential external reviewers including the Department of Energy to ensure that they comply with the mandatory minimum proposal requirements of the H2Fuels Grant Program and are complete. All necessary materials must be included with the proposal. Neither CCAT nor DEEP will accept any additional information after the due date for proposals. Applications that are found to be complete will be evaluated further. CCAT will notify Applicants, in writing, of a determination that an Applicant does not qualify or their proposal is otherwise ineligible for funding through the H2Fuels Grant Program. CCAT shall include this documentation in the Applicant's file.

E. Proposal Ranking Procedures

CCAT will assemble a proposal review team to conduct a detailed technical and financial evaluation of all proposals that meet the mandatory minimum requirements of the H2Fuels Grant Program. Proposals from qualified Applicants will be evaluated utilizing the criteria below, which are detailed in Appendix B:

- (10%) Project Summary and Approach;
- (40%) Technical and Operational Information;
- (30%) Non-Technical Information;
- (10%) Financial Information; and
- (10%) Business Background and Experience.

Technical Recommendation Report: CCAT will develop "Findings of Fact" for each complete proposal, which will detail the technical and operational characteristics for each proposed project.

Financial Recommendation Report: CCAT will produce a financial recommendation report for each qualified Applicant that complies with the mandatory minimum requirements of the H2Fuels Grant Program. The report will summarize the review process and include all findings, strengths, weaknesses, issues/concerns, and a summary recommendation. As part of the report, CCAT will express an opinion on the ability of Applicant(s) to develop the proposed project.

F. Proposal Recommendation Package

Upon completion of review of the proposals that comply with the mandatory minimum requirements of the H2Fuels Grant Program, CCAT will assemble, and submit to DEEP, a proposal recommendation package, including evaluation of each proposal's ability to meet the evaluation criteria, evaluation of the technical and financial requirements and CCAT's recommendation for vendor selection. Upon review and determination by DEEP, DEEP will notify CCAT of their decision to award or deny funding to the selected Applicant.

IX. Implementation, Agreement and Administration

A. Agreement for Financial Assistance

CCAT will present a draft Agreement to the Applicant whose proposal is deemed to be the most advantageous to the State of Connecticut, based on the scoring hierarchy outlined in Appendix B. CCAT will enter into negotiations with such Applicant. CCAT will work with the Applicant to develop an Agreement, which will provide funding for the proposed project. This Agreement will establish the terms and conditions for financial assistance and establish a date by which time the Applicant must complete the proposed hydrogen refueling infrastructure project. Upon finalization of an agreement, CCAT will notify the other parties who submitted proposals that were not selected. In the event that such an Agreement cannot be successfully negotiated, the right to negotiate such an Agreement will be awarded to the next most advantageous proposal and continue in this manner until an agreement is executed. If an Agreement cannot be executed, a new solicitation may be initiated.

Once complete, two original copies of the Agreement, one for each party, will be signed by an employee authorized to bind the Applicant's company and CCAT's Chief Administrative Officer.

B. Modifying Proposal after Approval

An Awardee must request change(s) in writing prior to enacting changes to the approved proposal, provided the change(s) conform to the following criteria:

- The proposed change does not substantially alter the function(s), need/justification, purpose, or work proposed in the original proposal;
- The proposed change does not conflict with the guidelines of the H2Fuels Grant Program;
- The proposed change would be a sound investment for the State of Connecticut;
- The proposed change would not substantially alter the operational parameters of the hydrogen refueling station;
- The proposed change does not violate any state, local, federal laws or regulations;
- The proposed change can be completed within the program timeline;
- The proposed change does not adversely alter the capability of the project to leverage additional funds; and
- The proposed change does not adversely impact the structure or financial status of the company since the original financial due diligence.

Awardee shall be notified by CCAT, in writing, regarding the status of their request to modify a proposal after approval. An amendment to the Agreement may be required.

C. Requirements after Approval

The Awardee under this solicitation will be required to adhere to the following requirements:

Safety Plan Review: The Safety Plan submitted with the funding proposal shall be reviewed, at the Awardee's cost, by the HSP and the result of that review shall be submitted to CCAT. The Awardee shall address all recommendations made by the HSP and subsequently submit an updated Plan.

Annual Safety Evaluations: Awardee funded under this solicitation shall participate in annual safety evaluations, at their cost, with the HSP for five years after the station becomes operational. The evaluations will include the station's adherence to the updated Safety Plan.

D. Notification of Completion

An Awardee must document that the hydrogen refueling station has received all applicable permits and approvals from municipal, state, and federal authorities having jurisdiction for the proposed hydrogen refueling station. Upon completion of the project, an Awardee must notify CCAT that the proposed project is complete, operational and ready for retail use, and request issuance of grant funds in writing.

E. Review and Verification

Upon receipt of a written request for the issuance of H2Fuels Grant funds, CCAT will review the approved project budget and the proposed expenditure of funds, and verify the Awardee has purchased equipment and/or constructed the hydrogen refueling station, consistent with the Awardee's Agreement and approved project budget. CCAT will conduct an on-site inspection(s) of the Awardee's hydrogen refueling station to verify and document that the proposed project has been constructed and will operate as proposed, in accordance with the terms and conditions of the Agreement. CCAT will give the Awardee reasonable notice that an inspection of the hydrogen refueling station will occur so that the Awardee may notify the appropriate staff at the hydrogen refueling station. CCAT may use additional engineering resources to verify compliance with operational parameters detailed above, and compliance with permitting requirements.

F. Authorization and Payment

Upon review and satisfactory verification of the stages of project completion outlined in Section VII, including documentation of expenditures and outlays, consistent with the approved project budget and timeline, CCAT will notify DEEP and request authorization to release the funds to the Awardee. CCAT will provide DEEP with documentation upon request. CCAT will process the request for payment, and issue a check for the grant award following the review and satisfactory verification of the completed hydrogen refueling station and no later than 45 days from DEEP's approval to release funds.

G. Reporting

Quarterly Reporting: During the construction period, the Awardee shall provide a quarterly status report to CCAT, detailing the progress made on the construction of the proposed station(s), consistent with the proposed timeline and milestones set forth in the Agreement.

Monthly Reporting: The Awardee shall provide a status report to CCAT, on a monthly basis for one year after the station attains retail status, detailing: the cost of hydrogen delivery; the quantity of hydrogen dispensed; the price of hydrogen; any maintenance completed and the associated costs; the number of vehicles utilizing the hydrogen refueling station; and any issues affecting the operation of the hydrogen refueling station, including but not limited to hydrogen pressure, hydrogen quality, station capacity, the ability to dispense back-to-back refills, and proposed resolutions of any operating issues.

The Awardee shall also provide a copy of the above-mentioned data to NCFTEC, through NREL, as part of national efforts to compile hydrogen station data such as maintenance, component reliability, etc. using standard data templates. Data is compiled without company attribution to help identify issues and provide guidance back to national and state R&D programs. For this purpose, data shall be collected for no less than 5 years following station becoming operational.

Release and Incident Reporting: The Awardee will also be required to provide safety related information such as incidents, near-misses, lessons learned or best practices, in accordance with the

Safety Planning for Hydrogen and Fuel Cell Projects guidance document, which may be used and disseminated as appropriate, without any attribution to the applicant, or any company or location, through the Department of Energy's H2tools.org website (<https://h2tools.org/hsp>).

X. Record Keeping and Retention

A. Record Keeping

The Awardee under the H2Fuels Grant Program must keep records regarding the proposed project, including but not limited to:

- Financial records;
- The application for financial assistance;
- The executed Agreement;
- Quarterly construction status reports;
- Monthly operation reports; and
- Any other program documents that may be requested.

B. Record Retention

The Awardee shall retain the records required in subparagraph A of this section for at least five (5) years after the due date (with extensions) for filing the Federal income tax return for that year. The records for the first year of operation must be retained for at least five (5) years beyond the due date (with extensions) for filing the Federal income tax return for any given year of operation.

XI. Liability & Delegation

Compliance with the requirements of the H2Fuels Grant Program is the sole responsibility of the Awardee to whom the H2Fuels Grant funds are allocated. CCAT's obligation to monitor for compliance with the requirements of the H2Fuels Grant Program does not make it liable for the Awardee's noncompliance. Should the Awardee fail to comply with the terms and conditions of the Agreement, CCAT may withhold payment or pursue any other remedies allowed by law.

XII. Proprietary Data

Applicants may request, in accordance with the provisions of Conn. Gen. Stat. section 1-210, confidentiality for certain information regarding specific trade secrets, intellectual properties or technology during the application process. Applicants shall clearly identify the type of market sensitive materials that requires confidentiality and shall include such materials in a clearly identified and sealed envelope as part of the proposed application.

APPENDICES

Appendix A: Hydrogen Refueling Station Interface Specification

Confirm compliance with the Hydrogen Refueling Station Interface Specification	
Confirm	Hydrogen Refueling Station Interface Specification
	The station will meet all applicable codes and standards for hydrogen fueling in the US and Connecticut, including, but not limited to: Connecticut Fire, Building, Electrical, and Fuel Code; NFPA 2 2016; National Electrical Code; CSA HGV 4.9, ASME B31.
	The station will be capable of maintaining consistent operation across the historical ambient temperature range in Connecticut for the last 20 years. For reference, temperature data (maximum and minimum) for Hartford/Bradley is available at: www.ncdc.noaa.gov
	The station/dispenser(s) will conform to CSA HGV 4.3 which is the appropriate standard that covers station refueling meeting SAE J2601-2016 fueling protocols. The dispenser shall not provide any other fueling protocols, other than those defined in SAE J2601-2016, or subsequent published version.
	Pressure Class: H70-T40; (H35-T20 if option installed)
	The station will have non-communication and communications available for H70 fueling according to SAE J2799-2014.
	The station will be capable of fueling at least, 200 kg in a 12 hour period (or alternate initial capacity for the first 24 months of operation). The station will be able to repeat this requirement after a time period not to exceed twelve (12) hours of no fueling. The original system design shall be scalable to allow future expansion of the ground storage capacity to be capable to fuel, at least, 400 kg in a 12 hour period, where allowable by site layout constraints.
	For category H70-T40, the station will be capable of completing, at least, 5 consecutive fills for a dispensed mass of 4 kg for each fueling, and with a 3 minute interval between each fueling (if applicable 4 consecutive fills for H35-T20). The time between fueling is defined as removing the nozzle from the previous fueling to starting the fueling sequence of the next fueling. Each fueling shall achieve a state of charge (SOC) of not less than 98.0% +2%/-0%, as measured by the station. The station shall be able to perform the next sequence of 5 consecutive fills, as defined above, after a 30 minute period with no fueling.
	All fueling at H70-T40 shall have a final SOC target of 98.0% +2.0/-0.0%.
	All fueling nozzles used by the station shall conform to SAE J2600-2012 or ISO 17268-2006, or the latest version of these standards.

Confirm compliance with the Hydrogen Refueling Station Interface Specification	
Confirm	Hydrogen Refueling Station Interface Specification
	The dispenser will have at least one (1) particulate filter with a rating no larger than five (5) micron at 98% efficiency and adequate capacity to protect the Compressed Hydrogen Storage System (CHSS) from excessive particulate loading. The filter shall be located as close as possible to the dispenser hose “breakaway” and down- stream in the process from the pre-cooler assembly. The dispenser shall also inhibit aerosols to the vehicle. The dispenser provider shall inspect and, when necessary, replace these filters on a periodic basis as determined by the maintenance plan.
	Hydrogen dispensed at the station shall meet the fuel quality requirements of SAE J2719-2015 (ISO14687-2). The station will pass a hydrogen quality test to be defined as “Operational”, and tested at least every 6 months, and prior to resuming or starting commercial operations after the hydrogen lines are potentially exposed to contamination due to maintenance, startup, or other activity.
	The station will have, for stations that have on-site generation or purification of hydrogen, a method to periodically monitor the gas stream; such as an in-line analyzer; , and/or a supplier’s fuel certification for delivered hydrogen, , so that the hydrogen quality does not exceed the requirements defined in SAE J2719 at the output of the HFS nozzle. If an analyzer is used, it will be placed immediately downstream and as close as possible to the hydrogen generation/purification equipment.
	Hydrogen dispenser performance and metering specifications must satisfy NIST Handbook 44: 2017, or applicable code for the state of Connecticut.

Appendix B: Evaluation – Measurement and Criteria

Only Applicants whose proposals meet the criteria in Section VIII B of this guidance document will be evaluated according to the criteria set forth below. Applicants should explicitly address these criteria as part of their proposal package submittal. Each proposal will be rated using a point system. Proposals will be evaluated based on a total of 100 points possible.

A. Measurement

The following measurement will be used to rate each criteria item:

- 0 – Does not, in any way, address the project requirements;
- 1 – Proposal discusses hydrogen fueling station installation, but does not reflect a minimal understanding of the project requirements;
- 2 – Proposal reflects a minimal level of understanding of project requirements;
- 3 – Proposal reflects a good understanding of project requirements with acceptable philosophy, experience and approach;
- 4 – Proposal is well crafted, to the point, and relevant with good understanding of project requirements and overall strategy; and
- 5 – Outstanding proposal demonstrating an innovative approach to the project requirements and documented accountable measures to achieve successful project completion.

B. Evaluation Criteria

Criteria	Maximum Points
<p>1. Project Summary and Approach</p> <p style="padding-left: 20px;">a. (7 points) Project Plan for the development, operation and maintenance of the proposed hydrogen refueling station, including:</p> <p style="padding-left: 40px;">i. Tasks,</p> <p style="padding-left: 40px;">ii. Deliverables, and</p> <p style="padding-left: 40px;">iii. Timeline and Milestones;</p> <p style="padding-left: 20px;">b. (3 points) Roles and Responsibilities, including collaboration with CCAT and DEEP regarding publication of information related to the hydrogen refueling station.</p>	10
<p>2. Technical and Operational Information:</p> <p style="padding-left: 20px;">a. (10 points) Location:</p> <p style="padding-left: 40px;">i. Proposed site for the refueling station in New Haven County,</p> <p style="padding-left: 40px;">ii. Potential market associated with the proposed project site, including private and state fleet vehicles, and existing hydrogen users, as well as the site’s proximity and direct or close access to I95, I91 and the I-95/I-91 interchange,</p> <p style="padding-left: 40px;">iii. The ability of the proposed project to expand capacity at the proposed site, as needed, and to other recognized sites and/or businesses within Connecticut, and</p> <p style="padding-left: 40px;">iv. Documentation of site control;</p> <p style="padding-left: 20px;">b. (25 points) Hydrogen Fueling Technologies:</p>	45

<ul style="list-style-type: none"> i. Confirmation of compliance with the elements of the Hydrogen Refueling Station Interface Specification Checklist in Appendix A, ii. A detailed site plan depicting significant features of the proposed station, including but not limited to: fuel production (if applicable), fuel delivery, storage, dispensing, signage, traffic flow, security features, public services, etc., iii. Technology and methods to be used to generate, store, and dispense 200 kg of hydrogen per day (or, if proposed, alternate initial capacity for the first 24 months of operation), iv. Method to ensure that the hydrogen dispensed complies with SAE J2719 including required fuel quality sampling upon station commissioning and every 3 months thereafter as well as after any potential exposure to contamination due to maintenance or other activities, v. Method for the measurement and payment of hydrogen fuel: how the proposed station will accept payment, including the use of major credit and/or debit cards, and fleet cards, vi. Technology that will be used to ensure that hydrogen can be consistently delivered to fuel cell vehicles in a manner consistent with the requirements of SAE J2601 over a 12 hour period; the number of dispensers that will be installed, the number of hoses to be installed on each dispenser; and the ability of the dispenser(s) and hoses to accommodate simultaneous fueling, vii. Technology that will be used to ensure the proposed station can, at a minimum, deliver the rated daily capacity over a 12 hour period from 6 a.m. to 6 p.m. with a preference for automated operation and automated payment to extend service to 24 hours/day 7 days/week, viii. Technology that will be used to ensure the proposed station is reliable, includes planned redundancy, and the capacity to dispense back-to-back refills, at a minimum of five 4kg H70-T40 fills per hour, (or four 4kg H35-T20 fills per hour if option installed), ix. Security measures and related protocols for station accessibility by the general public and state, municipal and private fleet vehicles, x. Demonstration that station readiness will be ascertained, through evaluation of station/fuel dispenser using the HyStEP device, <ul style="list-style-type: none"> 1. Should the HyStEP device be unavailable, the station/fuel dispenser fueling protocol shall be evaluated using best practices with automobile Original Equipment Manufacturers (OEMs) or other acceptable evaluation methods, 2. The application shall include milestones and due dates for the possibility of using HyStEP and automaker best practices, and xi. Demonstration that the Safety Plan was developed in accordance with the HSP's <i>Safety Planning for Hydrogen and Fuel Cell Projects</i> (March 2016, or subsequent published version); <p>c. (4 points) A description of how the proposed project will use renewable energy technologies with multiple pathways and fuel sources to produce hydrogen;</p> <p>d. (4 point) A plan for becoming a retail hydrogen refueling station within 180 days of becoming an operational hydrogen refueling station; and</p>	
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<p>e. (2 point) Confirmation that station performance data will be collected and provided to NFCTEC.</p>	
<p>3. Non-Technical Information</p> <p>a. (5 points) Impact on the local/regional supply chain, including economic impact and the potential for local job creation;</p> <p>b. (10 points) A description of the Applicant’s readiness to proceed, including staff resources;</p> <p>c. (5 points) A description of the Applicant’s commercial partners, if any, who may support the effort through a commitment to deliver FCEVs into the Connecticut market;</p> <p>d. (5 points) A description of the Applicant’s efforts to integrate the proposed station with hydrogen producers and hydrogen users to leverage resources of existing hydrogen producers and hydrogen users to enhance economic viability; and</p> <p>e. (5 points) A description of all private and/or federal cost sharing to complete the proposed project.</p>	30
<p>4. Financial Information</p> <p>a. (2 points) Evidence of financial resources to complete the proposed project, including commitment letters or other proof of access to capital;</p> <p>b. (2 points) A detailed project budget, including but not limited to, a description of financing details and funding sources, the amount of funding the applicant is providing, the amount of funds requested under the H2Fuels Grant Program and how such funds will be used;</p> <p>c. (2 points) A 5 year business plan for the project including, but not limited to, market assumptions, revenue and cost assumptions, including the projected wholesale cost and retail price of hydrogen to consumers, financing structure, and company infrastructure;</p> <p style="padding-left: 40px;">i. The plan should include a break-even pricing (BEP) calculation, and the hydrogen sales volume associated with the BEP; as well as a comparison of the project’s BEP to market prices and trends;</p> <p>d. (2 points) A certificate of good standing in the state of incorporation; and</p> <p>e. (2 points) A Dun and Bradstreet (D&B) business report that identifies potential issues including, but not limited to, outstanding, unresolved or anticipated litigation in which the Applicant and/or the business’s management team is a named party, UCC filings and credit history.</p>	10
<p>5. Business Background and Experience</p> <p>a. (2 points) Organizational Structure:</p> <p style="padding-left: 40px;">i. Names, titles and biographies of the Applicant’s key management team, and</p> <p style="padding-left: 40px;">ii. Documented experience with hydrogen refueling station development and operation and ability of the Applicant and key partners or subcontractors to complete the proposed project,</p> <p style="padding-left: 40px;">iii. Commitments from public and/or private fleets to purchase FCEVs;</p> <p>b. (1 points) Any environmental matters (litigation, investigations, regulatory agency correspondence) associated with the Applicant or the proposed hydrogen refueling station property;</p> <p>c. (1 points) Types of insurance coverage and their corresponding limits; and</p> <p>d. (1 points) Affirmation of Due Diligence.</p>	5

Appendix C: Prorated Funding Schedule

If the hydrogen refueling station has not attained 200kg/day capacity within 24 months of being deemed operational, the Awardee will be required to return awarded funds to DEEP in the amounts as outlined in the table below.

Station Capacity at 24 Months After Becoming Operational (<i>kg/day</i>)	Percentage of Awarded Funds to be Returned to DEEP (%)
200	0
150	25
100	50
75	67

Appendix D: Potential Sites for Hydrogen Refueling Station

Based on the preferential siting requirements outlined in Section VIII. B above, the following sites in the New Haven County area have expressed interest in participating in this solicitation process. Specifically, they have offered the listed locations as potential sites for the hydrogen refueling station. Applicants may explore the feasibility of these locations for their proposed project or provide an alternate location that meets the siting requirements outlined in Section VIII. B of this guidance.

Potential Locations

1. Long Wharf Mobil Mart

Contact Name: Mahmoud Karanouh

Contact Number: (203) 782-2100 x1

Location: 200 Sargent Drive
New Haven, CT 06511

2. Turnpike BP dba Xtra Fuels

Contact Name: Hakeem Nomani

Contact Email: fnomani@hotmail.com

Location: 750 1st Avenue
West Haven, CT 06516

3. Berkshire IV

Contact Name: Kate Childs

Contact Number: (203) 639-3513 x221

Contact Email: kvchilds@tuxisohrsfuel.com

Location: 170 Middletown Avenue
New Haven, CT 06513

4. Sardar LLC

Contact Name: Kenneth Coomes, Aldin Associates LP

Contact Number: (860) 748-4835

Contact Email: kcoomes@aldinassoc.net

Location: 670 Ella T. Grasso Boulevard
New Haven, CT 06519

General information regarding potential siting opportunities in the New Haven area has been developed consistent with the H2USA 2017 Northeast Fuel Cell Electric Vehicle Fleet Deployment Plan, and is available at <http://chfcc.org/hydrogen-refueling-station-new-haven-area/>.