STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL
Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@ct.gov
Web Site: portal.ct.gov/csc

VIA ELECTRONIC MAIL & CERTIFIED MAIL

December 20, 2021

Bruce L. McDermott, Esq.
Murtha Cullina LLP
265 Church Street
New Haven, CT 06510
bmcdermott@murthalaw.com

RE: **PETITION NO. 1458** – Homestead Fuel Cell 1, LLC petition for a declaratory ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed construction, maintenance and operation of a grid-side 8.4-megawatt fuel cell facility located at 441 Homestead Avenue, Hartford, Connecticut, and associated electrical interconnection to Eversource Energy's existing Northwest Hartford Substation.

Dear Attorney McDermott:

At a public meeting held on December 16, 2021, the Connecticut Siting Council (Council) considered and ruled that the above-referenced proposal meets air and water quality standards of the Department of Energy and Environmental Protection and would not have a substantial adverse environmental effect, and pursuant to Connecticut General Statutes § 16-50k would not require a Certificate of Environmental Compatibility and Public Need, with the following conditions:

1. The Petitioner shall prepare a Development and Management Plan (D&M) for this facility in compliance with Sections 16-50j-60 through 16-50j-62 of the Regulations of Connecticut State Agencies. The D&M Plan shall be submitted to and approved by the Council prior to the commencement of facility construction and shall include:
    a) A final site plan including, but not limited to, detailed site design, fuel cell layout, site access, electrical, water and natural gas connections, project interconnection detail, fencing, lighting, and site drainage;
    b) Construction site plans that include, but are not limited to, site preparation, grading, construction laydown areas, and erosion and sedimentation controls;
    c) Site maintenance/groundskeeping plan;
    d) Contact information for the construction contractor;
    e) A copy of a spill prevention control and countermeasures plan prior to commencement of construction;
    f) Contact information for the spill response contractor; and
    g) Documentation that all facility perimeter fencing, including the decorative fence proposed for the east side of the site, comply with the requirements of the National Electric Code (NEC).

2. Annually provide an updated copy of the Emergency Response Plan to local emergency responders prior to facility operation, and provide emergency response training;

3. The use of natural gas as a fuel system cleaning medium during fuel cell construction, installation or modification shall be prohibited;

4. Submit the following information to the Council 15 days prior to any fuel pipe cleaning operations related to fuel cell construction, installation, or modification:
    a. Identification of the cleaning media to be used;
    b. Identification of any known hazards through use of the selected cleaning media;
    c. Description of how known hazards will be mitigated, including identification of any applicable state or federal regulations concerning hazard mitigation measures for such media;
    d. Identification and description of accepted industry practices or relevant regulations concerning the proper use of such media;
    e. Provide detailed specifications (narratives/drawings) indicating the location and procedures to be used during the pipe cleaning process, including any necessary worker safety exclusion zones;
    f. Identification of the contractor or personnel performing the work, including a description of past project experience and the level of training and qualifications necessary for performance of the work;
    g. Contact information for a special inspector hired by the project developer who is a Connecticut Registered Engineer with specific knowledge and experience regarding electric generating facilities or a National Board of Boiler and Pressure Vessel Inspector and written approval of such special inspector by the local fire marshal and building inspector; and
    h. Certification of notice regarding pipe cleaning operations to all state agencies listed in General Statutes § 16-50j(h) and to the Department of Consumer Protection, Department of Labor, Department of Public Safety, Department of Public Works, and the Department of Emergency Management and Homeland Security;

5. Compliance with the following codes and standards during fuel cell construction, installation or modification, as applicable:
    a. NFPA 54
    b. NFPA 853; and
    c. ASME B31;

6. Unless otherwise approved by the Council, if the facility authorized herein is not fully constructed within three years from the date of the mailing of the Council's decision, this decision shall be void, and the facility owner/operator shall dismantle the facility and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made. The time between the filing and resolution of any appeals of the Council's decision shall not be counted in calculating this deadline. Authority to monitor and modify this schedule, as necessary, is delegated to the Executive Director. The facility owner/operator shall provide written notice to the Executive Director of any schedule changes as soon as is practicable;

7. Any request for extension of the time period to fully construct the facility shall be filed with the Council not later than 60 days prior to the expiration date of this decision and shall be served on all parties and intervenors, if applicable, and the City of Hartford;

8. Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;

9. The facility owner/operator shall remit timely payments associated with annual assessments and invoices submitted by the Council for expenses attributable to the facility under Conn. Gen. Stat. §16-50v;

10. The facility owner/operator shall file an annual report on a forecast of loads and resources pursuant to Conn. Gen. Stat. §16-50r;

11. This Declaratory Ruling may be transferred, provided the facility owner/operator/transferor is current with payments to the Council for annual assessments and invoices under Conn. Gen. Stat. §16-50v and the transferee provides written confirmation that the transferee agrees to comply with the terms, limitations and conditions contained in the Declaratory Ruling, including timely payments to the Council for annual assessments and invoices under Conn. Gen. Stat. §16-50v; and

12. If the facility owner/operator is a wholly owned subsidiary of a corporation or other entity and is sold/transferred to another corporation or other entity, the Council shall be notified of such sale and/or transfer and of any change in contact information for the individual or representative responsible for management and operations of the facility within 30 days of the sale and/or transfer.

This decision is under the exclusive jurisdiction of the Council and is not applicable to any other modification or construction. All work is to be implemented as specified in the petition, dated July 13, 2021, and additional information received July 26, 2021, September 10, 2021, September 14, 2021, and October 1, 2021, and in compliance with Public Act 11-101, An Act Adopting Certain Safety Recommendations of the Thomas Commission.

Enclosed for your information is a copy of the staff report on this project.

Sincerely,

Melanie A. Bachman
Executive Director

MAB/IN/lm

Enclosure: Staff Report dated December 16, 2021

c: Service List dated August 27, 2021
The Honorable Luke Bronin, Mayor, City of Hartford (luke.bronin@hartford.gov)
Ewan Sheriff, Fire Marshal, City of Hartford (shere001@hartford.gov)

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Petition No. 1458
Homestead Fuel Cell 1, LLC
441 Homestead Avenue
Hartford, Connecticut

Staff Report
December 16, 2021

Introduction

On July 14, 2021, the Connecticut Siting Council (Council) received a petition from Homestead Fuel Cell 1, LLC (HFC1), a wholly owned subsidiary of Fuel Cell Energy Inc. (FCE), for a declaratory ruling, pursuant to Connecticut General Statutes (CGS) §4-176 and §16-50k, for the installation of a grid-side 8.4-megawatt fuel cell facility and associated equipment at 441 Homestead Avenue, Hartford, Connecticut.

HFC1 met with City of Hartford (City) officials on April 1, 2021 to discuss the project. On July 12, 2021, HFC1 mailed notification of the project to the City, required state officials and agencies, and abutting property owners. HFC1 did not receive any comments from the abutting property owners.

C.G.S. §22a-20a requires applicants seeking a permit from the Department of Energy and Environmental Protection (DEEP) or the Council for a new or expanded facility defined as an "affecting facility" that is proposed to be located in an environmental justice community to file an Environmental Justice Public Participation Plan (EJPPP). Hartford is an environmental justice community. However, the proposed facility is not an "affecting facility" under C.G.S. §22a-20a because it is a Class I renewable resource under 10 MW. Thus, C.G.S. §22a-20a does not apply to the facility, and an EJPPP is not required.

On July 16, 2021, the Council sent correspondence to the City stating that the Council has received the petition and invited the municipality to contact the Council with any questions or comments by August 13, 2021. No comments from the City were received.

Also, on July 16, 2021, pursuant to Regulations of Connecticut State Agencies (RCSA) §16-50j-40, the Council notified all state agencies listed therein, requesting comments regarding the proposed project be submitted to the Council by August 13, 2021. The Connecticut Airport Authority (CAA) submitted comments on July 21, 2021[1]. HFC1 provided a response to the CAA comments on July 26, 2021[2]. No other state agency comments were received.

While the Council is obligated to consult with and solicit comments from state agencies by statute, the Council is not required to abide by the comments from state agencies. [3]

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[1] https://portal.ct.gov/-/media/CSC/3_Petitions-medialibrary/Petitions_MediaLibrary/MediaPetitionNos1451-1460/PE1458/PROCEDURALCORRES/pe1458_CAA_commentsacknowledged_20210721.pdf

[2] https://portal.ct.gov/-/media/CSC/3_Petitions-medialibrary/Petitions_MediaLibrary/MediaPetitionNos1451-1460/PE1458/PETITIONERSUBMISSIONS/PE145820210726-Letter-to-the-Connecticut-Siting-Council-re-Notification-of-Homestead-Fuel-Cell-1-LLC.pdf

[3] *Corcoran v. Connecticut Siting Council*, 284 Conn. 455 (2007)

On August 9, 2021, Allco Renewable Energy Limited (Allco) requested Connecticut Environmental Protection Act (CEPA) intervenor status under CGS §22a-19. On August 27, 2021, the Council granted Allco CEPA intervenor status.

The Council issued interrogatories to HFC1 on August 27, 2021. HFC1 provided responses to Council interrogatories on September 10, 2021.

On September 10, 2021, pursuant to CGS §4-176(e) of the Uniform Administrative Procedure Act which requires an administrative agency to take action on a petition within 60 days of receipt, the Council voted to set the date by which to render a decision on the petition as January 10, 2022. This date is the statutorily mandated 180-day decision deadline for this petition.

On September 17, 2021, Allco submitted interrogatories to HFC1. On October 1, 2021, HFC1 provided responses to Allco's interrogatories.

Public Benefit

The project would be a "grid-side distributed resources" facility, as defined CGS § 16-1(a)(37). CGS § 16a-35k establishes the State's energy policy, including the goal to "develop and utilize renewable energy resources…to the maximum practicable extent." The proposed facility is a distributed generation resource and will contribute to fulfilling the State's Renewable Portfolio Standard as a low emission Class I renewable energy source. On or about June 13, 2018, the project was selected as part of a DEEP Request for Proposals (RFP) under Public Act 17-144 – An Act Promoting the Use of Fuel Cells for Electric Distribution Benefits and Reliability. Operation of the fuel cell facility would reduce electric load and stress on the system.

Power produced by the facility would be sold to Eversource Energy (80.38%) and the United Illuminating Company (UI) (19.62%) in accordance with a power purchase agreement (PPA). The PPA is for 7.4 MW. Under its terms, any excess power delivered to the electric distribution companies would be at the prevailing wholesale power rate. The PPA also has a 20-year term and there are no provisions for extension or renewal.

The PPA does not include the utilization of waste thermal energy; however, the waste heat from the facility will be available on demand for any future potential off-takers.

HFC1 intends to participate in the ISO-New England, Inc. Forward Capacity Market.

Project Site

The site[4] is a 1.84 acre rectangular-shaped parcel located at the intersection of Homestead Avenue and Albany Avenue. The host property is owned by Talar Properties, LLC, is zoned commercial and industrial mix (CX-1) and is surrounded by mostly commercial properties.

The proposed site has previously been used for various industrial purposes, including automobile garages and dry-cleaning services, and hosted a building that was removed. A 140-foot tall telecommunications tower is located in the northwestern portion of the parcel within a fenced equipment compound.

[4] RCSA §16-50j-2a(29), "Site" means a contiguous parcel of property with specified boundaries, including, but not limited to, the leased area, right-of-way, access and easements on which a facility and associated equipment is located, shall be located or is proposed to be located.

An existing car wash and Albany Avenue (Route 44) are located to the north of the host parcel, Eversource's 115-kV Northwest Hartford Substation and Connecticut Department of Transportation (CDOT) railroad tracks are located to the west, a commercial property is located to the south and Homestead Avenue and another commercial property are located to the east. The nearest residential property line is located at 29 Baltimore Street about 282 feet to the southeast of the site across Homestead Avenue.

The CDOT railroad tracks are currently not operational.

Proposed Project

The proposed facility would consist of three natural gas fueled SureSource 3000 fuel cell units installed on a concrete foundation approximately one-foot above grade.[5] The fuel cell units will be manufactured in Connecticut and installed and operated by FCE on behalf of HFC1. The fuel cell units would be delivered to the site by truck.

Each unit would be about 69-feet 11-inches long and about 43-feet 2inches wide and have a footprint of about 3,017 square feet. Each of the fuel cell units would have a vertical exhaust stack that would reach a height of about 33-feet above ground level (agl) including the concrete pad. The exhaust stacks would be the tallest features of the proposed facility. Each unit would generate about 2.8 MW of power and would have an operational service life of 20 years.

Each fuel cell unit would consist of three main sections:

a) The mechanical portion of the fuel cell unit which comprises of the desulfurization system, the main process skid and the water treatment system that provides ventilation, cleans and heats fuel and water and includes the control system for the unit;
b) Two 1.4 MW fuel cell power modules which convert the fuel supply into direct current (DC) power; and
c) The electrical portion of the fuel cell unit which comprises two power conditioning units, two transformers, and one switchgear for grid connection that converts DC power from the fuel cell into AC power.

The fuel cell units utilize non-combustion carbonate fuel cell technology that consumes natural gas as fuel to generate electrical power. The fuel cell units would be replaced every 5-7 years.

The facility would be grid-interconnected to Eversource's Northwest Hartford Substation at 23-kV. The proposed connection path would be above ground on existing and proposed utility poles and extend from the proposed facility along Homestead Avenue and Albany Avenue and terminated at the 23-kV distribution system at the rear of the facility and leading to the substation. A 2018 feasibility study indicated that the Northwest Hartford Substation could accommodate the generation of the fuel cell facility with minor upgrades, including, but not limited to, installation of a transfer trip, primary cable, switchgear, metering cabinet and a larger manhole on Homestead Avenue.

An updated Feasibility Study and associated System Impact Study are currently pending. This project would also require an ISO-NE transmission interconnection study.

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[5] There is space on the proposed site for a fourth 2.8 MW fuel cell unit. HFC1 submitted a bid into the Shared Clean Energy Facility (SCEF) RFP for a separately metered 2.8 MW fuel cell unit that is proposed to be located in this space on the site and would request an amendment to the petition for the fourth unit if it is selected in the SCEF RFP.

The existing Connecticut Natural Gas (CNG) pipeline on Homestead Avenue is not adequate to serve the fuel cell facility. A new and upgraded natural gas pipeline is necessary for the project to become operational. HFC1 is consulting with CNG on the design and installation of a new upgraded natural gas pipeline for the project.

The fuel cell facility is microgrid capable, however the proposed facility will not operate as part of a microgrid at this time.

FCE would construct the facility and maintain the fuel cell units. HFC1 would own the facility.

Construction of the project is expected to begin in the fourth quarter of 2021 and would take approximately 12 months. Construction hours would be from 7:00 am to 5:00 p.m. Monday through Friday. If Saturday and Sunday work is required, the construction hours would be between 9:00 a.m. and 5:00 p.m. No work is planned at night.

Once operational, the facility would be unstaffed, requiring only occasional vehicle trips to the facility for routine site maintenance activities.

At the end of the 20-year facility life span, all fuel cell components would be removed and the utility connections properly isolated. The on-site concrete pads and associated structures would remain in place.

Environmental Effects and Mitigation

Air Emissions

Air emissions produced during the operation of the facility would not trigger any regulatory thresholds and would not require a DEEP Air Permit. The proposed facility would emit 36,000 metric tons per year of Carbon dioxide (CO_2) without waste heat recovery. The utilization of waste heat recovery would not affect the projected emissions from the facility.

The proposed facility would emit 644 tons per year (tpy) Carbon dioxide equivalent (CO_2e) of methane (CH_4), 0.2 tpy of nitrous oxide (N_2O), no sulfur hexafluoride (SF_6), hydrofluorocarbons (HFCs) or perfluorocarbons (PFCs), which are greenhouse gases defined in RCSA Section 22a-174-1(49). The Project would also emit negligible amounts of sulfur oxides (0.004 tpy), volatile organic compounds (0.7 tpy) and particulate matter (0.0007 tpy).

Water Resources

The facility would require about 39,000 gallons per day (gpd) of raw water for its operation and will discharge about 19,500 gpd of wastewater to the Metropolitan District. The amount of wastewater discharged would be greatly reduced if the waste heat were to be utilized. A new water line would also be installed.

The DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (General Permit) requires implementation of a Stormwater Pollution Control Plan to prevent the movement of sediments off construction sites into nearby bodies of water and to address the impacts of stormwater discharges from a project after construction is completed. The General Permit authorizes the discharge of stormwater at a site with a total disturbance of one acre or more of land area. The project entails site disturbance in excess of one acre. A DEEP issued General Permit for Stormwater Management is required prior to commencement of construction. The petitioner has not yet submitted an

application for a General Permit. HFC1 anticipates that an application will be submitted by its contractor one month prior to the commencement of construction.

The site is not within a Federal Emergency Management Agency-designated flood zone. There are no wetlands or watercourses near the site. The site is not within a DEEP-designated Aquifer Protection Area. The nearest wetland is about 300 feet southeast of the facility. The proposed project would be constructed consistent with the *2002 Connecticut Guidelines for Soil Erosion and Sedimentation Control.*

Soil

The project site is not located on any prime farmland soils. The project site is previously disturbed and has undergone remedial activities such as soil relocation and groundwater remediation. A Phase I Environmental Site Assessment (ESA) and Phase II ESA conducted in February and March 2019, respectively, determined contaminant releases had occurred on the site. A Phase III ESA and Remedial Action Plan were completed in January 2021. The Remedial Action Plan includes ongoing remediation of soil and groundwater at the site. The proposed fuel cell facility is designed as an engineered cap in accordance with DEEP Remediation Standard Regulations.

Wildlife

The project area is not located within a DEEP Natural Diversity Database (NDDB) buffered area. Correspondence from DEEP dated November 2, 2020, determined that the project would not have an impact on State listed endangered species or species of special concern.

Historic and Recreational Resources

By letter dated December 24, 2020, SHPO determined that the proposed project would not have an adverse effect on sites listed on or eligible for listing on the National Register of Historic Places.

Visibility

The site is within an urban area developed with a mix of commercial and industrial uses. It hosts an existing 140-foot telecommunications tower and is adjacent to CDOT railroad tracks beyond which Eversource's Northwest Hartford Substation is located.

Views of the proposed facility from the west and northwest would be obstructed by the existing tree line, views from the south will be obstructed by a commercial building. Landscaping and decorative fencing that would be installed on the eastern side of the facility would further soften the view of the facility from the east.

Public Safety

Natural Gas Safety

Natural gas would not be stored at the site. It will be delivered through a connection to an upgraded underground pipeline from the CNG gas main on Homestead Avenue.

Odorized natural gas would be supplied to the fuel cell facility at a nominal pressure of 20 psig[6]. The fuel cell units would reduce the gas pressure to 15 psig and direct flow through the desulfurizer vessels for deodorization.

The natural gas supply contains sulfur which is a fuel cell system catalyst contaminant. Each fuel cell has a desulfurization system that would remove sulfur. The desulfurization process would not result in sulfur being released into the air. The sulfur and other byproducts would be stored/contained within the sealed desulfurizer vessel.

Maintenance of the desulfurizer vessel and replacement of the desulfurizer media is anticipated to be done annually. The vessels would be removed from the fuel cell units and transported by a licensed hazardous waste transporter to an approved disposal facility. Hazardous materials would not accumulate within the fuel cell stacks.

In the event of a fire, system malfunction or emergency the plant control system would initiate an emergency shut down sequence which isolates the fuel cell units from the external fuel source and disconnects the fuel cell inverters from the grid.

A pressure relief safety valve is also incorporated into the project design. It is designed to automatically restrict and stop flow when natural gas flow exceeds certain limits, thus limiting the risk of escaping natural gas due to damage or a pipe failure.

Before commissioning the proposed facility, HFC1 would use compressed air as pipe cleaning media, in accordance with Public Act 11-01, An Act Adopting Certain Safety Recommendations of the Thomas Commission.

Approximately 3,000 gallons of liquid nitrogen will be stored on site. The liquid nitrogen is used in gaseous form to purge the fuel cell modules of all humidified natural gas and prevent ambient air intrusion during an emergency shut down event or when the facility is not in operation. HFC1 will notify DEEP and the Hartford Fire Department of all hazardous materials stored on the site.

Noise

The primary sources of equipment noise for the proposed project are the air blower and the piping that delivers air and fuel to the cell modules.

Sound modeling techniques were used to estimate the potential noise impacts to industrial, commercial and residential receptors in the project area.

RCSA §22a-69-2.2 notes that, "Where multiple uses exist within a given Noise Zone, the least restrictive land use category for Emitter and Receptor shall apply…" Accordingly, given the zoning classification of the subject property and its past and current use, the proposed facility would be considered a Class C (Industrial) emitter. Please see Table 1 below.

Emitter Class	**RECEPTOR ZONE**		
	Industrial	***Commercial***	***Residential (day/night)***
Industrial	70	66	61/51
Commercial	62	62	55/45

[6] **psig** (pound-force per square inch gauge) is a unit of pressure relative to the surrounding atmosphere.

Residential	62	55	55/45

Table 1. DEEP Noise Control Regulations.

Results indicate that projected sound impacts are not expected to exceed 46 dBA at residential property boundaries, 54 dBA at commercial property boundaries and 59 dBA at industrial property boundaries. Thus, the operation of the proposed fuel cell facility would meet DEEP Noise Control Regulations.

The facility layout incorporates engineering design considerations that act as sound emission mitigation measures. For example, the largest sound-generating associated equipment is located in the central portion of the facility layout and is shielded by other associated equipment. Furthermore, HFC1 incorporated vibration isolation of rotating equipment and a partial sound enclosure of the main process air blower.

Any noise associated with the construction of this project would be temporary in nature and exempt per DEEP Noise Control Regulations.

Security

The facility would be remotely monitored by FCE's Global Monitoring and Control Center personnel on a 24/7 basis to detect abnormalities in operation. The fuel cell facility would be designed in accordance with American National Standards Institute and Canadian Standards Association (ANSI/CSA) America FC 1-2004 for stationary fuel cell power systems and includes extensive safety control systems, including both automatic and manual shutdown mechanisms that comply with pertinent engineering standards. If operational abnormalities occur, the fuel cell can be remotely shut down and personnel dispatched to service the facility.

The project area would be enclosed within an 8-foot tall chain link fence with a curved anti-climb feature on the north, south and west sides of the facility. The east side of the facility would be enclosed by a decorative fence, the design of which is to be determined by the City.

The fence would be about 32 feet from Homestead Avenue to the east, about 12 feet to the railroad tracks to the west and about 150 feet to Eversource's Northwest Hartford Substation across the tracks further to the west. The boundary of the abutting commercial parcel to the north is about 175 feet from the northern fence line of the facility. The adjoining parcel to the south is about 43 feet from the southern fence line.

The site will have a locked gate and limited access for authorized personnel only. If approved, staff recommends a condition that HFC1 submit documentation that all facility perimeter fencing, including the decorative fence proposed for the east side of the site, comply with the requirements of the National Electric Code (NEC).[7]

Site lighting will be turned on at night time for security purposes and lighting fixtures will be selected and installed in accordance with the International Dark Sky Association (IDA) Guidelines.

Fire Protection

In accordance with the National Fire Protection Association, Standard for the Installation of Stationary Fuel Power Systems (NFPA 853) FCE has provided a Fire Prevention and Emergency Plan for this fuel cell

[7] Section 110.31 of the National Electrical Code (NEC), 2020 Edition notes that, for over 1,000 Volts, "...a wall, screen, or fence shall be used...A fence shall not be less than 7 feet in height or a combination of 6 feet or more of fence fabric and a 1 foot or more...utilizing barbed wire or equivalent."

installation. FCE's Fire Prevention and Emergency Plan provides guidance on fire prevention procedures, inspections, housekeeping practices, flammable material storage, control of ignition sources, procedures for fire protection equipment impairment, fire emergency plans and other information.

The proposed transformers would be filled with 100% biodegradable fire-retardant oil and will not have secondary containment.

The closest facility associated equipment to Route 44 is the nitrogen storage tank at about 290 feet away. The closest facility associated equipment to Homestead Avenue is the gas supply meter which is set back about 40 feet and is surrounded by bollards. Bollards would also be installed around the switch gear.

In the event that the CDOT railroad becomes operational, the fuel cell system will have manual and automatic gas shut off features.

The detection of a potential combustible gas mixture or a fire will result in an emergency facility shutdown and an alarm notification to service personnel. The natural gas supply valves would close and nitrogen (an inert gas) from the on-site storage tank would purge the fuel cell stack and fuel processing system.

Also, Emergency Shut Down push buttons will be located throughout the site and can be used by site personnel or emergency responders.

FCE will coordinate with local first responders prior to the commencement of site operation to review emergency response procedures specific to the proposed fuel cell facility. FCE will also schedule a walk around tour and on-site training for the local fire department prior to construction completion.

Aviation Safety

Each fuel cell has its own exhaust stack reaching a maximum height of approximately 33 feet above ground level. The nearest airports to the proposed facility are the Hartford-Brainard Airport and the Rentschler Heliport at approximately 3.8 miles and 4.5 miles from the facility site, respectively.

In response to the CAA comments, and in accordance with Federal Aviation Administration (FAA) Form 7460, HFC1 will provide notice to the FAA of the height of the crane to be employed during construction.

The fuel cell exhaust stream does not produce any vapor plumes from condensing water due to the high temperature of the stream and upward vertical velocity in the design of the exhaust stack.

Conclusion

The project is a distributed energy resource with a capacity of not more than sixty-five megawatts, meets air and water quality standards of the DEEP, and would not have a substantial adverse environmental effect. As a low-emission Class I renewable energy source, it would reduce the emission of air pollutants that contribute to smog and acid rain, and to a lesser extent, global climate change, and furthers the State's energy policy by developing and utilizing renewable energy resources and distributed energy resources.

The project was selected in a competitive RFP process and would not cause unreasonable pollution, impairment or destruction of the public trust in the air, water or other natural resources of the state.

Recommendations

If approved, staff recommends the following conditions:

1. The Petitioner shall prepare a Development and Management Plan (D&M) for this facility in compliance with Sections 16-50j-60 through 16-50j-62 of the Regulations of Connecticut State Agencies. The D&M Plan shall be submitted to and approved by the Council prior to the commencement of facility construction and shall include:
    a) A final site plan including, but not limited to, detailed site design, fuel cell layout, site access, electrical, water and natural gas connections, project interconnection detail, fencing, lighting, and site drainage;
    b) Construction site plans that include, but are not limited to, site preparation, grading, construction laydown areas, and erosion and sedimentation controls;
    c) Site maintenance/groundskeeping plan;
    d) Contact information for the construction contractor;
    e) A copy of a spill prevention control and countermeasures plan prior to commencement of construction;
    f) Contact information for the spill response contractor; and
    g) documentation that all facility perimeter fencing, including the decorative fence proposed for the east side of the site, comply with the requirements of the National Electric Code (NEC).
2. Annually provide an updated copy of the Emergency Response Plan to local emergency responders prior to facility operation and provide emergency response training.

Figure 1. Aerial view of the project area and surrounding development

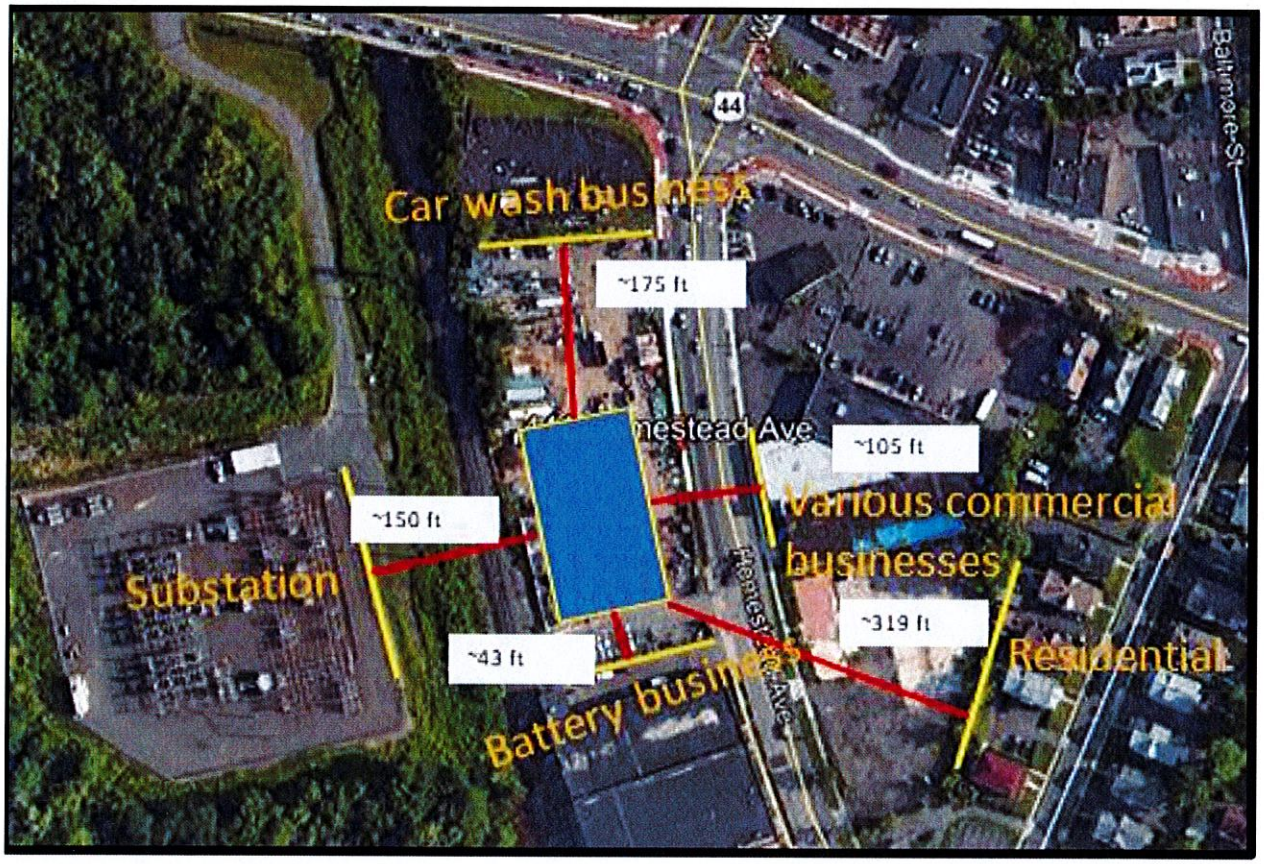

Figure 2. Site Plan

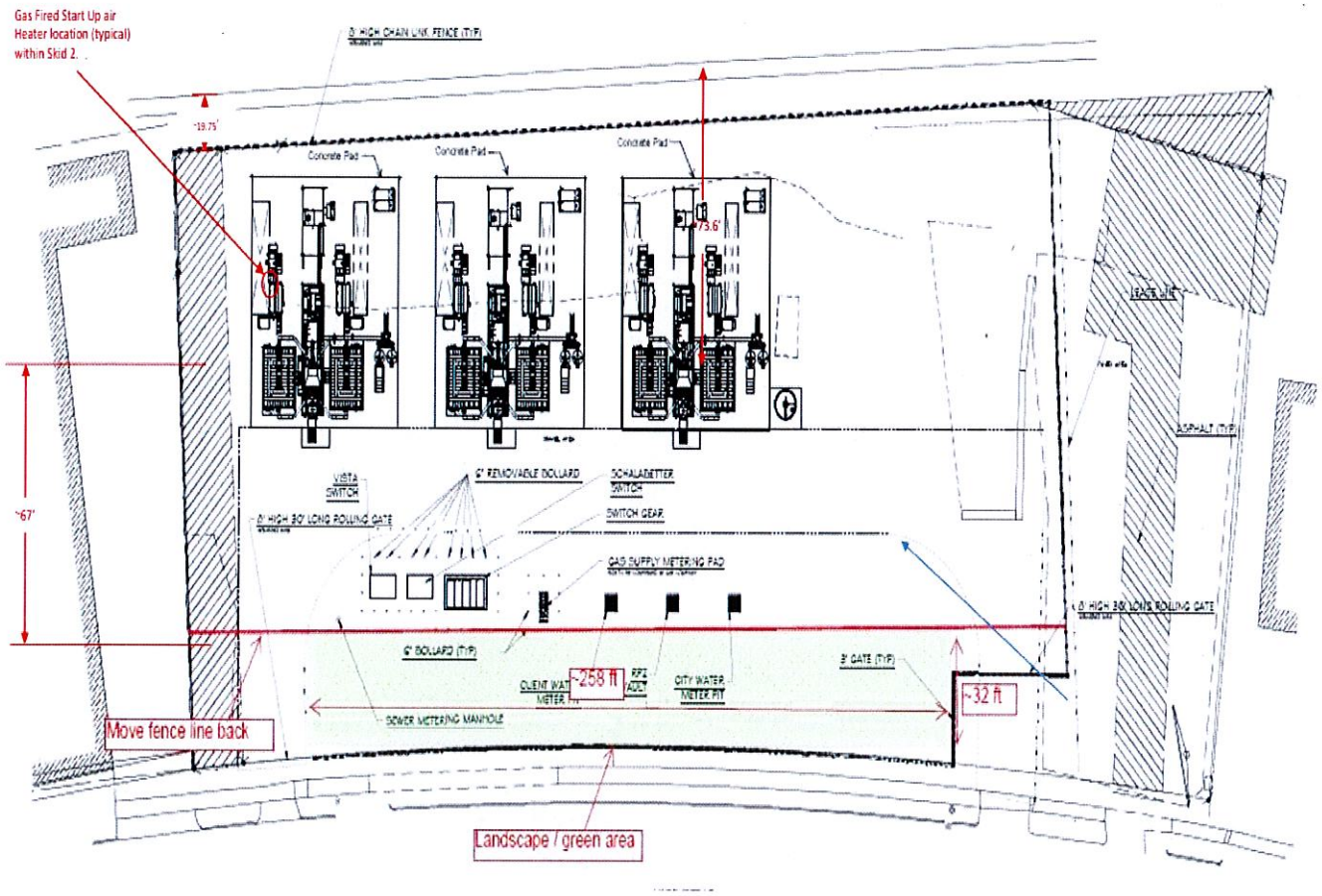

Figure 3. Typical equipment component layout of the SureSource 3000 Fuel cell power plant

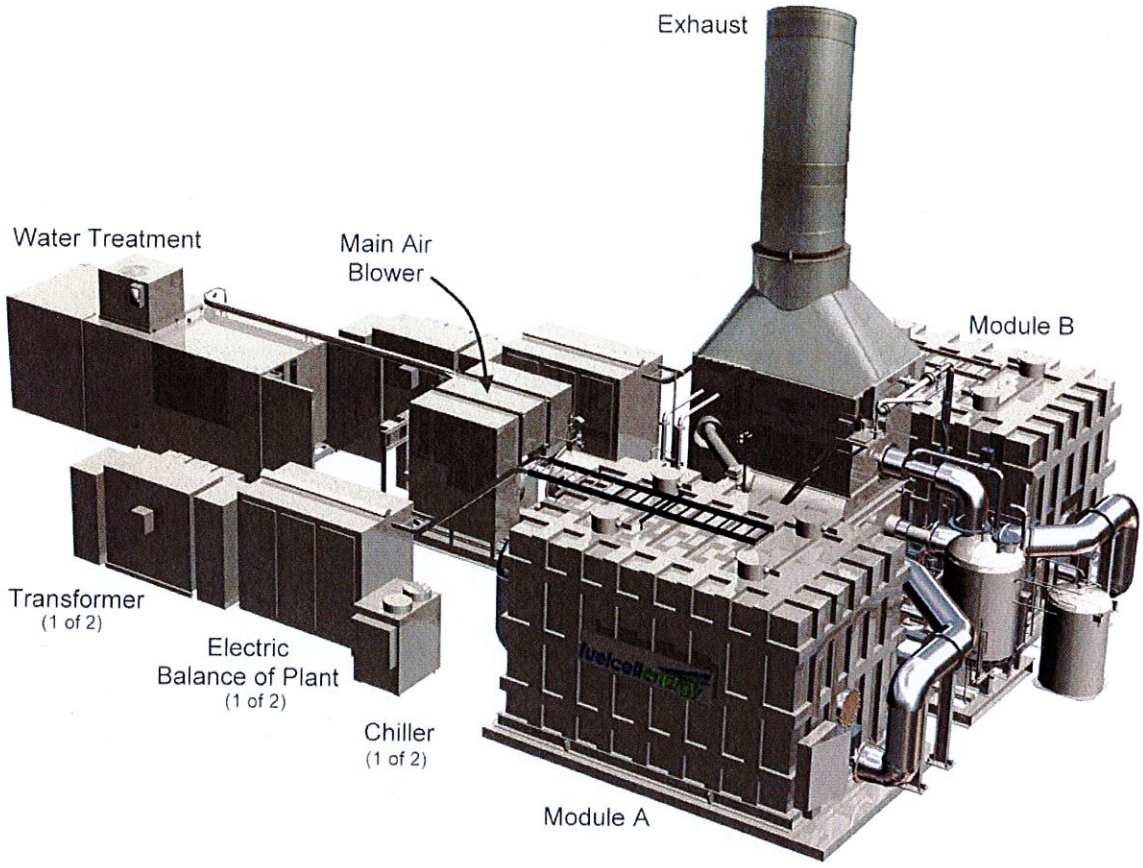

Figure 4. Existing Site conditions

Figure 5. Simulation of proposed facility

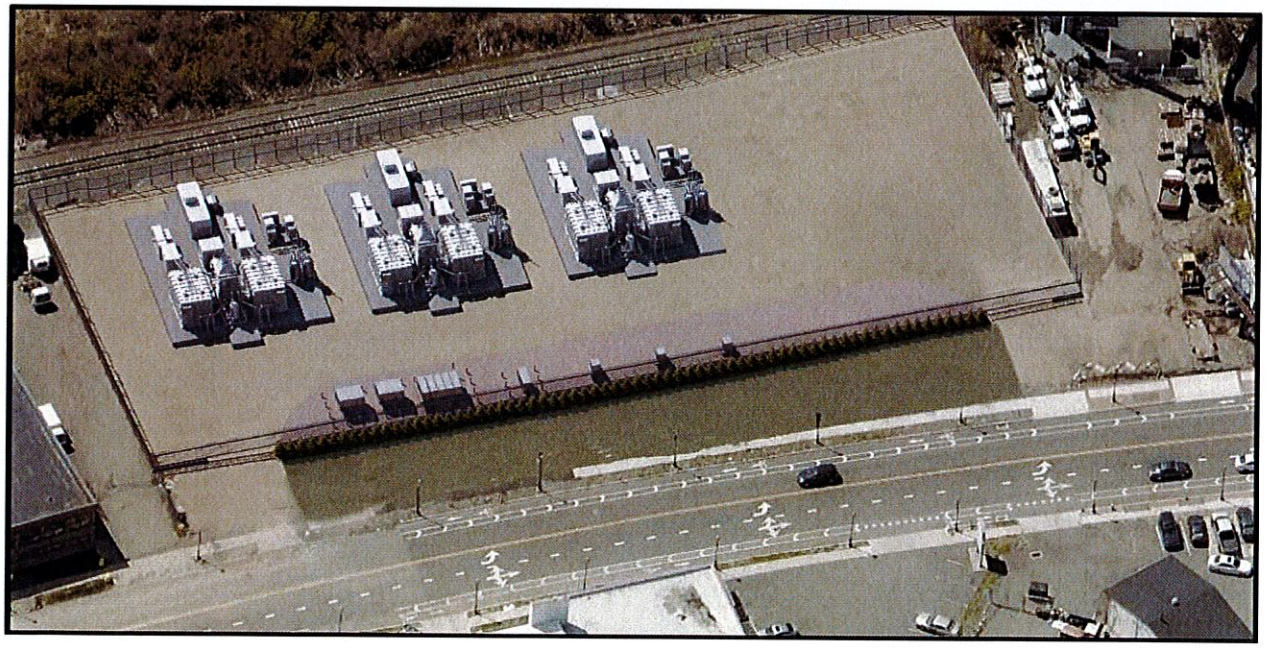

Figure 6. Municipal Zoning Map showing location and Zoning

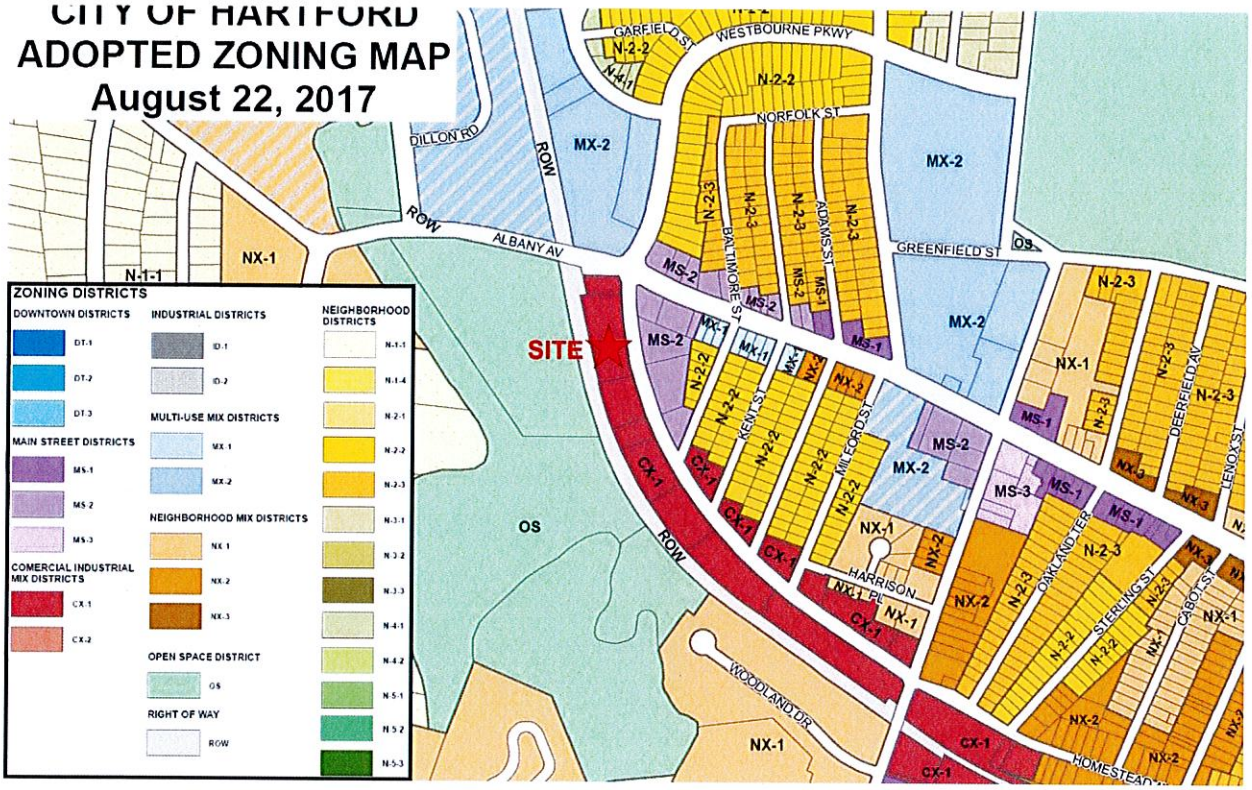

Figure 7. View from Homestead Avenue