

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

August 21, 2025

Steve Pearson VFS, LLC 5827 Terex Clarkstown, MI 48346 spearson@vfsmi.com

RE: **PETITION NO. 1669** – VFS, 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 customer-side 460-kilowatt fuel cell facility and associated equipment located at Housatonic Community College, 900 Lafayette Boulevard, Bridgeport, Connecticut, and associated electrical interconnection. **Council Interrogatories to Petitioner.**

Dear Steve Pearson:

The Connecticut Siting Council (Council) requests your responses to the enclosed questions no later than September 11, 2025. Please submit an original and 15 copies to the Council's office and an electronic copy to siting.council@ct.gov. In accordance with the State Solid Waste Management Plan and in accordance with Section 16-50j-12 of the Regulations of Connecticut State Agencies, the Council requests all filings be submitted on recyclable paper, primarily regular weight white office paper. Please avoid using heavy stock paper, colored paper, and metal or plastic binders and separators. Fewer copies of bulk material may be provided as appropriate.

Please be advised that the original and 15 copies are required to be submitted to the Council's office on or before the September 11, 2025 deadline.

Copies of your responses are required to be provided to all parties and intervenors listed in the service list, which can be found on the Council's website under the "Pending Matters" link.

Any request for an extension of time to submit responses to interrogatories shall be submitted to the Council in writing pursuant to §16-50j-22a of the Regulations of Connecticut State Agencies.

Sincerely,

Melanie Bachman Executive Director

MAB/MP

Enclosure: Revised Schedule, dated August 21, 2025

c: Service List, dated May 13, 2025

Petition No. 1669 VFS, LLC

Housatonic Community College 900 Lafayette Boulevard, Bridgeport, Connecticut

Interrogatories August 21, 2025

Notice

- 1. Referencing Petition pp. 12 and 15, VFS, LLC (VFS) plans to submit plans for the proposed facility to City of Bridgeport (City) officials and request a meeting with the City Chief Building Official. Provide details of consultation with municipal officials including personnel contacted, dates of contact, and municipal comments and how these comments were addressed.
 - R1. The Building Official declined the meeting until CSC approves the project.
- 2. Has VFS received any comments since the petition was submitted to the Council? If so, summarize the comments and state how these comments were addressed.

 R2. No.

Project Development

- 3. What is the estimated cost of the proposed project? R3. 4.16 million
- 4. Is the project, of any portion of the project, proposed to be undertaken by state departments, institutions or agencies, or to be funded in whole or in part by the state through any contract or grant?
 - R4. The project is privately funded.
- 5. Referencing Petition p. 15, what is the term of the contract for VFS to provide Low Emission Renewable Energy Credits (LREC) to The United Illuminating Company (UI)? If the proposed facility operates beyond the terms of such agreement, will VFS decommission the facility or seek other revenue mechanisms?
 - R5. Other revenue mechanisms will be sought out.
- 6. Referencing Petition p. 15, what is the "SAM Program?" How will the facility use virtual net metering, and which entities would purchase the energy, capacity and renewable energy credits (RECs)?
 - R6. The "SAM" program or "NREZ State, Agricultural, Municipal virtual Net Metering program allows for virtual net metering on State properties such as HCC. The point of connection must be behind a meter on the site. Contributory meters are allowed to be on other sites as long as they are owned by the same entity. This Facility will not utilize RECS.
- 7. If VFS transfers the facility to another entity, would VFS provide the Council with a written agreement as to the entity responsible for any outstanding conditions of the Declaratory Ruling and quarterly assessment charges under CGS §16-50v(b)(2) that may be associated with the facility, including contact information for the individual acting on behalf of the transferee?

 R7. VFS will comply with all CT. Siting Council rules regarding transfers of ownership to other entities.

Proposed Site

8. Submit a map clearly depicting the boundaries of the fuel cell facility site and the boundaries of the host parcel. Under Regulations of Connecticut State Agencies (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.

R8. See attachment #1

9. How many acres is the host parcel? R9. 3.3 acres total.

10. Referencing Petition p. 8, VFS notes that, "The nearest residential properties are over 1000' to the North of the proposed Facility." Is this distance to the nearest off-campus residential property line or the nearest off-campus residential structure? Please clarify and provide distance and directions to the nearest residential structure and nearest residential property line from the proposed facility. Provide the address(es) of such parcel(s).

R10. According to GIS data the nearest residential location is 1083 Broad St. The distance to the property line is 1020 ft. as measured in the interactive mapping system.

11. What is the distance and direction of the nearest on-campus residential structure from the proposed fuel cell facility?

R11. There is no on campus residential housing.

12. Explain why the proposed site was selected for this Project.

R12. The Facility location was chosen for its proximity to the boiler room and the fact that the area is already fenced. The area is further preferred because the Facility will not be visible from the street.

13. Submit photographs of the proposed fuel cell facility site with descriptive captions and/or a map identifying the locations of the photographs.

R13. See attachment 2 and 3.

14. Provide the total area (in acres) of the limits of disturbance for construction of the proposed facility. R14. 0.0573 acres or 2500 SF.

Proposed Facility and Associated Equipment

- 15. Would the proposed facility provide thermal energy to any buildings on the campus? Explain. R15. The Facility will provide 1.3 MMBtu of available thermal energy for use in preheating the boiler return.
- 16. What percentage of each building's thermal load would be served by waste heat from the facility? R16. > 50% of the building thermal load will be served by the Facilityby means of preheating the boiler return flow.
- 17. Would any transformers be installed? If yes, please respond to the following: R17. No transformers will be required. The Facility will connect at 480 volts directly to an existing switchboard.

- a) What is the size (kVA), primary and secondary line voltages and quantity of the proposed transformers?
- b) What type of insulating oil is used within the transformer(s)? Is it biodegradable?
- c) Do the transformer(s) have a containment system in the event of an insulating oil leak?
- d) Would the transformer(s) have a low oil alarm?

Energy Output

- 18. Referencing Petition p. 3, provide the percentage of the overall school baseload that would be supplied by the facility.
 - R18. Approximately 70% of the school baseload energy will be provided by the Facility
- Would the proposed facility operate in parallel with the grid? Would any excess power go to the grid during periods of lighter on-campus loads? Explain.
 R19. The Facility will be connected in parallel with the grid.
- 20. Would the proposed facility provide any backup emergency power for any structures on campus in the event of a power outage? Are there existing sources of backup power on the campus? Explain. R20. Yes, the Facility will provide limited backup power for select critical circuits.

Electrical Interconnection

- 21. Is an interconnection application with The United Illuminating Company required? If yes, has an interconnection application been submitted? If so, what is the status?

 R21. An interconnection application has been filed with United Illuminating and is currently under review.
- 22. Referencing Petition Drawing GA1.0-I, would the operation of the proposed fuel cell facility interfere with the operation of the existing roof-top solar installation or increase electric and magnetic fields from the cumulative operation of the fuel cell and solar installation? Explain. R22. The fuel cell will be connected behind a different meter from the solar and will not affect the operation of the system.
- 23. What is the line voltage of the electrical interconnection? R23. 480 VAC.

Public Health and Safety

- 24. Would the project comply with the current Connecticut State Building Code, National Electrical Code (NEC) and Connecticut State Fire Prevention Code?

 R24. The Facility will be constructed in accordance with all applicable building and fire codes.
- 25. Referencing Petition Drawing GA1.0-I, approximately 10 primary and 10 spare nitrogen cylinders would be stored on site. Could these pressurized cylinders explode if exposed to fire?

 R25. Nitrogen is a nonflammable inert gas that will not explode if exposed to fire.
- 26. What security measures would be employed to protect the fuel cell units/components from trespass, theft, vandalism or intrusion?
 - R26. The Facility will be fully fenced with a ten-foot-high chain link fence and locking gates.

- 27. Referencing Petition Drawing GA1.0-I, would the parking spaces in front of the proposed facility site be used for access during construction? Identify which parking areas would remain in use and which parking areas would be inaccessible.
 - R27. Access to the site would be through an existing gate adjacent to the boiler room door to the South. All parking would remain active except for one day when rigging the components with a crane.
- 28. Referencing Petition Drawing GA1.0-I, provide the height of the existing chain link fence. Would such fence comply with the NEC?
 - R28. The fence is ten feet high and will be connected to the site grounding ring being installed as part of the project.
- 29. Referencing Petition, Noise Assessment dated March 10, 2025, please respond to the following:
 - a) Provide the nearest distance from the proposed facility to the City Library. Ra. 88'
 - b) Does VFS plan to locate the cooling module behind the power module similar to Figure 3, Fuel Cell Layout #1?
 - Rb. Yes the cooling module will be positioned to reduce noise propagation.
 - c) Indicate on Drawing GA1.0-I where the acoustic barrier would be installed.
 Rc. The Acoustical barrier will be hung on the fencing surrounding the Facility. Final design drawings will reflect this.
 - d) Would noise from the operation of the proposed facility comply with state standards at the property boundaries with implementation of the noise mitigation measures? Explain.
 Rd. We will use high mass vinyl blanketing which has historically been very effective in reducing fugitive noise. Post construction testing to prove compliance will be conducted and a report will be provided to the Council.
- 30. Would the construction or operation of the proposed facility impact or interfere with any existing utilities or infrastructure within the project area? If so, identify any measures that would be employed to protect existing utilities or infrastructure from impact or interference.

 R30. No interference is anticipated.
- 31. How would traffic be managed during construction?
 R31. All traffic would be off of the public roadways. Some minor temporary traffic disruption will be likely when the crane is driven into its working position. Flaggers would be provided for traffic control when this takes place.
- 32. Referencing Petition p. 8, would a crane be required for construction? If yes, to what height would the crane boom be extended? Would notice to the Federal Aviation Administration be required for the temporary use of a crane?

 R32. A crane with a boom height of approximately 130' will be utilized during construction. No FAA notification is required.
- 33. Would lighting be installed at the facility? If so, for what purpose and what type would be installed (e.g. motion activated, present timer...)?

 R33. LED lighting will be installed on a switched circuit for the purpose of servicing after dark.
- 34. Describe how the proposed facility would comply with the Council's White Paper on the Security of Siting Energy Facilities, available at: https://portal.ct.gov/-/media/CSC/1_Dockets-

<u>medialibrary/Docket_346/whitepprFINAL20091009114810pdf.pdf</u> Would safety signs be located on the fence?

R34. The link is invalid and cannot be reached. All code required signage will be applied.

Environmental Effects and Mitigation Measures

35. Referencing Petition p. 10, the projected carbon dioxide (CO₂) emissions rate for the PureCell Model 400 Fuel Cell is approximately 1,049 lbs/MWh. However, the specifications sheet indicates 1,006 lbs/MWh for electric only, 567 lbs/MWh using high-grade heat recovery and 496 lbs/MWh using full heat recovery. Please clarify the correct CO₂ emissions rate for the proposed facility taking into the account the use of waste heat.

R35. As stated on the HyAxiom PureCell Model 400 data sheet, the CO2 emission rate for a Model 400 running in electric only mode is 1,006 lbs/MWh. However, when waste heat recovery is used, the CO2 savings resulting from reduced on-site boiler gas consumption, is subtracted from the electric only CO2 emission rate. Therefore, since this project uses full heat recovery, the net CO2 emissions will be 496 lbs/MWh.

- 36. Referencing Petition p. 9 and Drawing GA1.0-I, would the reduction in natural gas use from the thermal energy produced by the proposed facility result in further CO₂ emissions reduction? R36. Yes.
- 37. Referencing Petition p. 10, the proposed fuel cell facility would require approximately 350 gallons of water for the initial fill. How many gallons of water would be required to restart the fuel cell facility?
 - R37. No water is required at restart. Once the initial fill is made the fuel cell runs in water balance until ambient temperature exceeds 86F.
- 38. Does the proposed site contain any Prime Farmland Soils and/or Statewide Important Farmland Soils? If so, provide the acreage of disturbance of these soils for the site.

 R38. No farmland soils are present. The Facility is in an already developed urban area.

Facility Construction

- 39. Referencing Petition Drawing GA1.0-I, would a water supply line for fuel cell filling be required? If so, would it connect to the adjacent building? What measures would ensure that the line does not freeze?
 - R39. The required water line will be fully heat traced from the adjacent building to the fuel cell.
- 40. Referencing Petition Drawing GA1.0-I, would new natural gas service need to be provided to the gas service and meter pad, or would it connect to existing natural gas service on campus? Explain. R40. A new dedicated gas line will be installed to service the fuel cell.