

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 www.ct.gov/csc

VIA ELECTRONIC MAIL

December 7, 2016

Dawn Mahoney, Esq. General Counsel Doosan Fuel Cell America Inc. 195 Governor's Highway South Windsor, CT 06074

RE:

PETITION NO. 1269 - Doosan Fuel Cell America Inc. petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the construction, operation and maintenance of a customer-side 920-kilowatt combined heat and power fuel cell facility to be located at the Zygo Corporation, Laurel Brook Road, Middlefield, Connecticut.

Dear Attorney Mahoney:

The Connecticut Siting Council (Council) requests your responses to the enclosed questions no later than December 30, 2016. To help expedite the Council's review, please file individual responses as soon as they are available.

Please forward an original and 15 copies to this office, as well as send a copy via electronic mail. 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 is requesting that 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.

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.

Yours very truly,
Millin Blick

Melanie Bachman

Acting Executive Director

MB/RM

c: Council Members







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Petition No. 1269 Doosan Fuel Cell America, Inc. Zygo Corp. – Laurel Brook Road, Middlefield

Interrogatories

- 1. Please provide a detailed, scaled site plan for the proposed facility including but not limited to, the dimensions and location of the proposed fuel cell facility, cooling module, concrete pads, fencing and/or other protection, and utility connections. If a fence is proposed, indicate if it would have anticlimb features. If bollards are not proposed, is the facility at risk from vehicle impact?
- 2. What is the address of the proposed installation?
- 3. Would the proposed fuel cell shut down in the event of a power outage? If so, does it have "black start" capability and the ability to automatically restart?
- 4. Could the facility continue operating during a power outage and provide seamless uninterruptable power?
- 5. Would the proposed fuel cell provide baseload or backup power (or both) for the subject building? What percentage of the building's energy usage would the proposed fuel cell facility provide? Would any surplus power be sold to the grid?
- 6. What is the operational life of the facility? Does the fuel cell media have to be changed? If so, at what intervals?
- 7. Please provide an Emergency Response Plan for the proposed facility in accordance with Public Act 11-101, An Act Adopting Certain Safety Recommendations of the Thomas Commission.
- 8. Please identify media to be used for pipe cleaning procedures at the proposed facility in accordance with Public Act 11-101, An Act Adopting Certain Safety Recommendations of the Thomas Commission.
- 9. Which National Fire Protection Association or other codes and standards apply to fuel cell construction, installation and/or modifications?
- 10. Please provide additional noise analysis data to supplement the determination (Petition p. 5) that noise levels comply with Department of Energy and Environmental Protection criteria at the property boundaries.
- 11. What is the distance and direction to the nearest residence from the proposed fuel cell facility?
- 12. What is the municipal zoning of the host property? What land uses are adjacent to the host property?
- 13. What is the distance and direction of the proposed facility to the nearest airport? Does this type of installation require any notification to the Federal Aviation Administration in regards to facility exhaust plumes?



- 14. Please provide a FEMA flood map showing the proposed facility. Would the proposed facility be within a FEMA designated 100-year or 500-year flood zone? If so, could the proposed facility be raised to one foot above the 100-year flood zone?
- 15. Is the proposed facility within a Department of Energy and Environmental Protection-designated Aquifer Protection Area?
- 16. Provide the distance and direction of the nearest wetland from the proposed installation.
- 17. In regards to Petition p. 5, Table 1, do the CT Emissions Standards listed pertain only to facilities installed on/before April 30, 2012? If so, please revise.
- 18. What operational mode will be used (Power or ECO) at the site? Do the PureCell emission rates listed in Table 1 on Petition p. 5 reflect the selected operational mode?
- 19. Why is the air emission data on the Purcell Model 400 datasheet based on facility operation at 440 kW? What are the air emission rates for facility operation at 460 kW?
- 20. Would methane (CH₄) be emitted from the proposed fuel cell facility?
- 21. What was the ISO New England, Inc. eGRID fossil fuel output emission rate for CO₂ (lbs/per megawatt-hour) used to determine 260 metric tons of carbon emissions would be offset annually from operation for the facility? Does the 260 metric tons include the ECO or Power operational mode? How was the 260 metric tons figure determined?
- 22. Does the amount of phosphoric acid in the fuel cell comply with the applicable state and federal regulations?
- 23. Natural gas has sulfur dioxide injected as an odorant. Please submit a desulfurization plan narrative for the proposed fuel cell facility containing the following information:
 - a) Chemical reaction overview concerning what substances are produced from the desulfurization process, as well as plans for their containment and transport;
 - b) How much solid sulfur oxide would result from the desulfurization process, and methods and locations for containment, transport, and disposal;
 - c) Whether any of these desulfurization substances are considered hazardous, and if so, plans for the containment, transport, and disposal of hazardous substances;
 - d) Anticipated method of disposal for any other desulfurization substances; and
 - e) Whether any gaseous substances resulting from desulfurization can be expected to vent from the fuel cells, as well as the applicable DEEP limits regarding discharge of these gasses.
- 24. If the proposed facility is approved, approximately when would construction commence and when is it expected to be completed and operational? What are the expected typical work hours and days of the week that construction would occur?
- 25. Provide a decommissioning plan for the proposed facility.
- 26. Please confirm the owner of the host property was provided notice of the proposed project and provide information regarding certified mail receipts for all recipients that were provided notice including the property owner, abutting property owners, state agencies, and state and local public officials.