

April 14, 2020

PETITION NO. 1393- Doosan Fuel Cell America, Inc. petition for a declaratory, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed construction, maintenance and operation of a 440- kilowatt customer-side combined heat and power fuel cell facility and associated equipment to be located at Cherry Street Lofts, 375 Howard Ave, Bridgeport, Connecticut 06605.

RESPONSE TO COUNCIL INTERROGATORIES

Dear Ms. Bachman,

We are submitting an electronic copy of response to the Council's interrogatories dated April 13, 2020. Projected noise levels from the proposed project will meet the City of Bridgeport Noise Ordinance and State of Connecticut Control of Noise Regulations. Response to interrogatory 12 includes a detailed explanation of how the proposed project will comply the noise ordinances.

We appreciate the siting councils prompt review of these answers.

Respectfully Submitted, Doosan Fuel Cell America, Inc.

Donald Emanuel Installation Project Manager Donald.Emanuel@doosan.com Doosan Fuel Cell America, Inc.



RESPONSE TO COUNCIL INTERROGATORIES Petition No. 1393

12. Petition p. 8 states Cherry Street Lofts is residential. Does the Cherry Street Lofts project include commercial retail and/or educational uses on the same parcel? If so, what is the State of Connecticut Noise Zone Classification for commercial retail and/or educational uses? On the same parcel as the proposed fuel cell is the Great Oaks Charter School. There are no commercial retail locations on the proposed parcel. State of Connecticut Noise Zone Classification lists educational institutions as Class B Land Use Category.

The school and residences located in the court-yard area of the Cherry St. Lofts project are in an area of High Background Noise, as defined under State of Connecticut Control of Noise Regulation, §§22a-69-3.6:

In those individual cases where the background noise levels caused by sources not subject to these Regulations exceed the standards contained herein, a source shall be considered to cause excessive noise if the noise emitted by such source exceeds the background noise level by 5 dBA, provided that no source subject to the provisions of Section 3 shall emit noise in excess of 80 dBA at any time, and provided that this Section does not decrease the permissible levels of the other Sections of this Regulation.

The parcel in-question is located adjacent to Interstate 95, a source of noise from automobiles. Automobile noise is excluded from the State of Connecticut Noise Regulations, reference §§22a-69-1.7(i). Background noise at the parcel is 53 to 56 dB (Reference acoustical report submitted March 17, 2020), exceeding the night-time noise regulations for Class A receptors.

With the 12' acoustical barriers installed as detailed in Attachment 24 noise levels at residences adjoining the courtyard will be 55 to 58 dBA, a rise of 2 to 5 dB above the background noise level. This rise is below the threshold considered to be excessive and therefore the proposed project will comply with the State of Connecticut Noise Regulations. The City of Bridgeport Noise ordinance has the same provision for areas of high background noise.

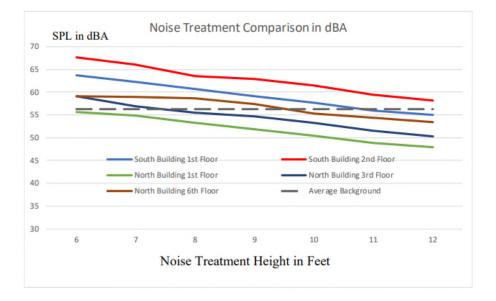
- 13. For mixed use projects on the same parcel or contiguous parcels under the same ownership, what State of Connecticut Noise Zone Classification would be used? Where multiple uses exist within a given Noise Zone, the least restrictive land use category for the Emitter and Receptor shall apply regarding the noise standards.
- 14. If the Cherry Street Lofts project is a mixed use property, what would be the State of Connecticut Noise Zone Classification for the property? Would the on-site residential units have a different noise zone classification than other portions of this same property? Please explain. Where multiple uses exist within a given Noise Zone, the least restrictive land use category for the Emitter and Receptor shall apply regarding the noise standards. The school and residential units are high background noise areas, where sources are allowed to exceed background noise levels by at most 5 dBA, so long as the maximum noise level is no more than 80 dBA.
- 15. The response to interrogatory 11 states residential use areas of the Cherry Street Lofts property would have noise levels of 55-58 dBA for units located within the courtyard after sound mitigation



Doosan Fuel Cell America, Inc. 101 East River Dr East Hartford, CT 06108 T - 860 727 2200

measures are deployed. Is this measurement for the first or second floor? What noise levels would occur to residential courtyard units located on the higher floors?

The noise levels of 55-58 dBA are for the highest floors on each building, which correspond to the highest noise levels. The acoustical study submitted on March 17, 2020, in the Airborne Noise Recommendations at 375 Howard Ave, Pg. 12, Figure 10 includes information on expected noise level at different floors of the adjoining apartment buildings. That figure is reproduced below:



16. If the Cherry Street Lofts project is a mixed use property, do the projected noise levels from the fuel cell, with sound mitigation blankets, meet regulatory criteria for on-site residential and educational uses?

The projected noise levels from the proposed project will meet local and state noise level criteria for noise sources. The project location falls under a high background noise area, where sources are all allowed to exceed background noise levels by at most 5 dBA, so long as the maximum noise level is no more than 80 dBA the criteria are met.

- 17. The mitigation plan within the sound study recommended 12-foot high sound mitigation blankets on three sides of the fuel cell facility area Although no blanket was proposed on the east side facing the school, would the installation of a sound mitigation blanket on the east side have a measurable reduction in noise at the school?
 The proposed site plan submitted in response to Interrogatory #11 includes sound-mitigation blankets on the east-side of the cooling module, with a 4' opening to access the cooling module. Installing sound curtains in this opening is not necessary to be in compliance with the City of Bridgeport or State of Connecticut noise ordnances but would reduce the noise levels at the school by approximately 2 dBA.
- 18. Are there any measures that can be incorporated into the design of the 12-foot high fence/sound mitigation blanket installation to improve aesthetics of the facility?



Doosan Fuel Cell America, Inc. 101 East River Dr East Hartford, CT 06108 T - 860 727 2200

Colored slats will be installed in the chain link fence that will show on the outside of the fence. The project developer is considering additional plantings in the courtyard, around the fuel cell facility, including arborvitaes.

19. Prior to submission of the Petition to the Council, did the City review site plans or other materials that showed the fuel cell as part of the Cherry Street Lofts Project? Did the City make any comment to the developer or Doosan regarding potential noise from the facility? If so, how were any noise issues addressed?

The project developer met with the City of Bridgeport, including the Office of Planning & Economic Development, prior to submission of the petition to the Council. During these meeting detailed site plans were not reviewed, however the project was discussed in detail. There were no comments regarding noise. As part of the building permit application process, the city has been provided a full set of drawings for this project.