



STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL

Ten Franklin Square  
New Britain, Connecticut 06051  
Phone: (860) 827-2935  
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**CERTIFIED MAIL  
RETURN RECEIPT REQUESTED**

December 20, 2002

Mr. Viktor Boed, C.E.M., Manager  
Yales University  
Office of Facilities/Plant Engineering  
2 Whitney Avenue, P.O. Box 208297  
New Haven, CT 06520-8297

RE: **PETITION NO. 598** - Yale University petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the construction of a fuel cell to be located on Yale's Campus in New Haven, Connecticut.

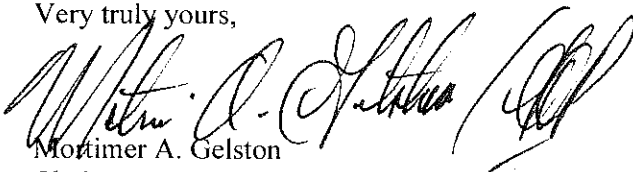
Dear Mr. Boed:

At a public meeting held on December 19, 2002, the Connecticut Siting Council (Council) considered and ruled that this proposal would not have a substantial adverse environmental effect, and pursuant to General Statutes § 16-50k would not require a Certificate of Environmental Compatibility and Public Need.

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 December 10, 2002.

Enclosed for your information is a copy of the staff report on this project, dated December 19, 2002.

Very truly yours,



Mortimer A. Gelston  
Chairman

MAG/laf

Enclosure: Staff Report dated December 19, 2002

c: Frank Gargiulo, Zoning Administrator, City of New Haven  
Honorable John Destefano, Jr, Mayor, City of New Haven  
Andrew Lord, Esq., Murtha Cullina LLP  
Alfred E. Smith, Jr., Murtha Cullina LLP



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Petition No. 598  
Yale University  
New Haven, Connecticut  
Staff Report  
December 19, 2002

On December 16, 2002 Connecticut Siting Council (Council) member Philip Ashton with Robert Mercier of Council staff met Yale University (Yale) representatives Alfred Smith and Viktor Boed at Yale for a field review of this petition. Yale is petitioning the Council for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need (Certificate) would be required for installation of a fuel cell adjacent to the Class of 1954 Environmental Sciences Center (Sciences Center).

Yale proposes to install a DirectFuel Cell DFC300 Powerplant manufactured by FuelCell Energy of Danbury, Connecticut. The fuel cell consists of three individual modules enclosed within a single unit that is approximately 10 feet wide, twenty-eight feet long, and eleven feet high. A fuel cell module contains electrochemical cells that produce direct current electricity. An electrical module converts the direct current power to alternating current power. A mechanical module contains fuel and water treatment equipment, air blowers, and a heat exchanger that utilizes waste heat to preheat fuel and water.

The fuel cell is capable of producing 250 kilowatts of electricity and would provide 500,000 BTU of thermal energy to the Sciences Center. The fuel cell will be interconnected with Yale's distribution system and with the Sciences Center air conditioning system. The fuel cell will provide heat to an air-to-water heat exchanger which in turn will provide heated water to re-heat coils on the Sciences Center air handling units.

The fuel cell will utilize natural gas as a fuel and will be water-cooled. The fuel cell would consume 2,000 standard cubic feet per hour of natural gas, which will be provided by Southern Connecticut Natural gas Company. The South Central Connecticut Regional Water Authority will supply approximately 1,100 gallons of water per day to the non-contact cooling water loop of the fuel cell. Approximately 550 gallons per day of waste non-contact cooling water will be discharged to the municipal sanitary sewer system. The fuel cell exhaust will contain low levels of oxides of nitrogen, oxides of sulfur, carbon monoxide, and volatile organic compounds. An air permit will not be required due to low emission levels of these regulated constituents.

The fuel cell would be located in a paved area adjacent to the Sciences Center and surrounded by other buildings. The fuel cell would not be visible from off-campus locations. An informational kiosk explaining fuel cell technology would be located in the adjacent Peabody Museum.