

Petition No. 1090
Bloom Energy/Danbury Fair Mall
Danbury, Connecticut
Staff Report
January 23, 2014

On December 24, 2013, the Connecticut Siting Council (Council) received a petition from Bloom Energy Corporation (Bloom) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the installation of a 750 kW fuel cell facility at the Danbury Fair Mall at 7 Backus Avenue in Danbury, Connecticut. Council member Dr. Barbara Bell and Siting Analyst Robert Mercier visited the site on January 15, 2014 to review the proposal. Jay Stevenson, an engineer with Core States Group, represented Bloom at the field review.

Bloom's fuel cell facility would be a customer-side, distributed resources project that would consist of three 250 kW solid oxide fuel cell Energy Servers to be owned and operated by The Macerich Company, owners of the mall. The overall dimensions of each fuel cell would be approximately 26' -5" long by 8' -7" wide by 6' -9" tall. The units would be arranged in a linear fashion on a concrete pad in an exterior mall service area. The installation area consists of a grassy strip and paved area along the west side of the Lord and Taylor store. The installation site is adjacent to a paved service area and a fenced compound containing an electrical transformer and emergency generator. The fuel cell facility would be protected from impact by bollards.

New gas lines and electrical connections would be installed underground from the units to a nearby electrical room on the other side of the service area. A new gas meter would be installed on the exterior wall of the Lord and Taylor store.

A few existing trees at the edge of the grassy area would be removed to accommodate construction. The proposed facility is located in a mall alcove and is boxed in by the mall building, mall parking garage, and a parking lot. Interstate 84 is located to the north, beyond the parking lot and a waterway. Noise from facility operation would not be a concern given the lack of residential and other commercial properties.

The fuel cell facility is designed in accordance with American National Standards Institute and Canada Standards Association (ANSI/CSA) America FC 1-2004 for stationary fuel cell power systems and includes extensive safety control systems, including an automatic shutdown mechanism, that comply with pertinent engineering standards.

The Connecticut Public Utilities Regulatory Authority (PURA), in its Final Decision in Docket No. 12-02-09, determined that Bloom's Energy Server qualifies as a Class I renewable energy source as defined in Conn. Gen. Stat. § 16-1(a)(26)(A). Furthermore, Bloom was selected by CL&P as the winning bidder in the joint UI/CL&P request for proposals for their "Low and Zero Emissions Renewable Energy Credit Program." As a result of its selection, Bloom has entered into a standard contract for the purchase and sale of Class I renewable energy credits.

Bloom mailed notification of the project to abutting property owners and City of Danbury officials on December 18, 2013. No comments were received.

The proposed installation of the fuel cell is not expected to have any substantial adverse environmental impacts. It would reduce the emission of air pollutants that contribute to smog, acid rain, and global climate change. It would also contribute to the state's use of renewable energy.

Aerial View Site Location at Danbury Fair Mall



Aerial photograph taken from google earth