Petition No. 1070
Bloom Energy/AT&T
Waterbury, Connecticut
Staff Report
July 18, 2013

On June 24, 2013, the Connecticut Siting Council (Council) received a petition from Bloom Energy Corporation (Bloom), acting as agent for AT&T, for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the installation of an approximately 500 kW fuel cell facility at an AT&T facility at 348 Grand Street in Waterbury, Connecticut. Council member Edward Wilensky and Siting Analyst David Martin visited the site on July 17, 2013 to review the proposal. Richard Procanik, an engineer with Core States Group, represented Bloom at the field review.

Bloom's fuel cell facility would be a customer-side, distributed resources facility that would consist of two 250 kW Bloom Energy Server solid oxide fuel cells. The overall dimensions of the fuel cell installation would be approximately 51 feet long by 8 feet wide by 6' 9" tall. It would be installed on a pre-cast concrete pad and would be surrounded on two sides by a 12-foot high sound attenuation fence. The fuel cell facility would provide the critical electrical load for the AT&T facility. Any excess electricity generated would be sold to the grid.

AT&T's facility is located at the corner of Grand and State Streets in Waterbury's Central Business District. There are residential properties abutting the western property line of the AT&T property. One of these is a lawyer's office/residence and the other is a two-family house. The noise attenuation wall will be erected for the benefit of these properties. There are some school buildings to the north of AT&T's property. The other nearest properties are office and commercial uses.

Bloom's fuel cells would be located along the northerly edge of the AT&T parking lot. They would be fueled by natural gas, and Yankee Gas would bring a new gas connection to the fuel cell location from State Street; a relatively short connection distance. The fuel cell would connect electrically to the AT&T building via an underground line to be installed across the parking lot and into the building's basement.

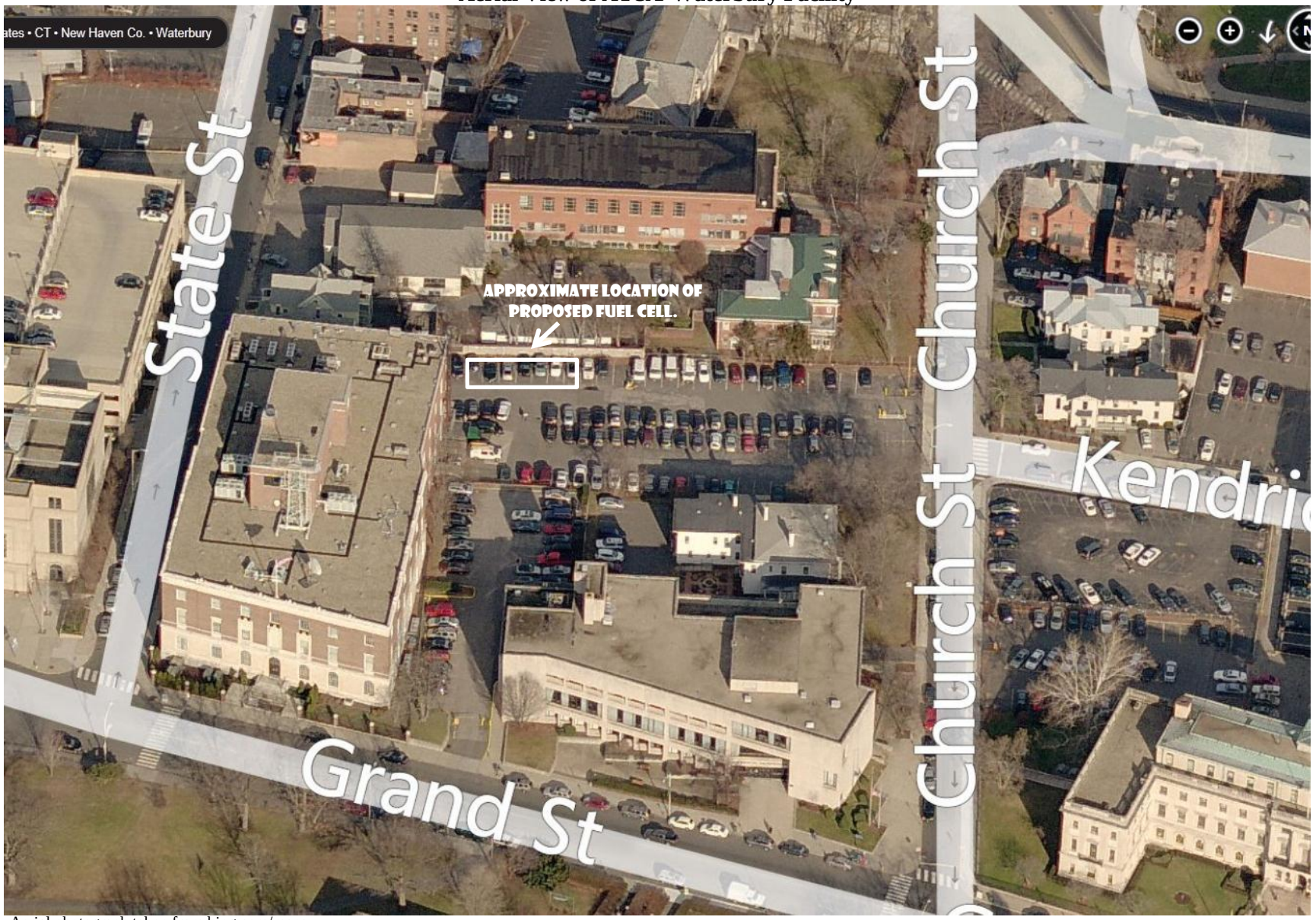
The fuel cell is designed in accordance with American National Standards Institute and Canada Standards Association (ANSI/CSA) America FC 1-2004 for stationary fuel cell power systems and includes extensive safety control systems, including an automatic shutdown mechanism, that comply with pertinent engineering standards. Sound levels generated by the fuel cell will meet all applicable requirements at any off-site noise receptors. The proposed fuel cell facility would comply with all applicable air and water quality standards of the Department of Energy and Environmental Protection.

The Connecticut Public Utilities Regulatory Authority (PURA), in its Final Decision in Docket No. 12-02-06, 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 has notified abutting property owners of its proposal. It has also discussed the project with land use officials with the City of Waterbury. To date, no comments have been received from the City. One abutter did contact the Council with concerns about noise.

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 of AT&T Waterbury Facility



Aerial photograph taken from bing.com/maps