

Petition No. 1069
Bloom Energy/AT&T
Meriden, Connecticut
Staff Report
July 25, 2013

On June 24, 2013, the Connecticut Siting Council (Council) received a petition from BE 2012 A LLC (BE) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the installation of an approximately 300 kilowatt (kW) fuel cell facility at an AT&T building at 84 Deerfield Lane in Meriden, Connecticut. Council member Phil Ashton and Michael Perrone of the Council staff visited the site on July 12, 2013 to review the proposal. Richard Streker, an engineer with Core States Group, represented BE at the field review.

The Connecticut Public Utilities Regulatory Authority (PURA), in its Final Decision in Docket No. 12-02-09, determined that Bloom Energy Corporation's (Bloom) solid oxide fuel cell 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.

The proposed fuel cell facility would be a customer-side, distributed resources facility consisting of two Bloom solid oxide fuel cells: one 200 kW unit and one 100 kW unit. The two fuel cell units located next to each other would have a (combined) total length of 41 feet long, 7-foot 4-inches wide, and 6-foot 9-inches tall. Other associated equipment would be located in a 6-foot 5-inch by 7-foot 4-inch area next to the fuel cells. A concrete pad approximately 52 feet long with a width that tapers from 24-foot 3-inches to 12-foot 3-inches would support the fuel cells and equipment. The fuel cell facility would provide the electricity for the AT&T building. Any excess electricity generated would be sold to the grid.

The site is located behind AT&T's building on Deerfield Lane, off of Research Parkway. The Research Parkway consists of commercial/industrial uses. The site is well screened by existing trees. There is one residential property across Thorpe Drive behind the AT&T building. The residential structure on that property is about 160 feet to the northeast of the fuel cell site and about 17 feet higher in elevation.

The visual impact of the fuel cell facility is not expected to be significant due to the box-like shape, existing trees, and much lower fuel cell elevation relative to the residential property. One existing tree would be removed to accommodate the concrete pad.

The fuel cell facility would be fueled by natural gas and would connect to the existing service line on the property. The proposed fuel utilizes natural gas in a chemical process and does not combust natural gas. The fuel cell would connect to the existing electrical equipment located on the first floor of the AT&T building.

The fuel cell design includes extensive safety control systems, including an automatic shutdown mechanism that would activate in the event of an unsafe condition. The system 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. The facility will comply with all applicable building, plumbing, electrical and fire codes. The proposed fuel cell facility would comply with all applicable air and water quality standards of the Department of Energy and Environmental Protection. If necessary to ensure compliance with applicable noise standards, an 8-foot tall noise wall would be installed.

BE has notified the City of Meriden (City) and abutting property owners of its proposal in writing on June 21, 2012. To date, no comments have been received from the City or abutters.

The proposed installation of the fuel cell facility 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 Class I renewable energy.

