Petition No. 1051

BE 2012 W LLC

New Haven, Connecticut

Staff Report

January 10, 2013

On December 3, 2012, the Connecticut Siting Council (Council) received a petition from BE 2012 W LLC (BE) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the installation of two 200 kilowatt (kW) Bloom Energy Corporation fuel cells as a customer-side distributed resources project at the Walmart at 315 Foxon Boulevard, New Haven. Council member Dr. Barbara Bell and Michael Perrone of the Council staff visited the site on January 8, 2013 to review the proposal. Rob Streker and Richard Procanik, engineers with Core States Group, represented BE at the field review. One abutting property owner, Vincent Marottoli, also attended the field review.

BE’s fuel cell installation is one of several proposed at different locations around the state including several Walmart and Sam’s Club stores. BE was selected by The Connecticut Light and Power Company (CL&P) as a winning bidder in CL&P’s and The United Illuminating Company’s joint request for proposals for their Low and Zero Emission Renewable Energy Credit (LREC/ZREC) Program, established under provisions of Public Act 11-80, *An Act Concerning the Establishment of the Department of Energy and Environmental Protection and Planning for Connecticut’s Energy Future*. As a result of its selection, BE has entered into a *Standard Contract for the Purchase and Sale of Connecticut Class I Renewable Energy Credits* (Standard Contract) with CL&P. BE’s selection and its Standard Contract was approved by PURA in its Docket No. 11-12-06.

BE’s installation would consist of two Bloom solid oxide, natural gas-fueled fuel cell units, with an electrical output of approximately 200 kW each, for a total output of approximately 400 kW. The overall dimensions of the installation would be approximately 52-foot 1-inches long by 8-foot 6-inches wide by 6-foot 9-inches high. The fuel cell system has been designed for the base load of Walmart, and any excess electricity generated would be sold to the grid.

The fuel cell was originally proposed to be installed directly behind the Walmart building or south of the building. This location was shifted to the east side of the building as recommended by the City of New Haven. There are residences to the east of the site. The nearest residence is approximately 166 feet away. However, they are located at a significantly higher elevation (~20 feet) than the Walmart site due to a large retaining wall. In addition, the box-like fuel cell structure is similar in appearance to many trailer trucks that park in the loading area. Natural gas service would be provided from the building.

The fuel cells are designed to include extensive safety control systems that comply with applicable engineering standards.

Notice was provided to the City of New Haven and abutting property owners on or about November 29, 2012. Abutting property owner Vincent Marottoli provided written comments indicating his preference to locate the fuel cell on the opposite site of the Walmart (closer to I-91) and concerns about noise.

BE has chosen the east side of the building due to the proximity of gas and electrical service. To locate the fuel cell on the west side would result in significantly long runs for gas and electrical utilities.

Preliminary calculations show that the fuel cell would meet the daytime noise limits. To ensure nighttime noise limit compliance, BE is willing to perform a detailed noise study and install a sound wall around the fuel cell if necessary.

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.

