

Petition No. 1060  
Bloom Energy/Macy's  
Cheshire, Connecticut  
Staff Report  
May 16, 2013

On April 10, 2013, the Connecticut Siting Council (Council) received a petition from Bloom Energy Corporation (Bloom), acting as agent for Macy's Corporate Services, Inc. (Macy's), for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the installation of one 600 kW fuel cell facility at the Macy's Distribution Center at 475 Knotter Drive in Cheshire, Connecticut. Council member Dr. Barbara Bell and Siting Analyst David Martin visited the site on May 8, 2013 to review the proposal. Rob Streker, 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 three 200 kW Bloom Energy Server solid oxide fuel cells, which would be fueled by natural gas. The overall dimensions of the fuel cell installation would be approximately 88 feet long by 8 feet wide by 6' 9" tall and would be located on a 102-foot by 21-foot concrete pad. The fuel cell facility would provide the critical electrical load for Macy's Distribution Center, which operates on a 24/7 basis. Any excess electricity generated would be sold to the grid.

The fuel cells would be located in the rear of the Distribution Center (see aerial photograph on page 2) in an area currently used for the storage of trailers. Yankee Gas would bring a new gas line to the rear of Macy's from the front of the building where its line to this property now terminates.

The fuel cell design includes extensive safety control systems 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). In addition, Connecticut's Clean Energy Finance and Investment Authority (CEFIA) determined that the fuel cell installation at Macy's Distribution Center would be consistent with CEFIA's Comprehensive Plan and awarded this project a grant of \$913,121. The Class I renewable energy credits that the fuel cell facility would generate each year would be sold to off-site entities for use in meeting renewable portfolio standards.

Macy's Distribution Center is located in a low density, heavily wooded industrial park. There are residential properties abutting Macy's property, and all of these properties were notified by Bloom of its proposal. The nearest residence is 800 feet to the northwest of the fuel cells' proposed location. No residences would have a view of the fuel cells, as Macy's property is well-screened by thick, existing vegetation.

Prior to petitioning the Council, Bloom and Macy's went through the Town of Cheshire's approval process and received a modified special permit from the Planning and Zoning Commission and a determination of no adverse wetland impact from the Inland Wetlands and Watercourses Commission.

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 Macy's Distribution Center in Cheshire



Aerial photograph taken from bing.com/maps