Petition No. 1093 Bloom Energy/Comcast Berlin, Connecticut Staff Report February 14, 2014

On January 17, 2014, the Connecticut Siting Council (Council) received a petition from Bloom Energy Corporation (Bloom), acting as agent for Comcast Corporation, for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the installation of an approximately 400 kW fuel cell facility at a Comcast Corporation (Comcast) headend, dispatch, technical operations, and warehouse facility at 222 New Park Avenue, Berlin, Connecticut. Council member Robert Hannon and Siting Analyst Michael Perrone visited the site on February 11, 2014 to review the proposal. Jay Stevenson, from Core States Group, represented Bloom at the field review. John Bairos, Manager – Government and Community Relations, represented Comcast at the field review. James Mahoney, Economic Development Director, represented the Town of the Berlin at the field review.

Bloom's fuel cell facility would be a customer-side, distributed resources project that would consist of two 200 kW Bloom solid oxide fuel cell Energy Servers (for a total of 400 kW) to be installed at Comcast. The project would also include two Uniterruptible Power Modules (UPM) to ensure that the fuel cells can continue to generate electricity seamlessly in the event of a commercial power outage.

It would be installed on a concrete pad displacing approximately seven parking spaces in the paved parking area behind the Comcast building. A concrete pad approximately 58-feet 4-inches long and 7-feet 8-inches wide would be installed to accommodate the fuel cells and the UPMs. Two smaller concrete pads would be installed for the electrical equipment and the natural gas equipment. These two concreted pads would be 16-foot 9-inches by 4-foot 3-inches and 13-foot 3-inches by 4-foot 9-inches, respectively. Bollards would be installed to protect the facility from vehicles in the parking lot.

The nearest home is approximately 350 feet to the northeast. The visual impact is expected to be minimal due to the distance, existing trees located between the home and the fuel cell location, and modular "box like" fuel cell design. No existing trees are expected to be removed.

The project is expected to meet all applicable requirements at any off-site noise receptors and would not require any noise barriers to be erected. The proposed fuel cell facility would comply with all applicable air and water quality standards of the Department of Energy and Environmental Protection.

Natural gas service would run underground from a gas main on New Park Drive to the fuel cell. Electric service would run underground from the building to the fuel cell.

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.

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).

Bloom has notified abutting property owners, the Town of Berlin, the City of Middletown, and others as required. To date, no objections have been 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.

