DOCKET NO. 426 – Third Taxing District Electric Department application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of an electric substation located at 6 Fitch Street, Norwalk, Connecticut.	}	Connecticut
	}	Siting
	}	Council
	}	August 9, 2012

Opinion

On April 10, 2012, the Norwalk Third Taxing District Electric Department (TTD) applied to the Connecticut Siting Council (Council) for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance, and operation of a new electric substation located at 6 Fitch Street in Norwalk, Connecticut. The purpose of the proposed facility is to improve reliability and add capacity to the TTD's electric power distribution system in the East Norwalk area.

TTD is a citizen-owned public power utility that serves approximately 3,800 customers, mostly residential, in a four-square-mile area in East Norwalk. TTD is a member of the Connecticut Municipal Electric Energy Cooperative, allowing TTD to purchase electricity from The Connecticut Light and Power Company (CL&P) for its customers.

TTD provides power to its customers via two 27.6-kV to 4.16-kV substations it operates within its service area (Rowan Street Substation and the East Avenue Substation). CL&P supplies TTD's substations by two 27.6-kV underground circuits originating from CL&P's Norwalk Substation. The two CL&P circuits are over 60 years old and are frequently out of service for maintenance or other issues related to CL&P customers beyond TTD's service area, resulting in an unreliable power supply for TTD's customers.

In addition to causing reliability concerns, CL&P's supply circuits do not have sufficient capacity for future load growth in TTD's service area. Two new large TTD customers will require a significant amount of load by 2016 that cannot be met with the currently designed electric supply system. Based on existing and projected loads and the need to provide a reliable electric supply to TTD, the Council finds a need for a new substation to serve TTD's customers.

The proposed substation is located on an industrially zoned 0.58-acre parcel on the south side of Fitch Street. Abutting properties include TTD's existing East Avenue Substation and a commercial property to the west, a church and a residence to the north, an auto-body repair shop to the east, and the Metro-North Norwalk train station and rail line and CL&P's transmission line right-of-way to the south.

The substation would consist of a 106-foot by 180-foot compound containing the substation equipment, associated connections and a control house. The control house would be designed to look like a wood frame building. An eight-foot high chain link fence with an additional foot of barbed wire would enclose the compound. The substation would be accessed by a short driveway from Fitch Street, across from the church parking lot.

The substation would be connected to CL&P's no. 1415 115-kV transmission circuit south of the site, which runs along the railroad. The interconnection would require two 40-foot line terminal structures within the substation and two new 115-foot steel dead-end structures installed within the parking area at the train station. The proposed dead-end structures would be approximately the same height as the existing monopoles.

The proposed substation would be connected to the adjacent East Avenue substation by two underground 23.6-kV feeders.

The Council finds the proposed site suitable for a substation, given its location in an industrial zone, and its location adjacent to existing commercial properties, the Metro-North railway and the CL&P transmission line right-of-way. Although there are residences farther east on Fitch Street as well as apartments associated with the two abutting commercial properties, the Council finds that TTD's proposed architectural treatment of the control house and the installation of privacy slats on the access gate and the east side of the substation would reduce the visual impact of the smaller-scale substation components. Views from Fitch Street would also be mitigated by the installation of landscaping associated with a proposed rain garden located between the substation and Fitch Street. A medium-sized ornamental tree in the northeast corner of the parcel would be kept and incorporated into the landscape plan.

The larger terminal structures and CL&P poles at the rear of the substation would be consistent with existing infrastructure present along the Metro-North railway and CL&P transmission line right-of-way. In an attempt to reduce the visual impact of the dead-end structures, CL&P would examine the possibility of redesigning the interconnection so that the new monopoles would have slimmer profiles.

The substation site is an open lot interspersed with a few small trees. No wetlands are located on-site. The site is not within any known habitat of federally threatened or endangered species nor State endangered, threatened or special concern species. Development of the site would not affect any archaeological or historic resources. Proper erosion and sedimentation control measures would be established during construction to contain disturbed soils.

The existing transmission line south of the site is the main source of magnetic fields in the area. Magnetic field levels at the southeast corner of the substation, where CL&P's no. 1415 line would cross into the substation, would be 82 milliGauss (mG) under normal load conditions and 186 mG under peak load conditions. As one moves away from the substation, the magnetic field levels decline. For example, under normal load conditions, a magnetic field level of 20 mG would be attained 25 feet from the southeast corner of the substation.

Based on the record in this proceeding, the Council finds that the effects associated with the construction, operation, and maintenance an electric substation at 6 Fitch Street in Norwalk , including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate either alone or cumulatively with other effects when compared to need, are not in conflict with the policies of the state concerning such effects, and not sufficient reason to deny this application. Therefore, the Council will issue a Certificate for the construction, operation, and maintenance of an electric substation at 6 Fitch Street in Norwalk, Connecticut.