

Petition No. 1058  
The Connecticut Light & Power Company  
Monroe, Oxford, Middlebury, Waterbury and Watertown, Connecticut  
Staff Report  
June 13, 2013

On March 1, 2013, the Connecticut Siting Council (Council) received a petition from The Connecticut Light and Power Company (CL&P) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed replacement of line structures on its 115-kV 1990 line. This line originates at the Stevenson Substation in Monroe and runs north-south through the municipalities of Oxford, Middlebury, Waterbury, and Watertown to the Frost Bridge Substation in Watertown, Connecticut. The line also includes an east-west segment, designated as the Baldwin Section, which extends from the Baldwin Junction in Middlebury to the Baldwin Substation in Waterbury. Council members Phil Ashton, Dr. Barbara Bell and Robert Hannon and Council staff members David Martin, Christina Walsh and Melanie Bachman conducted a field review of this proposal on April 17, 2013. John Morissette, Jim Clark, Amanda Mayhew and Chris Soderman represented CL&P at the field review. For the field review, Council members, staff and CL&P representatives and drove the length of the 1990 line, stopping at a number of locations along the route.

At a public meeting on April 18, 2013, the Council voted to set August 28, 2013 as the date by which to make a decision. Interrogatories were issued on April 19, 2013 and responses were submitted on May 8, 2013.

CL&P's project would consist of replacing 170 existing steel lattice structures with 179 steel monopoles and four wood H-frame structures. The wood structures would be installed in the vicinity of the Oxford airport, where CL&P must comply with Federal Aviation Administration (FAA) regulations that govern the height of structures within airport approach paths. The structures to be replaced were installed during the 1920s and 1930s and have outlived their designed life expectancies. Many of the structures are in critical need of replacement due to rusted and buckling members. The condition of the existing structures presents safety and reliability concerns. Replacement of the structures would necessitate some minor, associated work at the Frost Bridge, Baldwin, and Stevenson substations.

CL&P's new structures would comply with current design standards, which have been upgraded dramatically since the structures to be replaced were originally installed. Nearly all of the replacement structures would be installed within CL&P's existing right-of-way, except for the four wood structures near the airport. These four structures would require CL&P to widen its right-of-way for a short distance in the vicinity of the airport. ConnDOT and CL&P worked together on the design to keep the replacement towers beneath the airport's approach slope.

CL&P plans to use galvanized steel monopoles to replace the existing lattice towers. When asked by Council members why it chose galvanized steel over weatherizing steel monopoles, CL&P responded that this choice was in response to requests from the Towns of Oxford and Middlebury, and one resident in Oxford who lives near the 1990 line. In an interrogatory, the Council asked if CL&P could use weatherizing steel poles in the towns other than Oxford. CL&P's response was that it could use weatherizing poles in other towns, but that galvanized poles have already been ordered due to the long lead time needed for a large order of steel poles. On June 10, 2013, the City of Waterbury submitted a letter stating its preference for the installation of galvanized steel structures.

In response to Council interrogatories, CL&P indicated the cost per pound of steel for galvanized is \$1.75 and the cost per pound of steel for weatherized is \$1.72. With a price differential of \$336.42 for a typical structure, the additional cost for the all line structures to be replaced with galvanized rather than weathering steel would be \$60,219.18.

During the field review, Council members expressed some concern about the visibility of the Shaw's Hill Substation in Watertown to its residential neighbors on Hill Top Road and Shaw Farm Road. In response to a Council interrogatory, CL&P stated that it would be willing to install landscaping to provide vegetative screening of the substation and would submit a landscaping plan for the Council's review.

Another item of concern to Council members was the large, existing lattice structure (#393) in Waterbury located between the city's sewage treatment plant and its waste reduction/transfer station. It is also situated between Route 8 and the Naugatuck River and is the first structure on the Baldwin section of the 1990 line after it crosses the Naugatuck River from the Baldwin Substation. CL&P proposes to remove the top section of the existing lattice structure and continue to utilize the remaining portion of the tower for some of its lines coming out of Baldwin Substation. There was some thought among Council members that this structure was unsightly and should be removed. CL&P would explore design options for this area. The final design would be provided in a Development and Management Plan.

The impacts of the replacement project on wetlands would be limited. Fourteen of the existing structures are located within wetlands. The replacements for these towers would be located outside of wetlands. There would be some temporary impacts to wetlands during construction activities, and approximately .55 acre of wetlands would be permanently impacted by access roads installed or improved for this project. CL&P would mitigate temporary wetlands impacts by restoring disturbed wetlands to pre-construction conditions. As a way of offsetting permanent wetlands impacts, CL&P would place a conservation easement on 26 acres of a larger parcel it owns in Oxford between Cortland Place and Oxford Road. These 26 acres include eight acres of high quality wetlands.

As part of its planning process, CL&P submitted project plans to DEEP's Natural Diversity Database (NDDDB) staff, which identified three plant species listed as state species of special concern within the vicinity of the project area. All of these plant species occur in the vicinity of the Stevenson Substation. CL&P's work in this area would be entirely within the fence line of the substation and would not impact these species. DEEP's NDDDB staff also identified three animal species that would occur in the vicinity of work areas: the American kestrel, the Eastern box turtle, and the Wood turtle. In order to protect these species, CL&P would comply with established protocols such as conducting sweeps of work areas and removing silt fencing from areas where work and been completed and disturbed areas have been stabilized. Should any kestrel nests be found near work areas, CL&P would avoid these areas during the nesting season.

Electric and magnetic fields (EMF) associated with the 1990 line following the completion of the project are expected to remain at levels similar to the levels produced by the existing line. CL&P would incorporate "no-cost" measures to minimize EMF at the edges of the 1990 line's right-of-way including: installing the replacement structures as close as possible to the remaining existing structures and optimizing circuit phasing wherever possible.

CL&P has been conducting outreach efforts to inform the general public and elected officials of the municipalities through which the 1990 line passes since the summer of 2011. It has met with chief elected officials of Oxford, Middlebury, and Waterbury and has briefed the town manager of Watertown. Because of the relatively limited scope of project activities to be conducted in Monroe, CL&P only had telephone discussions with this town's First Selectman. CL&P also sent two separate mailings to property owners along the route of this project.

The environmental impact of the proposed replacement of the 1990 line structures should be relatively insignificant in light of the scope of the project. CL&P would seek to minimize wetlands impacts and would take mitigation measures where such impacts would be unavoidable. CL&P would also employ established construction protocols to protect the listed species identified along the path of the 1990 line. The project will enable CL&P to improve the safety and reliability of its 1990 transmission line.

Council staff recommends approval with the condition that CL&P submit a Development and Management Plan for this project that includes:

- a. A revised design plan that would remove Structure #393 (in Waterbury, west of the Naugatuck River) in its entirety and replace it with a monopole, and reduce the clutter of the distribution lines at that river crossing; and
- b. A landscaping plan for Shaw's Hill Substation to screen the substation from the nearby residential area.