

Petition No. 853
Connecticut Light and Power Company
Proposed Lighting Modifications
To structures supporting transmission lines
Crossing the Housatonic River in the
Towns of Stratford and Milford CT
Staff Report
April 10, 2008

On March 19, 2008, Connecticut Siting Council (Council) member Edward S. Wilensky and Council staff Fred Cunliffe met with Eriks Surmanis and Helen Taylor of Connecticut Light and Power Company (CL&P) at the existing structures of the proposed modification.

CL&P proposes to remove and replace an existing lighting scheme (medium-intensity white strobe lights operating day and night) on structures 287 and 288 of the 115-kV circuit number 1710 which crosses the Housatonic River. The existing lights were previously approved via Petition No. 331 on October 20, 1994 by the Council. At the time of the initial installation residents complained of the strobe lights; consequently CL&P disabled the two lower levels of strobes and maintained the top position. Over the years the strobes and associated controls have malfunctioned at times. Finally CL&P reverted to operating the strobes at night time intensity rather than daytime intensity 24/7. The Federal Aviation Administration (FAA) has been informed of these actions.

CL&P met with the municipalities as well as with nearby neighbors to share its plans to upgrade the lights. CL&P has re-evaluated FAA marking requirements, including painting for daytime marking. However painting is labor intensive and in an area near to a marine environment would be much more problematic.

Thus CL&P proposes to install a dual (white strobe and flashing red beacon) lighting system at three different levels on structures number 287 and 288. The lights will be installed on the river side of the structure versus the shore side as it exists now, thereby reducing light reflecting off the structure. Also, the lower two strobes would be directed upriver and downriver with a 120 degree beam width and be capable of vertical adjustment compared to 240 degrees of the existing system with no adjustment. The top strobe will have a 360 degree Omni-directional beam. Daytime white strobes would have a light intensity of 20,000 candelas compared to the nighttime flashing red beacon intensity of 2,000 candelas. Both sets of lighting would also flash beginning with the middle light followed by the top light then the bottom light at a rate of 60 flashes per minute and 40 flashes per minute for the white strobe and flashing red beacon, respectively. If either system fails the remaining system will automatically operate until repairs can be completed. The system would have a remote alarm to notify CL&P of a malfunction. Furthermore, use of a flashing red beacon rather than a solid red beacon would mitigate potential bird strikes during foggy and cloudy weather. This lighting scheme is consistent with FAA obstruction marking criteria (AC 70/7460-1K CHG 2) regarding Catenary Identification.