

Petition No. 1125
T-Mobile Northeast LLC
Windsor, Connecticut
Staff Report
January 12, 2015

On December 11, 2014, the Connecticut Siting Council (Council) received a petition from T-Mobile Northeast LLC (T-Mobile) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the modification of an existing wireless telecommunications facility located off of Rood Avenue in Windsor, Connecticut. Staff member David Martin visited the site on January 6, 2015 to review the proposal.

T-Mobile currently has two sets of three antennas mounted at the top of an existing Connecticut Light & Power (CL&P) transmission line structure located south of Rood Avenue and adjacent to I-91. The two sets of antennas have centerline heights of 155 feet above ground level (agl) and 161 feet agl respectively. These antennas operate on the 1900 and 2100 MHz frequency bands. The overall height of the structure, with antennas in place, is 164 feet. There is an 18-foot by 20-foot equipment compound enclosed by a six-foot high chain link fence at the base of the tower. This facility was originally approved by the Council under Petition 590 in 2002. Since the original installation, T-Mobile has changed its antennas under an exempt modification submitted to the Council in 2010.

T-Mobile has recently acquired bandwidth in the 700 MHz frequency range and is now proposing to replace the three existing antennas at the 155-foot centerline height with three 700 MHz antennas, relocate three existing tower mounted amplifiers from the 155-foot height to the 161-foot height, and add three remote radio heads on an H-frame inside the equipment compound. It also seeks to expand the fenced area by a dimension of 12 feet by 20 feet in order to enclose the transmission line structure and existing ice bridge within the equipment compound as required by CL&P.

Ordinarily, the equipment changes proposed by T-Mobile would be treated as an exempt modification. However, since the expanded fenced area would technically expand the boundaries of the facility, T-Mobile is submitting this petition.

There are single family residences on either side of CL&P's transmission line easement. The closest homes to the equipment compound are approximately 200 feet to the west. Although T-Mobile has planted some arbor vitae along the west side of its compound, there is little existing vegetation to screen the compound from the nearest residences' view. However, the compound is minimally intrusive and the expansion of the fenced area is unlikely to result in any noticeable change, especially since the area of expansion is on the side opposite the nearest homes.

Council staff calculates that T-Mobile's proposed antenna array would result in a power density equal to approximately 6.75% of the FCC's applicable limit. The Structural Analysis of the tower concludes that it is structurally adequate to accommodate the proposed antenna changes.

T-Mobile notified the town and adjacent property owners of its proposal. The Council has not received any comments or inquiries from town officials or nearby residents.

The proposed antenna modifications and fence line expansion are not expected to have any substantial adverse environmental effects.

Views of existing transmission line tower



(view from I-91 taken from Google Earth)



(aerial view taken from Bing)



(photo of existing facility by staff)