

Clearance to WPEG

This instant translator application clears all allocation constraints of Section 74.1204. On first glance, it appears that interference is created to second-adjacent WPEG, Concord, NC. However, Section 74.1204(d) instructs us:

“In addition, an application otherwise precluded by this section will be accepted if it can be demonstrated that no actual interference will occur due to intervening terrain, lack of population or such other factors as may be applicable.”

WPEG places 74.3 dBu over the proposed translator site. Adding the 40 dBu U/D ratio to the 74.3 dBu signal produces an interfering contour of 114.3 dBu.

The proposed antenna is a Shively 6812B-SS and is located at an elevation of 51 meters AGL on the tower. Attached is the vertical radiation pattern from Shively, the antenna manufacturer. Using this pattern, we have calculated the exact 114.3 dBu interfering contour which is included in this exhibit. The nearest this contour comes to the ground is 6.1 meters (20 feet). This is produced by the 20 degree azimuth of the antenna. In this azimuth there is a relative field of .615 which produces a power of 95.556 Watts. This closest area of interference occurs at a distance of 123.6 meters from the tower base. This distance from the tower is mainly undeveloped but there is one single-story business within this range. The interference will stay in the air 6.1 meters over the heads of all persons in this one building.

In conclusion, based on the foregoing explanation showing that no persons will receive interference, it is thought this application is in compliance with Section 74.1204 using Section 74.1204(d).

Bromo Communications, Inc.