

SECTION 74.1204(d) STUDY

This narrative exhibit demonstrates that the predicted interference to the 60 dBu contour of the third-adjacent W297AV, Hazleton, PA is allowable under the rules stated in 47 CFR 74.1204(d).

In support thereof this Applicant states the following:

1. W297AV, Hazleton, PA, third adjacent channel facility to this translator proposal, is protected from interference within its 60 dBu contours from the associated interference contour (based on 47 CFR 74.1204(a)(1); using the FCC F(50/10) curves) which need be 40 dBu greater than the associated coverage contours (W297AV) that would encompass the proposed translator antenna site and that contour which is 40 dBu greater than the associated coverage contour. It should be noted that W297AV has two relevant contours, the 60 dBu contour of the licensed authorization and the 60 dBu contour of a construction permit to modify (minor mod) W297AV (BPFT-20080402ACK). The relevant contour for the desired to undesired analysis for both of these W297AV authorizations is the same contour, the 64 dBu contour.

2. This translator's antenna location is located within the 60 dBu contour (based on 73.333 F(50/50)) of W297AV, Hazleton, PA. This proposal will use the predicted desired to undesired coverage method to determine the appropriate interference contour that need be used with regard to W297AV. Included as an attachment (W297AZ 107.9 Nescopeck Pass, PA Desired to Undesired Ratios Map) is a map showing that the 64 dBu coverage contours of W297AV encompasses the proposed antenna site along with the entire proposed 104 dBu interference contour. As the proposed 104 dBu interference contour is 40 dBu greater than the 64 dBu

contours of W297AV then this contour is the appropriate interference contour for this analysis and it is clearly evident that interference will only occur within this interference contour for this proposed translator.

3. Given this translator's requested effective radiated power of 10 watts, Non-directional; the predicted 104 dBu interference contour for this proposal would be very small. At any HAAT value, the 104 dBu contour distance for this proposal is 0.14 kilometers.

4. This proposed translator antenna is to be situated 45 meters above ground on a 61 meter tall radio tower. Enclosed as W297AZ Nescopeck Pass Vertical Freespace FMV2, is a study showing the free space signal distance based on the Freespace Equation and factoring in the Vertical Pattern (downward radiation) of the proposed FMV2 Half-wave Dipole Array. Based on this study, no part of the 104 dBu contour ever reaches the ground level. As such, no interference would be caused at any location other than atop the actual radio tower. The rule in 47 CFR 74.1204(d) states "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 factors as may be applicable." In this particular case, as shown in this exhibit, it is clearly evident that there is a "lack of population" as defined in 47 CFR 1204(d) thus allowing this translator to operate at this proposed location.

For the foregoing reasons this Applicant submits that the predicted interference to W297AV, Hazleton, PA is allowable under Section 74.1204(d) of the Commission's rules. Furthermore, grant of this application is in the public interest as it would increase the coverage area of a radio facility in this area and impose no hardship to the referenced facility, W297AV, Hazleton, PA.

By: Kevin Fitzgerald, Chief Engineer