

## ENGINEERING STATEMENT

Metro TV, Inc.  
September, 2017

Metro TV, Inc. is the licensee of WBLZ-LP, Syracuse, NY, and had been issued construction permit 0000004573 to flash cut to digital operation. The CP was recently modified (file number 0000029261) and included an additional condition concerning any effect the construction or modification that WBLZ-LP may have on radio station, WOLF(AM), Syracuse, NY which is co-located on the same structure.

The AM station utilizes a single shunt-fed radiator and has many antennas and appurtenances already mounted above the active portion of the tower including full-power FM, FM translators, STL antennas, Class A TV and LPTV stations. These antennas are all mounted well above the top of the shunt-fed skirt and the installations or subsequent changes have not affected the AM antenna's performance.

Section 1.30003(a) of the Commission's Rules govern the installations of antennas on nondirectional AM towers whereby it states: "Upon completion of the installation, antenna impedance measurements on the AM antenna shall be made. If the resistance of the AM antenna changes by more than 2 percent (see 73.45(c)(1) of this chapter), an application on FCC Form 302-AM (including a tower sketch of the installation) shall be filed with the Commission for the AM station to return to direct power measurement."

During installation of the LPTV antenna for WBLZ-LP, WOLF(AM), Syracuse, NY (Fac. ID 73380) determined its operating power via the indirect method. Upon completion of the installation of the LPTV antenna, impedance measurements were performed. The impedance measurements revealed that the resistance of the AM antenna

showed no discernible change thereby complying with the requirement of less than a 2% change of the licensed value as required by Section 1.30003(a) concerning this type of installation.

Consistent with the practices of the Audio Services Branch, this is the only condition required to be satisfied when mounting an antenna on a nondirectional AM tower<sup>1</sup>.

With the granting of the modified CP for WBLZ-LP, a further additional condition was added indicating that sufficient field strength measurements be made to establish that the AM radiation pattern remain essentially omnidirectional. This specific condition was subsequently discussed with a member of the Video Services staff who indicated that the condition may have not been necessary and to include an attachment to the license application to describe any additional condition that did not need to be performed in order to ensure proper operation of the AM station.

In this case, a detailed explanation was submitted by email to the staff indicating that establishing omnidirectional performance of a nondirectional AM antenna is required by Section 1.30002 of the Commission's Rules only when erecting a new structure within one wavelength and with a minimum height of 60 electrical degrees at the AM frequency.

As this modification is for adding only an antenna six feet in length directly to a leg on the tower well above the active skirt, only Section 1.30003(a) would be pertinent. As previously stated, impedance measurements performed after the installation exhibited no discernable change to the AM antenna resistance which is consistent with other

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<sup>1</sup> In certain situations, intermodulation measurements may also be required when the new or modified antenna is physically close in proximity to another antenna in the same frequency range.

appurtenances that have previously been added to the tower and also required compliance with Section 1.30003(a).

Therefore, it is respectfully requested that the licensee/permittee be waived of the field strength measurements section of the condition as had been discussed with the staff. If there are any further questions, please do not hesitate to contact the licensee for additional information.