APPLICATION FOR STATION LICENSE
CUMULUS LICENSING LLC
WNNK-FM (AUX) RADIO STATION
CH 281B - 104.1 MHZ - 0.55 KW
HARRISBURG, PENNSYLVANIA
August 2005

TECHNICAL STATEMENT

This Technical Statement was prepared on behalf of Cumulus Licensing LLC ("Cumulus"), licensee of radio station WNNK-FM, Channel 281B, Harrisburg, Pennsylvania. Cumulus has an outstanding permit to construct a new auxiliary FM antenna system for WNNK-FM (BXPH-20050817ABR).[1] Cumulus herein submits a license application to cover the outstanding permit.[2] Cumulus is able to operate the WNNK-FM auxiliary as needed. A calculation of the transmitter power output of the WNNK-FM transmitter is attached as Exhibit A.

There are two operating conditions/restrictions on the WNNK-FM permit. The first condition states that Cumulus will reduce the power of the WNNK-FM auxiliary antenna, or cease operation as needed, to insure that persons with access to the tower will not be exposed to radio frequency radiation levels in excess of the Commission's guidelines. Cumulus will comply with this requirement. The remaining condition states that, prior to the construction of the tower and installation of all appurtenances, measurements will be taken on AM stations WHP and WTKT (partial proof of performance). Following the construction, another set of measurements

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1) The antenna is primarily to be used for HD/digital operations for WNNK-FM and is an interleaved antenna system (mounted between the bays of the primary WNNK-FM main antenna).

2) A STA seeking authority to operate this system digitally is also being submitted.

is to be taken on the same facilities to demonstrate that neither were impacted by the WNNK-FM auxiliary antenna. The condition is unnecessary, as detailed below.

The WNNK-FM tower, on which the WNNK-FM auxiliary system is located, has been in existence for nearly twenty years. In fact, the tower pre-dates WTKT AM. As such, it is not possible to take before tower construction measurements on either WTKT or WHP. Additionally, the WNNK-FM auxiliary antenna and line are already in existence on the structure. The system was placed on the tower to enable iBiquity to undertaken IBOC testing of an interleaved antenna system. Further, the WNNK-FM auxiliary antenna, as an interleaved system, is physically mounted between the bays of the existing WNNK-FM main antenna. The transmission line for the auxiliary antenna system, which is 7/8 inch in width, is routed down the tower next to the feed line for the main antenna system (which is 3 inches in width, three times the line size of the auxiliary line). As such, the increased mass of the antenna and line is insignificant.

Additionally, there are three other taller structures within 1,400 feet of the WNNK-FM tower, two of which are within 400 feet. As the WNNK-FM tower is the shortest tower of the four and within close proximity of the taller structures, the impact of the WNNK-FM auxiliary antenna and line on the tower will have no impact to the directional facilities of either WHP or WTKT. Therefore, it is believed that the pre- and post-measurement condition on the WNNK-FM auxiliary permit is unnecessary.