

APPLICATION FOR STATION LICENSE
AMEND BLH-20031017ACG
WXTU LICENSE LIMITED PARTNERSHIP
WXTU (FM) RADIO STATION
CH 223B - 92.5 MHZ - 15.0 KW (DA)
PHILADELPHIA, PENNSYLVANIA
March 2006

TECHNICAL STATEMENT

This Technical Statement was prepared on behalf of WXTU License Limited Partnership (“WLLP”), licensee of radio station WXTU, Channel 223B, Philadelphia, Pennsylvania. WLLP holds an outstanding construction permit which made minor changes and a correction in the operational facilities of WXTU (BMPH-20040303ABJ). This instant application seeks to amend a pending license application, to bring the technical data contained therein into agreement with the construction permit for a correction of coordinates (BMPH-20040303ABJ).¹ Attached as Exhibit A is a calculation of the transmitter power output for WXTU.

As originally requested in BPH-20000630AEI, a change in the directional envelope pattern was proposed, which affected the directional antenna azimuths between 140° and 190°, bringing the envelope to full field in those azimuths.² Since WXTU has several pre-1964 grandfathered shortspaces, it could not alter its authorized directional system in any of the remaining azimuths. As such, WXTU is still operating, and will continue to operate, its licensed directional antenna system, as authorized in BLH-19860325KC. The antenna pattern change

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- 1) At the direction of the Commission’s staff, this instant application is being submitted as an amendment to the pending license application.
 - 2) The ability to change the pattern came through an agreement with the licensee of station WVLT, Channel 221A, Vineland, New Jersey.

effectively expanded the envelope pattern only. No actual construction or change was necessary or undertaken.³ It is noted that the operating WXTU antenna system is elliptically polarized, based on its design. As such, while the power of the horizontal plane reaches 15.0 kilowatts, the vertical polarization reaches only 12.4 kilowatts.⁴

There were two conditions placed on the WXTU permit. The first condition requires the power of the station be lowered, or operation ceased, to ensure that persons having access to the site are not exposed to radio frequency electromagnetic fields in excess of the FCC guidelines. WLLP herein restates that it will lower the power of WXTU or cease operation, as necessary, to ensure no one is exposed to fields in excess of the FCC limits.

The remaining condition relates to the use of a directional antenna for WXTU. The power limitations set forth on the permit have been met. Further, as indicated above, WXTU continues to operate its authorized directional (as granted in BLH-19860325KC) with no changes. However, due to the age of the documentation provided with the antenna, it was necessary to re-tabulate the horizontal and vertical polarizations, in ten degree increments. We have attached as Exhibit B the antenna proof of performance from the manufacturer of the WXTU antenna, which includes the surveyor's statement, as well as the updated tabulation and relative field plots. The RMS of the envelope pattern associated with BMPH-20040303ABJ has a calculated RMS of 78.9%. The composite measured pattern, using the higher value of either

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- 3) The adjustment in power was to compensate for a slight change in the height above average terrain, based on the use of a computer 3 second arc database, rather than data extracted from topographic maps which was used for the facilities proposed in BPH-19831102AI.
 - 4) The gain figures on the horizontal and vertical planes were taken from BLH-19860325KC and are shown on Exhibit A.

the horizontal polarization or the vertical polarization, has a calculated RMS of 74.8%.

Therefore, the actual measured pattern is within 85% of the envelope pattern, which was submitted with the application for construction permit.

Based on this material, it is believed that WXTU has satisfied all conditions noted on the permit.