

Larry H. Will, P.E.

Broadcast Engineering

1055 Powderhorn Drive
Glen Mills, PA 19342-9504

PH (610) 399-1826
FAX (610) 399-0995
E-Mail lhwill@verizon.net

NORTHEASTERN PENNSYLVANIA TV ASSOCIATION

**LICENSEE OF W63AB
AND PERMITTEE OF W20CP**

MANSFIELD, PENNSYLVANIA

FAC ID# 49435

**FCC FILE #s BLTT-931206IM
BPTT-20031229AAA**

APPLICATION FOR A DIGITAL FLASH CUT

ON CH 20

(MINOR CHANGE)

EXHIBIT 12

March 9, 2006

NORTHEASTERN PENNSYLVANIA TV ASSOCIATION

LICENSEE OF W63AB MANSFIELD, PA

**FCC FILE #s BLTT-931206IM
BPTT-20031229AAA**

APPLICATION FOR A DIGITAL FLASH CUT

EXHIBIT 12 – RFR STATEMENT

There are no AM stations within 3.2 km of the W20CP site. The instant application is excluded under 1.1306. There are no physical changes proposed to the existing pre 1986 tower or immediate surrounding area. Using the procedures outlined in OET Bulletin 65, Edition 97-01 and specifically Appendix A, Table 1 and Equation 10, Page 21, I have evaluated the RFR energy from the antenna system of W20CP as follows:

W20CP is one of four low power stations at this general location required to be considered by 47 CFR 1.1307(b). They are W20CP (formally W63AB), W26CV, W54AV, and W259AW. However, as shown below, W20CP will contribute less than 5% of the allowable RFR energy to persons on the ground and outside the secured and marked tower structure.

W20CP W20CP is proposing to flash cut to digital operation on Channel 20 utilizing a maximum ERP of 1.15 kilowatts average power with a directional antenna and horizontal polarization. The Channel 20 Bogner B8U transmitting antenna is a high gain unit with an elevation power gain of 10x side mounted with a C/R 42 meters up the tower. With the resulting high elevation gain, the RFR energy at steep angles below the horizon are expected to be at least 10 dB below that of the main lobe. Utilizing Appendix A, Table 1 the maximum occupational/controlled exposure level at CH 20 is 1.7 mW/cm^2 . Using Equation 10, Page 21 of OET-65, the distance to the 1.7 mW/cm^2 contour is 1.5 meters. For general

population/uncontrolled environment the maximum exposure level is 340 uW/cm^2 . Again using Equation 10, the calculated distance to the 340 uW/cm^2 contour is 3.4 meters. Since the base of the antenna is approximately 39 meters above the ground, the height of the structure limits the possible excessive radiation values to at least 35.6 meters above the ground.

Again using Equation 10, the predicted RFR energy levels at 2 meters above ground is calculated at 2.8 uW/cm^2 or 0.82% of the FCC allowable for the general public/uncontrolled environment per FCC OET-65.

CONCLUSIONS ON RFR ANALYSIS

Therefore the level of RFR energy from the proposed W20CP at all points on the ground are below that required for protection of both the employees and the general public as required by ANSI 95.1-1992 or FCC OET 65, Edition 97-01. Since W20CP is calculated to produce less than 5% of the OET-65 levels anywhere that the general public or untrained individuals can have access, the W20CP facility is exempt from RFR requirements as to the sum of any other contributions from this multi-user site.

At those locations where RFR energy fields in excess of FCC guidelines are predicted to be encountered (up on the tower and very near the station's transmission antenna), signs and protective devices secure the area affected from the general public. With respect to direct employees of this licensee, OSHA RFR guidelines will be observed. Contractors and other outside workers potentially exposed to such areas on the tower shall be advised of the hazard by posted notices or other means. The station will reduce power or cease operation, if necessary, in order to protect workers on the tower.

With these procedures in place, we believe the proposed W20CP operation is in compliance with the RFR energy requirements of 47 CFR 1.1307(b).