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MARANATHA BROADCASTING COMPANY, INCORPORATED

LICENSEE OF

WFMZ-DT CHANNEL 46

ALLENTOWN, PENNSYLVANIA

FCC FACILITY ID # 39884

FCC FILE No. BLCDT-20060621AAU

APPLICATION FOR A

DIGITAL REPLACEMENT TRANSLATOR FOR WFMZ-DT

ENGINEERING EXHIBIT 12

June 4, 2009

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MARANATHA BROADCASTING COMPANY, INCORPORATED
ALLENTOWN, PENNSYLVANIA
APPLICATION FOR A CONSTRUCTION PERMIT FOR
A REPLACEMENT TRANSLATOR ON CH 51
FOR READING, PA

EXHIBIT 12

There are no directional AM stations within 3.2 km, nor any non-directional AM stations within 0.5 km of the proposed WUNC-DT replacement translator proposed 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. The proposed replacement translator is located at a multi-user site.

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 NEW (CH 51) as follows:

NEW (CH 51): NEW, Channel 51 is proposing digital DTV replacement operation on Channel 51 and utilizing an ERP of 0.005 kilowatts average digital power with a directional antenna and horizontal polarization. The proposed Channel 51 transmitting antenna is a medium gain unit with an elevation power gain of at least 4x side mounted with a C/R 17 meters up the

tower. With the very low ERP of 0.005 kW and the RF frequency 695 MHz, the calculated RF level at 1 meter from the antenna is less than 200uW which is less than 50% of that allowable at 695 MHz.

Since the antenna is located 17 meters up the tower, the proposed operation of NEW translator on Channel 51 results in RF levels well below that permitted for the general public by OET 65. The calculated RFR level at 2 meters above ground is 0.04% of the allowable for the general public/uncontrolled environment. The proposed site is not a hazard to persons.

. Furthermore, since the total contribution from NEW is below 5% of the allowable, this proposed station is exempt from further consideration on total RFR levels at this multi-user site.