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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**

**MINOR MODIFICATION OF LICENSE**

**TO INCREASE ERP**

**ENGINEERING ALLOCATIONS AND CANADIAN PROTECTION  
EXHIBIT**

**June 18, 2008**

**MARANATHA BROADCASTING COMPANY, INCORPORATED**  
**LICENSEE OF**  
**WFMZ-DT CHANNEL 46**  
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**FCC FILE No. BLCDT-20060621AAU**

**ENGINEERING ALLOCATIONS AND CANADIAN PROTECTION EXHIBIT**

**ALLOCATION PROTECTION**

This application is for a modification of the WFMZ-DT License to specify an increase in ERP from 400 to 800 kW utilizing a directional antenna. This office, with assistance from Meintel, Sgrignoli, and Wallace, Inc., has completed a Longley-Rice analysis of the proposed digital operation on TV Channel 46 with an ERP of 800 kW and utilizing the existing PSI Model PSIMPTD-9-DCP-46 directional antenna and that study shows that no prohibited interference greater than 0.5% population will occur to any other authorized or pending full service digital station or allotment as required by the decision in the Third Periodic Review in MB Docket 07-91 with the exception of to WOLF-DT, Channel 45, Hazelton, PA. As provided elsewhere in this application, the applicant has made a mutual interference agreement with the licensee of WOLF-DT as permitted by 47 CFR 73.623(g).

**CANADIAN PROTECTION**

WFMZ-TV currently has been coordinated with Canada at 400 kW ERP (DA) with a main lobe oriented to 160 degrees True.

A review of the allocation requirements of the US-Canadian digital L.O.U. shows that, for WFMZ-DT, Appendix 2 spacing requirements are fully met. WFMZ-DT is located at least

388 km from the nearest point of land in Canada. This distance exceeds all adjacent channel spacing requirements of the L.O.U. Appendix 2 and the tables of Paragraph 4 therein.

The nearest Canadian co-channel DTV allotment is for McCarther's Mill, ON at 45-08-18N, 077-38-50W or 533.98 km. This facility is a Canadian Class C. From Table 4.2.1, the maximum required separation into a Canadian UHF Class C is 296 km. Therefore the proposed WFMZ-DT digital operation at 800 kW (DA) fully meets the requirements of the US-Canadian L.O.U. Table 4.2.1 worst case UHF DTV into DTV separation requirement is 378 km while Table 4.2.7, UHF DTV into NTSC is 325 km. Both of these distances are greater than the nearest point of land in Canada from the WFMZ-FT transmitter site. Thus the proposed operation of WFMZ-DT at 800 kW fully complies with the requirements of channel spacing of Appendix 2 of the US-Canada L.O.U.