

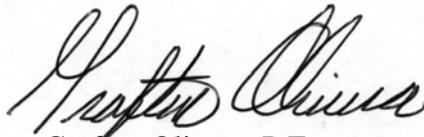
TECHNICAL EXHIBIT  
CONCERNING HUMAN EXPOSURE TO RF ELECTROMAGNETIC ENERGY  
PREPARED FOR  
STATION WDWL-DT  
BAYAMON, PUERTO RICO  
CH 30 100 KW (MAX-DA) 313 M

Technical Statement

The proposed facilities were evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. The radiation center for the proposed DTV antenna is located 33 meters above ground level. The maximum DTV ERP is 100 kW (horizontal polarization). A detailed analysis at every one degree of depression angle (below the horizon), based on the antenna vertical pattern (included in Exhibit 43) shows that the maximum RF exposure would occur at a depression angle of 72°, for vertical plane relative field value of 0.237, where the calculated power density at a point 2 meters above ground level is 176.6 uW/cm<sup>2</sup>. This is 46.5 % of the FCC's recommended limit of 379.3 uW/cm<sup>2</sup> for channel 30 for an “uncontrolled” environment. From the proposed tower operates FM station WBRQ, with an ERP of 3 kW and antenna radiation center located 52.4 meters above ground level. Assuming a worst-case scenario of a relative field value of 1.0, the calculated power density at a point 2 meters above ground level is 39.4 uW/cm<sup>2</sup>. This is 19.7 % of the FCC's recommended limit of 200 uW/cm<sup>2</sup> for the FM band for an “uncontrolled” environment. The maximum total RF exposure, for both facilities adds up to 65.2 % of the MPE for general population / uncontrolled environments. This is considerably below the MPE for an uncontrolled environment. Thus the proposed facility meets the FCC's requirements for human exposure to RF energy.

Access to the transmitting site will be restricted and appropriately marked with RFR warning signs. Furthermore, in the event that workers or other authorized personnel enter the restricted area or climb the tower, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing “accepted” RFR protective clothing or completely turning off the station.

Finally, it is noted that this technical exhibit only addresses the potential for radio frequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already has been provided to the FCC by the tower owner as part of the tower registration process.



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