TECHNICAL SUMMARY
APPLICATION FOR CONSTRUCTION PERMIT
CLASS A STATION WMJF-CD
TOWSON, MARYLAND
CHANNEL 23 3.57 KW (DA)

1. The instant application is the initial 90 day 'checklist' application for the reassigned facilities of WMJF-CD, Towson, Maryland (Ch. 23). It is proposed to operate with facilities that are identical to the facilities listed for WMJF-CD in the FCC's *Closing and Reassignment Public Notice* (CRP). Specifically, it is proposed to utilize a Dielectric model TFU-8DSB-R P300 (SP) directional antenna which has a horizontal plane relative field pattern that matches the horizontal plane relative field pattern for WMJF-CD's current PSI model PSILP8BH-39 directional antenna. There will also be no change in antenna orientation (110° true). Furthermore, it is proposed to operate with the assigned ERP of 3.57 kW and there will be no change in the antenna radiation center height (212 m AMSL). There will also be no change in the overall structure height (ASRN 1037283).

2. As the proposed facilities are identical to the facilities listed for WMJF-CD in the CRP, there will be no extension of the predicted service area relative to the baseline reassignment facility listed in the CRP. Also, the proposed facility is compliant with the 95% population service requirement. See attached FCC *TVStudy* analysis exhibit.

3. As also demonstrated in the *TVStudy* analysis exhibit, the proposal complies with the FCC's interference requirements based on the FCC's *TVStudy* program. A cell size of 2.0 km and a profile resolution of 1.0 points/km were utilized for the *TVStudy* analysis.

4. RFR Compliance: The proposed facilities were evaluated in terms of potential radiofrequency radiation (RFR) exposure at ground level to workers and the general public. The radiation center for the proposed DTV antenna will be located 66.6 meters above ground level and 8.5 meters above the building rooftop. The total DTV ERP is 3.57 kW (horizontal polarization only). A conservative vertical plane relative field value of 0.25 is presumed for the antenna's downward radiation (for angles towards the base of the tower, see attached antenna data). The calculated power density at a point 2 meters above the building rooftop is 149.3 uW/cm^2 which is 42.5% of the FCC's recommended limit of 351.3 uW/cm^2 for channel 23 for an uncontrolled environment.

However, as this is a multi-user site all existing and authorized broadcast facilities in the vicinity must be considered in the RFR evaluation. In addition to WMJF-CD, FM station WTMD (BLED-20130708ABE) also operates from the proposed location. The power density for WTMD was calculated to be 6.8% of the limit based on an antenna height of 79 meters above ground level and 21 meters above the building rooftop, a total ERP of 14.8 kW (H&V) and a greater than expected vertical relative field value of 0.1. The summation of the above fractions of the ANSI limit for each of the stations is 0.493. Since this is less than unity, the combined power density at 2 meters above the building rooftop will be less than the ANSI recommended limit applicable to general population/uncontrolled exposure areas. Thus, it is believed that the WMJF-CD facility is in full compliance with the FCC's requirements with regard to radio frequency radiation exposure.

Access to the transmitting site will be restricted and appropriately markets with RFR warning signs. Furthermore, as this is a multi-user site, a formal RFR protection protocol will be in effect in the event that workers or other authorized personnel enter the restricted area or climb the tower to ensure that appropriate measure will be taken to assure worker safety with respect to RFR exposure. Such measures include limiting the exposure time, wearing protective clothing, reducing power to an acceptable level or termination of transmitter output power all together until workers leave the restricted area.