

TECHNICAL SUMMARY  
REQUEST FOR SPECIAL TEMPORARY AUTHORITY (STA)  
DTV STATION KMBH  
HARLINGEN, TEXAS  
CH 38 34 KW (MAX-DA) 345.5 m

1. The instant request is for Special Temporary Authority (STA) for KMBH, Harlingen, Texas, which is licensed (BMLCDT-20140924ABC) for pre-transition DTV operation on channel 38. The KMBH STA facility will operate on pre-transition channel 38 using its licensed directional antenna (Andrew model ATW20H4-HSPX-38H) with the ERP reduced from 1000 kW to 34 kW. There will be no other changes including no change in the overall structure height of the existing tower (ASRN 1046272).

2. The proposed STA antenna system has been designed such that there will be no extension of the predicted noise-limited service contour of the STA facility beyond that of the main facility (see Figure 1 attached).

3. 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 344.5 meters above ground level. The total DTV ERP is 34 kW (horizontal polarization). A worst-case vertical plane relative field value of 1.0 is presumed (for angles below 60 degrees downward). The calculated power density at a point 2 meters above ground level is  $9.68 \text{ uW/cm}^2$  which is 2.4% of the FCC's recommended limit of  $411.33 \text{ uW/cm}^2$  for channel 38 for an uncontrolled environment. Therefore, based on the responsibility threshold of 5%, the proposal will comply with the RF emission rules.

Access to the transmitting site is restricted and appropriately marked with RFR warning signs. Furthermore, as this is a multi-user site, a formal RFR protection protocol is 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.