

TECHNICAL SUMMARY
REQUEST FOR SPECIAL TEMPORARY AUTHORITY (STA)
TV STATION KFXB-TV
DUBUQUE, IOWA
CHANNEL 43 4.5 KW (MAX-DA) 188 m

1. The instant request is for Special Temporary Authority (STA) for KFXB-TV, Dubuque, Iowa, which is licensed for operation on channel 43.¹ The KFXB-TV STA facility will operate on channel 43 with a directional antenna side-mounted at a height of 175 meters (575 feet) above ground level on KFXB-TV's current tower. There will be no change in the overall structure height of the existing tower (ASRN 1055265).

2. 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 175 meters above ground level. The total DTV ERP is 4.5 kW (horizontal polarization). A worst-case vertical plane relative field value of 1.0 is presumed for the antenna's downward radiation (for angles below 60 degrees downward). The calculated power density at a point 2 meters above ground level is 5.0 uW/cm² which is 1.2% of the FCC's recommended limit of 431.3 uW/cm² for channel 43 for an uncontrolled environment. Therefore, based on the responsibility threshold of 5%, the proposal will comply with the RF emission rules.

¹ See FCC File No. BLCDDT-20090528AEV.

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.