

TECHNICAL SUMMARY  
APPLICATION FOR MODIFICATION OF CONSTRUCTION PERMIT  
LMS FILE NO. 0000025324  
TV STATION KFXB-TV  
DUBUQUE, IOWA  
CHANNEL 14 580 KW (MAX-DA) 261 m

1. This application for modification of the KFXB-TV construction permit (LMS File No. 0000025324) proposes to simply change the antenna system from an ERI model ATW11H4-HTC4-14H horizontally polarized directional antenna (DA) to a Dielectric model TFU-12GTH-R C250 horizontally polarized DA. The horizontal plane relative field patterns for the authorized and proposed DA patterns are identical as is the antenna rotation (350 degrees). Furthermore, there will be no change in polarization (horizontal), electrical beam tilt (1 degree), effective radiated power (580 kW) or RCAMSL (510.2 meters). There will also be no change in the overall structure height (ASRN 1055265). Therefore, a TVStudy analysis is not necessary. In addition, the proposal will permit continued compliance with the FCC's city coverage requirements.

2. 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 248.1 meters above ground level. The total DTV ERP is 580 kW (horizontal polarization only). A conservative vertical plane relative field value of 0.15 is presumed for the antenna's downward radiation in both the horizontal and vertical planes of polarization (for angles below 60 degrees downward, see attached antenna data). The calculated power density at a point 2 meters above ground level is  $7.2 \text{ uW/cm}^2$  which is 2.3% of the FCC's recommended limit of  $315.3 \text{ uW/cm}^2$  for channel 14 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 markets with RFR warning signs. Also, 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.