

TECHNICAL SUMMARY  
STA REQUEST  
SPECIAL DISPLACEMENT WINDOW  
APPLICATION FOR CONSTRUCTION PERMIT  
LMS FILE NO. 0000054054  
LOW POWER DIGITAL STATION KBZO-LD  
LUBBOCK, TEXAS  
CHANNEL 30 15 KW (DA)

1. The instant application is for an STA to operate with the facilities set forth in the KBZO-LP's pending special displacement window application, LMS File No. 0000054054. Specifically, it is proposed to operate KBZO-LD on "in core" channel 30 with a directional antenna maximum effective radiated power (ERP) of 15 kW using an ERI model ALP16L2-HSOC-30 horizontally polarized directional antenna. The antenna radiation center height will be 1184.2 m AMSL. There will be no change in the overall structure height (ASRN 1054347).

2. Eligibility: KBZO-LD received a 120 day letter from T-Mobile indicating that the current KBZO-LD operation would likely interfere with its new 600 MHz band license. Therefore, pursuant to the FCC's Public Notice dated June 14, 2017 entitled "*Incentive Auction Task Force and Media Bureau Set Forth Tools Available to LPTV/Translator Stations Displaced Prior to the Special Displacement Window*" (DA 17-584, MB Docket No. 16-306, GN Docket No. 12-268), KBZO-LD is eligible to submit this STA to operate with the facilities set forth in its pending displacement application for channel 30.

3. Interference Compliance: As indicated in the attached *TVStudy* analysis, KBZO-LD's proposed channel 30 displacement operation meets the FCC's interference protection requirements with respect to all protected facilities based on both the pre-transition and post-transition allocation environments. A cell size of 1.0 km and a profile resolution of 1 km 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 200 meters above ground level. The total DTV ERP is 15 (horizontal polarization). A worst case vertical plane relative field value of 1.0 is presumed for the antenna's downward radiation (-60° to -90°

elevation). The calculated power density at a point 2 meters above ground level is 12.8  $\mu\text{W}/\text{cm}^2$  which is 3.4% of the FCC's recommended limit of 379.3  $\mu\text{W}/\text{cm}^2$  for channel 30 for an uncontrolled environment. Thus, as this is less than the 5% threshold value, it is believed that the KBZO-LD 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 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.