

TECHNICAL SUMMARY
SPECIAL DISPLACEMENT WINDOW
APPLICATION FOR CONSTRUCTION PERMIT
LOW POWER DIGITAL STATION KLHO-LD
OKLAHOMA CITY, OKLAHOMA
CHANNEL 26 15 KW (ND)

1. Application Purpose: The instant application is a special displacement window application for KLHO-LD currently on channel 31 at Oklahoma City, Oklahoma (FCC File No. BLDTL-20110112ADF).¹ As detailed below, KLHO-LD is eligible for displacement due to impermissible interference caused and received with the authorized operation of Class A station KOHC-CD on repacked channel 31 at Oklahoma City, Oklahoma (LMS File No. 0000034836). Therefore, it is proposed to operate KLHO-LD on “in core” channel 26 with a nondirectional antenna maximum effective radiated power (ERP) of 15 kW using an ERP model ALP16L2-HSO-26 horizontally polarized nondirectional antenna. The antenna radiation center height will be 499 m AMSL. There will be no change in the overall structure height (ASRN 1011122).

2. Eligibility to File in Special Displacement Window: Station KLHO-LD is eligible to file in the special displacement window as it was operating with its currently licensed facilities (FCC File No. BLDTL-20110112ADF) prior to April 13, 2017 – the release date of the *Closing and Channel Reassignment Public Notice*.² In addition, KLHO-LD is considered to be displaced due to impermissible interference caused and received with the authorized operation of Class A station KOHC-CD on repacked channel 31 at Oklahoma City, Oklahoma (LMS File No. 0000034836). Specifically, as indicated by the attached *TVStudy* analysis, KLHO-LD’s licensed channel 31 operation is predicted to cause up to 93.62% new interference to (up to 0.5% new interference is permitted) and will receive 93.63% new interference from KOHC-CD (a 2% threshold was used by the FCC for determination of displacement in the FCC Special Displacement Window PN). An exhibit

¹ See FCC Public Notice dated February 9, 2018 entitled “*Incentive Auction Task Force and Media Bureau Announce Post-Incentive Auction Special Displacement Window April 10, 2018 through May 15, 2018 and Make Location and Channel Data Available*” (DA 18-124, MB Docket No. 16-306, GN Docket No. 12-268) (“FCC Special Displacement Window PN”).

² See *Media Bureau Announces Date by Which LPTV and TV Translator Stations Must Be “Operating” In Order to Participate In Post-Incentive Auction Special Displacement Window, Public Notice*, 31 FCC Rcd 5383 (MB 2016).

supporting a request for waiver of the contingent application, Section 73.3517 of the FCC Rules, is also attached.

3. Interference Compliance: As indicated in the attached *TVStudy* analysis, KLHO-LD's proposed channel 26 displacement operation meets the FCC's interference protection requirements with respect to all protected facilities based on the post-transition allocation environment. A cell size of 1.0 km and a profile resolution of 0.1 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 100 meters above ground level. The total DTV ERP is 15 (horizontal polarization). A greater than expected vertical plane relative field value of 0.25 is presumed for the antenna's downward radiation (-60° to -90° elevation, see antenna information attached). The calculated power density at a point 2 meters above ground level is 3.26 uW/cm² which is 0.9% of the FCC's recommended limit of 363.3 uW/cm² for channel 26 for an uncontrolled environment. Thus, as this is less than the 5% threshold value, it is believed that the KLHO-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, 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.