

TECHNICAL SUMMARY
APPLICATION FOR SPECIAL TEMPORARY AUTHORITY
TV STATION K38FW
STATELINE, NEVADA
DIGITAL CHANNEL 31 12 KW (MAX-DA)

1. The instant application for Special Temporary Authority (STA) is a channel sharing proposal for analog station K38FW (Facility ID 125590, the “sharee”). The “sharer” station will be digital station K31KH-D at Stateline, Nevada (Facility ID 125591) using K31KH-D’s pre- and post-auction digital channel 31 facilities (FCC License File No. BLDTL-20110418ABC). Specifically, K38FW proposes to operate on digital channel 31 with stringent emission mask, a directional antenna maximum effective radiated power (ERP) of 10.1 kW utilizing an Superior Broadcast Products (SPB) model UPSL-2 directional antenna (antenna ID 102640) having a main lobe orientation of 215 degrees true with an antenna center of radiation of 1987 meters AMSL.

2. As indicated in the attached *TVStudy* analysis, the proposal will not cause interference to the predicted service of: (1) all other primary users in the repacked TV Band or in adjacent bands including land mobile operations, (2) licenses and valid construction permits for LPTV stations, (3) licenses and valid construction permits for full power and Class A stations that were not reassigned, and (4) the post-auction channels of reassigned full power and Class A stations as reflected in the *Closing and Reassignment Public Notice*. A cell size of 1.0 km and a profile resolution of 1.0 points/km were utilized for the *TVStudy* analysis. In addition, as K38FW and K31KH-D are currently co-located, the proposed K38FW operation will comply with the 30-mile site relocation limit and contour overlap rules.

3. RFR Compliance: The proposed facilities were evaluated in terms of potential radiofrequency radiation exposure at 2 meters above ground level in accordance with OST Bulletin No. 65, “Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation”. This Bulletin provides assistance in determining whether FCC-regulated transmitting facilities, operations or devices comply with limits for human exposure to radiofrequency (RF) electromagnetic fields adopted by the Commission in 1996.

Public access to the rooftop of the Harrah’s building will be restricted and appropriately marked with warning signs. Thus, the area in the vicinity of the transmitter site is defined as

a “controlled” environment. As shown on the attached vertical plane relative field pattern, the maximum vertical relative field for depression angles towards the tower base (-60° to -90° elevation) is less than 0.15. Therefore, using a “worst-case” vertical relative field value of 0.15, a maximum effective radiated power of 10.1 kilowatts, and an antenna center of radiation height above the building roof-top of 4 meters, the calculated power density at two meters above the rooftop is 1.897 milliwatt per square centimeter (mW/cm^2), or 99 percent of the Commission's recommended limit for a “controlled” environment ($1.917 \text{ mW}/\text{cm}^2$ for TV channel 31). If necessary, measurements will be made to show compliance.

In addition, an agreement will be in place to ensure that appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure.

Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing “accepted” RFR protective clothing and/or RFR exposure monitors or scheduling work when the stations are at reduced power or shut down.