

TECHNICAL SUMMARY

TELEVISION STATION KCSG CEDAR CITY, UTAH CHANNEL 14, 25 KW (MAX-DA), 368 M HAAT

1. The instant application is for minor modification of the KCSG licensed facility to relocate to an adjacent tower. KCSG is licensed for operation on Channel 14 at Cedar City, Utah (FCC File No. BLCDDT-20090617AAX). On November 9, 2022, the tower structure supporting the licensed KCSG transmitting antenna collapsed, which resulted in the destruction of the KCSG antenna. A new transmitting antenna for KCSG is to be installed on an existing 30.5-m lattice tower that located adjacent to the licensed tower location. The KCSG facility is being located to the only available tower space on the adjacent tower.

2. The new transmitting antenna will be an Electronic Research, Inc. model AL8W-14, which is nearly identical to the licensed transmitting antenna. The slight difference in the azimuth pattern is the result of utilizing the closest antenna pattern that was available on an expedited basis. The new transmitting antenna will be top-mounted on the existing 30.5-m tower, which will have an overall height of 37.0 m AGL. A study using the FCC's TOWAIR Analysis tool indicates that the tower structure does not require FAA notification, nor FCC antenna structure registration.

3. The geographic coordinates of the tower location and elevation of the tower site were determined based on the most recent mapping and topographical data available. The KCSG transmitting antenna height above average terrain (HAAT) was calculated to be 368 m for the new tower location. There is no change in the maximum directional effective radiated power (ERP) of the facility, which remains at 25 kW.

4. The proposed KCSG facility will provide 48 dBu, f(50,90), contour coverage of the entire community of license of Cedar City, as required. This is demonstrated in the Predicted Coverage Contours exhibit.

5. An interference analysis for the proposed KCSG facility was conducted using the FCC's *TVStudy* software. The results of this analysis are attached as an exhibit. As indicated, the proposed facility meets the FCC's interference protection requirements with respect to all protected facilities.