

TECHNICAL SUMMARY
APPLICATION FOR CONSTRUCTION PERMIT
TELEVISION STATION KPXC-TV
DENVER, COLORADO
CHANNEL 18 305 KW (MAX-DA) 358 M HAAT

1. The instant application is the initial 90-day ‘Checklist’ application for the reassigned facilities of KPXC-TV, Denver, CO (Channel 18). The proposed KPXC-TV facility will employ the existing top-mounted broadband antenna with no physical changes in the installation. The existing antenna is a Dielectric model TUD-C5-14/70H-2-B, which will operate on Channel 18. However, operation of the antenna on Channel 18 will result in an altered azimuth pattern due to the shift in frequency.

2. The ground elevation of the transmitter site was updated to agree with the antenna structure registration data. With that change, the antenna radiation center height above mean sea level is specified as 1878.4 m. In addition, it is noted that the antenna radiation center height above average (HAAT) was re-calculated considering all changes to the value in agreement with that given by the FCC’s *TVStudy* analysis software.

3. As a result of the altered Channel-18 azimuth pattern, the maximum effective radiated power was reduced to 305 kW to maintain the predicted service area of the proposed facility within 1% of the KPXC-TV baseline reassignment facility listed in the FCC’s Closing and Channel Reassignment (CCR) *Public Notice*. Also, the proposed facility is compliant with the 95% population service requirement relative to the CCR baseline facility as outlined in the CCR.

4. The instant proposal is compliant with the principal city coverage requirements of Denver. This is illustrated in the Predicted Coverage Contours exhibit (Figure 1).

5. Regarding the Table Mountain receiving zone, the proposed facility will radiate less energy in that direction than the given allotment for KPXC-TV. Specifically, the KPXC-TV Channel 18 baseline assignment facility results in a field strength at Table Mountain of 94.7 dBu, while the proposed KPXC-TV facility will result in a field strength of 93.8 dBu. See *TVStudy* Analysis exhibit.