

Engineering Statement
In Support of an Application to
Amend a Modification of
Construction Permit to
Change Antenna Location
KLDC, Denver, Colorado
Facility ID 12364
1220 kHz, 1 kW-D/0.012 kW-N, ND

The Corporate Engineering Department of the Crawford Broadcasting Company, on behalf of its subsidiary, KLZ Radio, Inc., has prepared this Engineering Statement and associated exhibits to accompany an Application for Amendment to Modification of Construction Permit to change the antenna site, increase the power and change the antenna system of KLDC, Denver, Colorado.

KLDC is currently authorized as a class D AM station operating on 1220 kHz with 0.66 kW nondirectional daytime and 0.011 kW non-directional nighttime at a site located at N39-41-00 and W105-00-24 (NAD27). This site is being decommissioned by the property owner and KLDC must relocate to a new site to continue providing service to Denver.

A construction permit (File No. BP-20201119AAE) was previously issued to permit the relocation of KLDC to the KLZ/KLDC antenna site, but it was subsequently determined that this relocation was not possible for financial reasons. Prior to this determination, a modification application (File No. BMP-20210308AAD) was filed to augment the directional pattern authorized in the construction permit because of anticipated detuning issues with the two tall KLZ towers. This application amends that augmentation application to abandon the relocation of KLDC to the KLZ/KLDC site and instead relocate it to a different site as described herein.

The instant application proposes in a minor change to relocate KLDC to a site 2.88 km south of the existing site, increase daytime power to 1.0 kW, and increase night power to 0.012 kW night, using a non-directional antenna both day and night. The proposed site is the former site of KLDC (prior to 1999) and is the same one that is presently used by KGNU (1390 kHz, 5 kW-D, 0.139 kW-N, Fac. ID # 31349). The existing tower, ASR #1024664, is a vertical, uniform cross-section, steel, guyed radiator 62.5 meters in height (101.8 electrical degrees above base insulator at 1390 kHz and 89.3 degrees at 1220 kHz). No change in tower height is proposed herein. The tower will be series fed. Geographic coordinates for the tower are 39-39-29 north latitude and 105-00-49 west longitude (NAD27).

The existing ground system consists of 120 equally spaced, buried copper radials about the base of the tower, 61 meters in length.

Measurements will be made to ensure that intermodulation products are well below the limits set forth in 47 C.F.R. §73.44.

The entire technical operation will be in compliance with all applicable FCC Rules and will be constructed in accordance with the standards of good engineering practice. The proposed KLDC antenna system is well in excess of the minimum physical vertical height specified by 47 C.F.R. §73.189.

The area within the daytime 1 V/m contour is industrial in nature. The contour evidently encompasses a population centroid, as population within the contour shows to be 240 (2020 Census), although there are only nine (9) identifiable structures that may be classified as dwellings within the contour. Population within the daytime 25 mV/m contour is 429,216 (2020 Census). Since the total population within the 1 V/m contour is less than 300, the requirement of 47 C.F.R. §73.24(g) is not applicable. In any event, the population within the 1 V/m contour is far less than 1% of the population within the 25 mV/m contour.

Unauthorized antenna tower access is and will continue to be restricted by a fence with locked gates. The minimum distance of the fence from the tower is greater than two (2) meters, which is the minimum distance required by OET-65. The antenna tower and fence are posted with warning signs, and all station personnel and contractors will be required to follow appropriate safety procedures before any work is commenced on the antenna tower, including reduction in power or discontinuance of operation before any maintenance work is undertaken.

The proposed facility is in compliance with all the engineering standards of allocation specified in the Commission's Rules.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'W.C. Alexander', with a stylized flourish at the end.

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