

EXHIBIT 12
TECHNICAL STATEMENT
K272FF ALBUQUERQUE, NEW MEXICO 271D
SANGRE DE CRISTO BROADCASTING CO., INC.
FCC FORM 349
JULY 2016

This Technical Statement is in support of a minor modification, FCC form 349, to FM translator K272FF, facility ID 144688, being filed on behalf of Sangre De Cristo Broadcasting Co., Inc. This is a 250-mile window application.

Sangre De Cristo Broadcasting Co., Inc. is proposing to change sites using a directional antenna at an Effective Radiated Power of 99 Watts. The directional antenna will be mounted at 52 meters Above Ground Level with a Center of Radiation at 1590 meters Above Mean Sea Level.

Figure 1 shows a channel interference study conducted from the proposed site for the new translator. The pertinent records for further study are:

- 1) KIOT Los Lunas, New Mexico 273C License
- 2) KIOT Los Lunas, New Mexico 273C License
- 3) KQTM Rio Rancho, New Mexico 269A License
- 4) KQUQ-LP Albuquerque, New Mexico 271L1 CP

The proposed site is located within the protected 60 dB contours of 2nd adjacent stations KIOT Los Lunas, New Mexico on channel 273C (2 records) and KQTM Rio Rancho, New Mexico on channel 269A. The signal strength at the proposed site of K272FF for these three records is 94.2 dB , 94.0 dB , and 94.0 dBu. The maximum distance from the transmitter to the edge of the interference zone is 13.9 meters. Because the transmitter is mounted 52 meters above ground, the interference zone will not reach within 38 meters of the ground. Therefore, there is no population in the interference zone.

The applicant, Sangre De Cristo Broadcasting Co., Inc., respectfully requests a

waiver of C.F.R. 74.1204(d) of the Commission's rules based on the fact that there is no population within the area of predicted interference.

Figure 2 is a predicted coverage map showing the 54 dB interference contour F(50,10) of the proposed operation and the 60 dB protected contour F(50,50) of KQUQ-LP Albuquerque, New Mexico on 271L1. As can be seen, there is no prohibited overlap between these two contours.

Figure 3 is the antenna pattern.

The distance between the proposed site and the previous authorized site for K272FF is 72 miles and meets the requirements for a 250-mile window application.

The proposed operation of K272FF will operate as a fill-in translator rebroadcasting KDEF(AM) Albuquerque, New Mexico, facility ID #227. Figure 4 shows that the 60 dB contour of the proposed operation of K272FF is entirely within the KDEF(AM) 2 mV/m contour and within 25 miles of the KDEF(AM) transmitter site.

It was concluded that the proposed operation of K272FF in Albuquerque, New Mexico on 271D will not cause any harmful interference to any existing stations and will be in full compliance with the Commission's rules. Let it be noted that should any actual real world interference occur, the applicant acknowledges that it will promptly suspend operation of this translator in accordance with 47 C.F.R. § 74.1203.