

KIRKMAN BROADCASTING, INC.

W254BK

CHARLESTON, SOUTH CAROLINA

ENGINEERING NARRATIVE

This application is being filed in the first of the 250 mile Translator Modification Application Filing Windows for AM Stations (DA15-1491). The primary station is class C WQNT(AM), Charleston, South Carolina.

The purpose of this application is to change the location of W254BK from Holly Hill, South Carolina to Charleston, South Carolina, a distance of 45.9 miles. In addition, the channel is changed from 254 to 238 and the power is increased from 0.019 kilowatt to 0.250 kilowatt. Under the terms of FCC DA 15-1491 this is considered a minor change application (see Exhibit 1).

This application meets the requirement that the translator 60 dBu contour must not exceed the lesser of the following constraints:

1. The 60 dBu translator contour must be completely within the 2 mV/m contour of the primary AM station, and
2. The translator 60 dBu contour must not extend more than 25 miles from the primary station transmitter.

Compliance with these constraints is demonstrated on a map attached to this exhibit.

As shown on the attached Channel Study, this application meets protection requirements to all stations except for WSSX-FM on second-adjacent channel 236 and WMXZ on second-adjacent channel 240.

The WSSX-FM signal at the proposed site is 98.3 dBu, and the translator interfering contour is 138.3 dBu. The distance from the proposed translator antenna to the interfering contour is 13.5 meters. With the translator antenna 120 meters Above Ground Level (AGL), the interfering contour is (120 m – 13.5 m) 106 meters AGL.

The WMXZ signal strength at the proposed site is 102.9 dBu, and the interfering contour is 142.9 dBu which is only 7.9 meters from the translator antenna, or 112.1 meters AGL.

There is no building on adjacent property that will be inside the interfering contour to either station, therefore, there is no population inside the interference area.

For purposes of §74.1204(d), there is no interference area that is open to, occupied or traversed by the general public. (See Living Way Ministries, Inc., 17FCC Rcd 17054

(2002), recondenied FCC 08-242, released October 10, 2008, especially the section "Guidance for Future Applicants to Demonstrate Lack of Population" at paras, 7-13.)

Based on the foregoing, a waiver for interference to WSSX-FM and WMXZ is requested under §74.1204(d).

The proposed power is 250 watts horizontal and 250 watts vertical, and the antenna will be a single element Nicom BKG-77. This antenna is similar to a Jampro "Double V" (EPA). Using FCC program FMModel, 250 watts H and 250 watts V, antenna height of 118 meters, the power density two meters above ground level is 0.342 microwatt per square centimeter. This is 0.16 of the ANSI recommended level of 200 microwatts per square centimeter.

An application is being filed concurrently with this one to move W243CO to this tower and to be diplexed into the antenna in this proposal. It is proposed that W243CO operate with a power of 240 watts H and V. Using FMModel, it will deliver a power density of 0.342 microwatts per square centimeter at two meters AGL. The combined power of the two translators will be 0.670 microwatt at two meters AGL, or 0.34 percent of the ANSI recommended level of 200 microwatts per square centimeter.

The signals of W254BK and W243CO will be combined with a combiner / diplexer designed and fabricated by one of the leading FM antenna manufacturers that will provide a high degree of isolation between transmitters and prevent spurious emissions.

The proposed antenna supporting structure is an existing tower (ASR 1044624), and the implementation of this proposed facility will not cause any change to the land surrounding the tower.

In view of the foregoing regarding the RFR power density and the existing tower, this application should be exempt from environmental processing.

In addition to this narrative, attachments in this exhibit include a channel study, and a map of the WQNT 2 mV/m contour, the translator 60 dBu contour and a 25 mile circle.