

TECHNICAL EXHIBIT  
APPLICATION FOR CONSTRUCTION PERMIT  
FOR  
TRANSLATOR STATION

ST. GEORGE, UT  
CH 295D 250 WATTS 56 M

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## INTRODUCTION

This technical exhibit has been prepared on behalf of MB Media Group, Inc., in support of an application for a commercial translator station.

This proposal would not be subject to environmental processing in accordance with Section 1.1306. It is believed that this proposal conforms to all applicable rules and regulations of the FCC.

### Proposed Station Data

Input Frequency: 96.3 MHz.

Output Frequency: 106.9 MHz.

Output Channel: 295

ERP: 250 watts

Class: D

### Proposed Antenna Location

The geographic coordinates (NAD 27) of the proposed site are as follows:

North Latitude: 37-03-49

West Longitude: 113-34-22

### Transmitting Antenna

ANTENNA: Shively Model 6810, non-directional.

### Interference

The proposed station will be located on Webb Hill, a communications site serving the Saint George, UT area.

Overlap with the proposed station and the pertinent contours of any co, first, second, third adjacent channel and IF spaced stations, are shown in Table 1 and Figures 1-4.

The interfering contours of the proposed station and co-channel KONV, Overton, NV, are shown in Figure 1. Although contour overlap is present, Figure 5 shows that significant intervening terrain exists between KONV and the proposed translator station, and actual interference would not occur over populated area. 47 CFR § 74.1204 (d) states *“In addition, an application otherwise precluded by this section will be accepted if it can be demonstrated that no actual interference will occur due to intervening terrain, lack of population or such other factors as may be applicable.”*

The pertinent interfering contours of the proposed station and second-adjacent KXFF, Colorado City, AZ, are shown in Figures 2-3. Figure 4 illustrates the 100 dBu contour of the proposed station superimposed on a USGS map. Although contour overlap occurs, it is over a small, unpopulated area. FCC 02-244, Section II.A.6 states that USGS quadrangles *“have been recognized as acceptable to demonstrate lack of population.”* As demonstrated on the quadrangle maps, there are no populated structures or highways within the contours. The contours encompass a road, but it is a road for access to the transmitter site. Hence, in accordance with 47 CFR § 74.1204 (d) and in FCC 02-244, a lack of population has been demonstrated within the area of interference.

### Unattended Operation

The proposed station will comply with all rules and requirements regarding unattended operation.

### Multiple Translators

The applicant certifies that it does not have any interest in an FM translator that serves substantially the same area and that rebroadcasts the same signal as the proposed translator.

### Environmental Considerations

The station will operate with an effective radiated power of 250 watts into a Shively 6810, 1-bay antenna.

The non-ionizing RFR analysis was conducted utilizing the FCC FM Model software program. Results of this analysis are shown in Figure 6.

The worst-case, predicted power density for the proposed station at two meters above ground level is estimated to be  $9.68 \mu\text{W}/\text{cm}^2$ , which will occur at a horizontal distance of 19.6 meters from the base of the tower.

Since the permitted power density for general-population/uncontrolled exposure (GPE) in the FM band is  $200 \mu\text{W}/\text{cm}^2$ , the predicted power density of the proposed site is 4.9% of the GPE. As this level is less than the 5% threshold established in 47 CFR § 1.1307 (b) (3), and only stations contributing 5% or more than the applicable standard need comply, the proposed facility does not need to be considered in determining site RFR compliance.

Access to the transmitting site is restricted and appropriately marked with warning signs. When it becomes necessary for workers to ascend the tower, appropriate measures, such as reduction or shut down of power if necessary, shall be taken to ensure that the human exposure to radio-frequency radiation will not exceed the FCC guidelines.

Callsign	State	City	Freq	Channel	ERP_w	Class	Status	Distance_km
KSNE-FM	NV	LAS VEGAS	106.5	293	100000	C	LIC	173.71
KSNE-FM	NV	LAS VEGAS	106.5	293	100000	C	CP MOD	173.77
NEW	UT	CEDAR CITY	106.7	294	62	D	APP	79.75
NEW	UT	MILFORD	106.7	294	10	D	APP	163.66
KONV	NV	OVERTON	106.9	295	92000	C	CP	83.66
NEW	UT	CEDAR CITY	106.9	295	62	D	APP	79.75
NEW	UT	MILFORD	106.9	295	10	D	APP	163.66
NEW	NV	NORTH LAS VEGAS	106.9	295	17	D	APP	179.21
NEW	AZ	SELIGMAN	107.1	296	250	D	APP	197.5
KXFF	AZ	COLORADO CITY	107.3	297	35000	C1	LIC	34.65
KXTE	NV	PAHRUMP	107.5	298	24500	C	LIC	211.35

TABLE 1: Pertinent first, second, third adjacent, and IF channel stations spaced with proposed station.