

Engineering Exhibit
KNFX-FM
Facility ID 41410
Minor Change Application
October 17, 2005

By this application it is sought to modify the facility of KNFX- FM to increase power from 3 kW to 6 kW utilizing its present antenna.

The KNFX-FM antenna is non-directional and is located 90 meters above ground level upon a tower described by antenna structure registration number 1052210. No change in any way will be made to the antenna system. The increase in power will be accomplished by a doubling of transmitter output power.

From this location KNFX-FM is fully spaced as a Class A facility in accordance with Section 73.207 to all known facilities, applications and allocations with the exception of KPLX 99.5 Fort Worth, TX to which spacing in accordance with Section 73.215 is requested. A fully spaced allotment location has been determined. Figure 1 is a table depicting the Section 73.207 spacing. Figure 2 is a table depicting the Section 73.207 spacing from the proposed allotment coordinates. Figure 3 is a map demonstrating that no prohibited contour overlap will exist with station KPLX.

The proposed facilities were evaluated in terms of potential radio frequency radiation exposure at ground level in accordance with OET Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radio frequency Radiation."

The proposed antenna system is an EPA type 6, 6- bay, 1.0 wave spaced "Shively 6810" style antenna, mounted with its center of radiation 90 meters above ground level. This proposal will operate with an effective radiated power of 6 kilowatts in both the horizontal and vertical planes. At 2 meters above ground, at 46 meters from the base of the tower, this proposal will contribute worst case 4.87 microwatts per square centimeter, or 0.48 percent of the allowable ANSI limit for controlled exposure, and 2.4 percent of the allowable limit for uncontrolled exposure. While it is believed that this proposal is in compliance with OET Bulletin Number 65 as required by the Federal Communications Commission this is a shared antenna location with 2 other broadcasters. The applicant will perform post constructions measurements to determine compliance and should such measurements reveal any areas of over-exposure, the applicant will properly address those areas.

Further, the applicant will see that signs are posted in the vicinity of the tower, warning of potential radio frequency hazards at the site. The applicant will cooperate with other users of the tower to reduce power of the facility, or discontinue operation, as necessary to limit human exposure to levels less than specified by the Federal Communications Commission should anyone be required to climb the tower for maintenance or inspection.

Figure 1. Antenna Location Spacing Study

ComStudy 2.2 search of channel 258 (99.5 MHz Class A) at 30-39-02.0 N, 96-20-58.0 W.

Callsign	State	City	Freq	Chanl	ERP_w	Class	Status	Dist_km	Sep	Clr
KPLX	TX	FORT WORTH	99.5	258	100000	C	LIC	222.2	226	-3.8
KPLX	TX	FORT WORTH	99.5	258	0	C	USE	222.2	226	-3.8
KVST	TX	HUNTSVILLE	99.7	259	0	C3	USE	89.02	89	0
KVST	TX	WILLIS	99.7	259	2550	A	LIC	81.75	72	9.8
KVST*	TX	WILLIS	99.7	259	0	A	RSV	84.65	72	12.6
KISS-FM	TX	SAN ANTONIO	99.5	258	100000	C	LIC	239.64	226	13.6
KISS-FM	TX	SAN ANTONIO	99.5	258	0	C	USE	239.64	226	13.6
KISS-FM	TX	SAN ANTONIO	99.5	258	100000	C	CP	239.64	226	13.6
KJAZ	TX	THORNDALE	99.3	257	6000	A	MOD	92.81	72	20.8
WACO-FM	TX	WACO	99.9	260	90000	C	LIC	119.26	95	24.3
WACO-FM	TX	WACO	99.9	260	890	C	CP	125.24	95	30.2
WACO-FM	TX	WACO	99.9	260	0	C	USE	125.23	95	30.2
KPLX	TX	FORT WORTH	99.5	258	25000	C	LIC	261.59	226	35.6

Figure 2. Allocation Coordinates Spacing Study

ComStudy 2.2 search of channel 258 (99.5 MHz Class A) at 30-35-59.0 N, 96-22-24.0 W.

Callsign	State	City	Freq	Chanl	ERP_w	Class	Status	Dist_km	Sep	Clr
KPLX	TX	FORT WORTH	99.5	258	100000	C	LIC	227.06	226	1.1
KPLX	TX	FORT WORTH	99.5	258	0	C	USE	227.06	226	1.1
KVST	TX	HUNTSVILLE	99.7	259	0	C3	USE	92.23	89	3.2
KISS-FM	TX	SAN ANTONIO	99.5	258	100000	C	LIC	234.33	226	8.3
KISS-FM	TX	SAN ANTONIO	99.5	258	0	C	USE	234.33	226	8.3
KISS-FM	TX	SAN ANTONIO	99.5	258	100000	C	CP	234.33	226	8.3
KVST	TX	WILLIS	99.7	259	2550	A	LIC	82.66	72	10.7
KVST*	TX	WILLIS	99.7	259	0	A	RSV	86.35	72	14.3
KJAZ	TX	THORNDALE	99.3	257	6000	A	MOD	89.65	72	17.6
WACO-FM	TX	WACO	99.9	260	90000	C	LIC	121.26	95	26.3
WACO-FM	TX	WACO	99.9	260	890	C	CP	128.21	95	33.2
WACO-FM	TX	WACO	99.9	260	0	C	USE	128.19	95	33.2
KODA	TX	HOUSTON	99.1	256	72000	C	LIC	134.43	95	39.4

Figure 3

