

CH 14 3.8 kW DIRECTIONAL RC 468.8 M AMSL PAXICO, KANSAS
ENGINEERING NARRATIVE AND RF RADIATION ENVIRONMENTAL ANALYSIS
MARCH 2024

Proposed Change in Facilities

K14PX-D is a licensed LPTV DTV facility authorized in file number 0000178486 and also authorized for a site change in construction permit 0000238713 . The proposed minor modification to construction permit is believed to qualify as a minor change:

The applicant proposes herein to move to FCC Tower registration ASR 1276612. The site change and proposed facilities are believed to comply with FCC policy and rules based on the following:

The proposed CH 14 LPTV protected contour and the licensed contour have an area of common overlap as depicted on Figure 1 attached.

The proposed site is located a distance of 39.32 kilometers (24.4 miles) from the licensed site coordinates in compliance with rule section 74.787 (b) (iii).

The proposed antenna system consists of a single Kathrein UHF panel antenna model 75010210, horizontally polarized without beam tilt. The antenna radiation center is 113.7 meters AGL. Utilizing formula 10 OF OET Bulletin No. 65, Edition 97-01, a value F of 1.00 has been used to calculate the power density 2 meters above ground. The maximum power density is 10.17 uw/cm squared calculated for an ERP of 3,800 watts H. polarization. This value is 3.25% of the Public Exposure MPE of 313 microwatts per centimeter squared. Based on this analysis it is believed that the proposed facility is in compliance with OET-65 Guidelines.

The applicant will reduce power or cease transmission as required to meet FCC OET-65 Guidelines.

The proposed tower is existing along with the transmitter building, access road and power. It is noted that K03II holds a CP at this elevation on the tower. That application is being modified as well so that the antenna radiation centers are not conflicting.

Below is a copy of the TVStudy interference analysis for CH 14 based on the facilities described above with the antenna pattern lobe oriented at 60 degrees true. As can be seen at the conclusion of the report there is no impermissible caused interference or received interference above 2%. It is believed that the proposed facility provides full protection to other television facilities.

TVStudy Report

Study created: 2024.03.17 18:56:16

Study build station data: LMS TV 2024-03-13

Proposal: K14PX-D D14 LD LIC PAXICO, KS
 File number: BLANK0000178486
 Facility ID: 186921
 Station data: User record
 Record ID: 1488
 Country: U.S.

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	K14SU-D	D14	LD	LIC	KEOKUK, IA	BLANK0000182817	400.1 km
No	KTIV	D14	DT	LIC	SIOUX CITY, IA	BLANK0000063868	402.8
No	KOCW	D14	DT	LIC	HOISINGTON, KS	BLCDT20090622AFO	266.0
Yes	KUKC-LD	D14	LD	LIC	KANSAS CITY, MO	BLANK0000120582	114.8
No	K14SH-D	D14	LD	LIC	MARSHFIELD, MO	BLANK0000124637	309.6
No	K14PQ-D	D14	LD	CP	SAINT JOSEPH, MO	BLANK0000194349	132.5
No	K14PQ-D	D14	LD	LIC	SAINT JOSEPH, MO	BLANK0000198168	132.5
No	KNLC	D14	DT	LIC	ST. LOUIS, MO	BLANK0000118216	461.6
No	KOCY-LD	D14z	LD	LIC	OKLAHOMA CITY, OK	BLANK0000178645	423.4
No	KTUL	D14	DT	LIC	TULSA, OK	BLANK0000215800	334.7
No	K26PI-D	N15z	TX	LIC	Kansas City, KS	BLTTL19880714IH	156.3
No	KSNW	D15	DT	LIC	WICHITA, KS	BLANK0000201956	199.9
No	K15MB-D	D15	LD	LIC	KANSAS CITY, MO	BLANK0000185547	112.0
No	KNPN-LD	D15	LD	LIC	SAINT JOSEPH, MO	BLANK0000064322	119.8
No	KMOS-TV	D15	DT	LIC	SEDALIA, MO	BLEDT20030108ABK	257.7
No	KFXL-TV	D15	DT	LIC	LINCOLN, NE	BLANK0000105938	206.4

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D14
 Mask: Full Service
 Latitude: 38 58 34.00 N (NAD83)
 Longitude: 95 48 34.00 W
 Height AMSL: 468.8 m
 HAAT: 0.0 m
 Peak ERP: 3.80 kW
 Antenna: KAT-75010210 (ID 1009110) 60.0 deg
 Elev Pattnr: Generic

48.7 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.277 kW	168.1 m	30.1 km

45.0	3.18	180.5	43.4
90.0	2.03	151.4	39.3
135.0	0.046	155.8	20.3
180.0	0.019	134.1	14.8
225.0	0.021	118.3	14.4
270.0	0.002	128.3	7.8
315.0	0.016	158.8	15.2

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 149 m

Distance to Canadian border: 1063.8 km

Distance to Mexican border: 1143.9 km

Conditions at FCC monitoring station: Grand Island NE
Bearing: 314.9 degrees Distance: 310.8 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 281.9 degrees Distance: 816.5 km

No land mobile station failures found

Study cell size: 0.50 km
Profile point spacing: 0.10 km

Maximum new IX to full-service and Class A: 0.50%
Maximum new IX to LPTV: 2.00%

No IX check failures found.

The foregoing was prepared on behalf of Roseland Broadcasting, Inc. by Clarence M. Beverage of Communications Technologies, Medford, New Jersey, whose qualifications are a matter of record with the Federal Communications Commission. The statements herein are true and correct of his own knowledge, except such statements made on information and belief, and as to these statements she believes them to be true and correct.



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March 18, 2024