

K03II-D MINOR MODIFICATION TO CONSTRUCTION PERMIT FCC FILE #0000238717
CH 3 0.1 kW DIRECTIONAL RC 367.3 M AMSL MANHATTAN, KANSAS
ENGINEERING NARRATIVE AND RF RADIATION ENVIRONMENTAL ANALYSIS
MARCH 2024

Proposed Change in Facilities

K03II-D is a licensed LPTV DTV facility authorized in file number 0000178488 with a construction permit to change sites authorized in FCC file # 0000238717. The proposed facility is believed to qualify as a minor change:

This application proposes to remain at the CP site location, FCC Tower registration ASR 1276612, but with lowered ERP, lower antenna radiation center and a change in antenna orientation to 40 degrees true. The proposed facilities are believed to comply with FCC policy and rules based on the following:

The proposed CH 3 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 will consist of a single Kathrein VHF log periodic antenna, model CL-24, horizontally polarized, without beam tilt. The antenna radiation center is 12.2 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 32 uw/cm squared calculated for an ERP of 100 watts H. polarization. This value is 16.05% of the Public Exposure MPE of 200 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 exists along with the transmitter building, access road and power.

Below is a copy of the TVStudy interference analysis for CH 3 based on the facilities described above with the antenna pattern lobe oriented at 40 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 19:33:23

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

Proposal: K03II-D D3 LD LIC MANHATTAN, KS
File number: BLANK0000178488
Facility ID: 183493
Station data: User record
Record ID: 1489
Country: U.S.

No protected stations found.

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D3
Mask: Full Service
Latitude: 38 58 34.00 N (NAD83)
Longitude: 95 48 34.00 W
Height AMSL: 367.3 m
HAAT: 0.0 m
Peak ERP: 0.100 kW
Antenna: KAT CL-24 ID 38574 40.0 deg
Elev Pattn: Generic

43.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.021 kW	66.6 m	15.1 km
45.0	0.094	79.0	23.3
90.0	0.009	49.9	10.6
135.0	0.000	54.3	2.3
180.0	0.000	32.6	2.0
225.0	0.000	16.8	3.2
270.0	0.000	26.8	1.5
315.0	0.000	57.3	3.0

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: 48 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

Study cell size: 1.00 km

Profile point spacing: 1.00 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.



Clarence M. Beverage
for Communications Technologies
Medford, New Jersey
March 18, 2024