

K29OC-D MINOR MODIFICATION OF CONSTRUCTION PERMIT
CH 29 1.57 kW DIRECTIONAL FACILITY ID 186919
CHAPMAN, KANSAS
ENGINEERING NARRATIVE AND RF RADIATION ENVIRONMENTAL ANALYSIS
DECEMBER 2021

Proposed Change in Facilities

K29OC-D is an LPTV DTV facility authorized in file number 0000157115. The proposed facility is believed to qualify as a minor change:

The applicant proposes herein to move to an amateur radio licensee tower which is unregistered but the shadow of the yagi antenna elements shows in satellite view 09/2012 in Google Earth Professional. The support structure overall height is 46'. The proposed site and proposed facilities are believed to comply with FCC policy and rules based on the following:

The proposed site is 7.5 kilometers from the city reference coordinates for Chapman, Kansas.

The proposed CH 29 LPTV protected contours have an area of common overlap as depicted on Figure 1 attached.

The proposed site is located a distance of 7.7 kilometers from the CP site coordinates in compliance with rule section 74.787 (b) (iii).

The proposed antenna system consists of a single Kathrein/Scala horizontally polarized panel antenna model CL-1469B 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 0.5 has been used to calculate the power density 2 meters above ground. The maximum power density is 126 uw/cm squared

calculated for an ERP of 1,570 watts H. polarization. This value is 33.8% of the Public Exposure MPE per section 1.1310 in the major lobe. 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 adjacent building, access road and power.

TVStudy Report

Study created: 2021.12.07 13:38:52

Study build station data: LMS TV 2021-12-07

Proposal: K29OC-D D29 LD CP CHAPMAN, KS
File number: BLANK0000157115
Facility ID: 186919
Station data: User record
Record ID: 1062
Country: U.S.

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	K26PI-D	N15z	TX	LIC	Kansas City, KS	BLTTL19880714IH	54.2 km
No	KSCW-DT	D28	DT	APP	WICHITA, KS	BLANK0000158298	125.7
No	KWKD-LD	D28	LD	LIC	WICHITA, KS	BLANK0000153828	144.0
No	KWKD-LD	N28+	TX	LIC	WICHITA, KS	BLTT20050801AHP	150.9
No	KCMN-LD	D28	LD	LIC	Kansas city, MO	BLANK0000124482	218.5
No	KHNE-TV	D28	DT	LIC	HASTINGS, NE	BLANK0000074810	212.6
No	KWOG	D29	DT	LIC	SPRINGDALE, AR	BLANK0000049027	398.4
No	KBWF-LD	D29	LD	LIC	SIOUX CITY, IA	BLANK0000063408	385.2
No	KSAS-LP	D29	LD	LIC	DODGE CITY, KS	BLDTL20140106DOA	298.2
No	K29JU-D	D29	LD	CP	GARDEN CITY, KS	BNPDTL20100108ADI	349.7
No	KHDS-LD	D29	LD	LIC	SALINA, KS	BLANK0000059140	58.8
No	K29NL-D	D29	LD	LIC	WICHITA, KS	BLANK0000160616	146.5
No	KRCG	D29	DT	CP	JEFFERSON CITY, MO	BLANK0000145041	429.3

No	KJLN-LD	D29	LD	CP	Joplin, MO	BLANK0000143697	310.8
No	KJLN-LD	D29	LD	LIC	Joplin, MO	BLANK0000143105	302.6
No	KMBC-TV	D29	DT	LIC	KANSAS CITY, MO	BLANK0000153380	217.7
No	KSFZ-LD	D29+	LD	CP	Springfield, MO	BLANK0000130705	410.6
No	KWNB-LD	D29	LD	LIC	MCCOOK, NE	BLDTL20070619AAU	336.9
No	KXVO	D29	DT	LIC	OMAHA, NE	BLANK0000078842	236.3
No	KXVO	D29	DT	CP	OMAHA, NE	BLANK0000158973	236.3
No	KTUZ-TV	D29	DT	LIC	SHAWNEE, OK	BLCDT20081105ACO	388.6
No	KTZT-CD	D29	DC	CP	TULSA, OK	BLANK0000170367	332.9
No	KTZT-CD	D29	DC	LIC	TULSA, OK	BLDTA20120430AEA	333.4
No	K29HZ-D	D29	LD	LIC	WOODWARD, ETC., OK	BLDTT20101007ABM	338.0
No	KGBD-LD	D30	LD	LIC	GREAT BEND, KS	BLDTL20121217ACU	162.1
No	K30LK-D	D30	LD	CP	SALINA, KS	BNPDTL20100419ACL	58.7
No	KSMI-LD	D30	LD	LIC	WICHITA, KS	BLANK0000011260	144.0
No	KPXE-TV	D30	DT	LIC	KANSAS CITY, MO	BLANK0000001701	217.9
No	DK31BW	N31	TX	APP	MANHATTAN, KS	BLTTL19890119II	41.8
No	KQKC-LP	N32z	TX	LIC	TOPEKA, KS	BLTTL20100128AAE	75.2

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D29
Mask: Full Service
Latitude: 39 2 16.30 N (NAD83)
Longitude: 97 2 13.70 W
Height AMSL: 371.5 m
HAAT: 0.0 m
Peak ERP: 1.57 kW
Antenna: SCA-CL-1469B (ID 1008555) 0.0 deg
Elev Pattn: Generic

50.2 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.000 kW	-15.8 m	2.1 km
45.0	0.807	11.7	16.6
90.0	1.04	-6.7	17.8

135.0	0.000	13.5	2.1
180.0	0.000	17.1	2.1
225.0	0.000	3.4	2.1
270.0	0.000	-17.3	2.1
315.0	0.000	11.3	2.1

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 2 m

Distance to Canadian border: 1084.9 km

Distance to Mexican border: 1104.6 km

Conditions at FCC monitoring station: Grand Island NE
Bearing: 330.9 degrees Distance: 240.7 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 282.3 degrees Distance: 711.4 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%

----- Below is IX received by proposal BLANK0000157115 -----

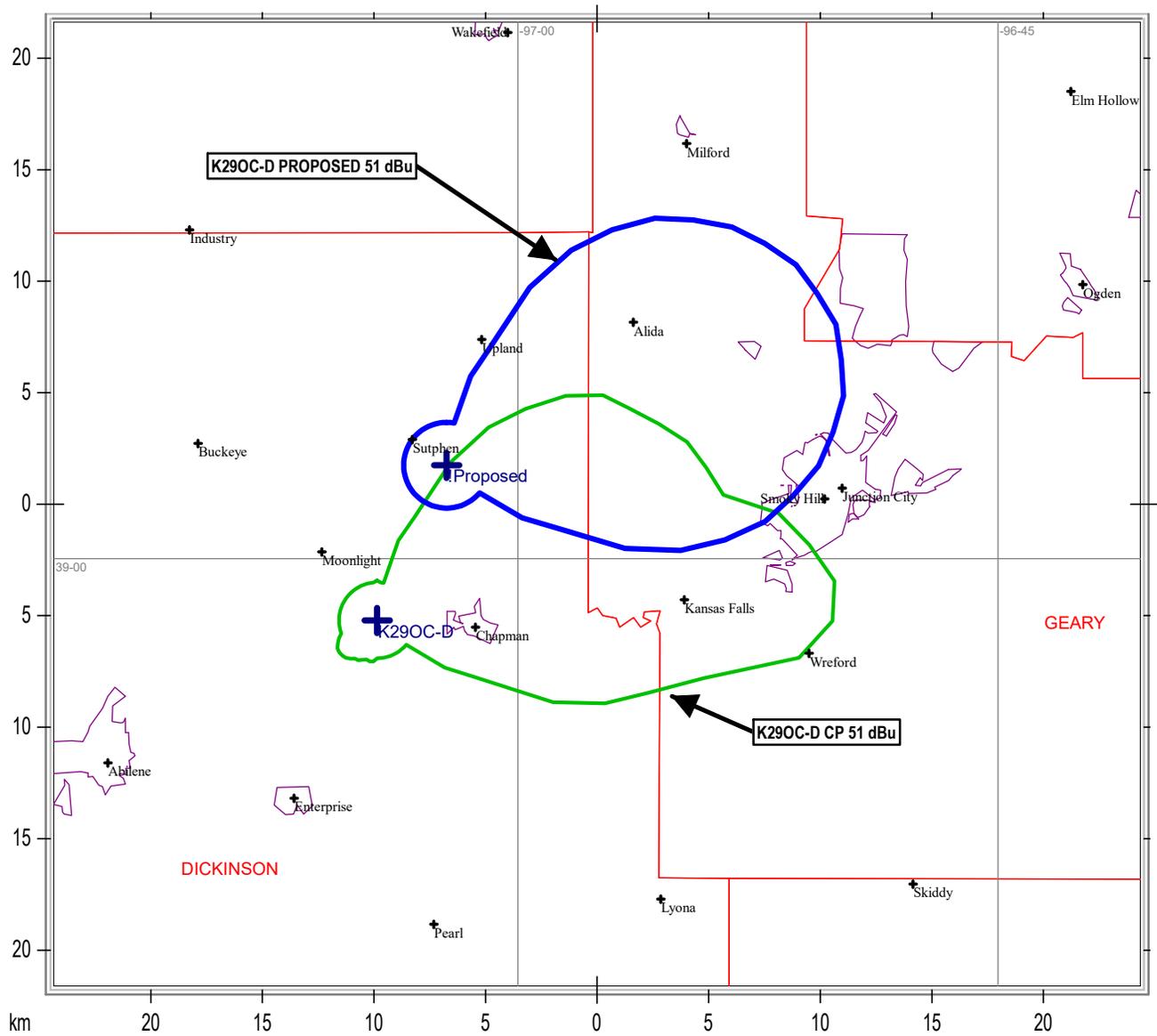
Proposal receives 27.63% interference from scenario 1
Proposal receives 27.63% interference from scenario 2
No IX check failures found.

The foregoing was prepared on behalf of Roseland Broadcasting, Inc. by Clarence M. Beverage of *Communications Technologies, Inc.*, 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, Inc.
Medford, New Jersey
December 7, 2021

PROPOSED K29OC-D CH 29 1.57 kW ERP MAX DA CHAPMAN, KANSAS



Communications Technologies, Inc. Medford, New Jersey

County Borders City Borders Lat/Lon Grid