

KCKW-LD MINOR MODIFICATION TO LICENSE FCC FILE #0000166016  
CH 25 6.5 kW DIRECTIONAL RC 690.5 M AMSL EUGENE, OREGON  
ENGINEERING NARRATIVE AND RF RADIATION ENVIRONMENTAL ANALYSIS  
FEBRUARY 2024

### Proposed Change in Facilities

KCKW-LD is a licensed LPTV DTV facility authorized in file number 0000166016. The proposed facility is believed to qualify as a minor change:

The applicant proposes herein to move to an existing, guyed, tower 61 meters in height. The tower ground elevation and site coordinates were entered into FCC TOWAIR. The Determination results were that there are no airports within 8 kilometers. Please see screen shot below.

DETERMINATION Results	
Structure does not require registration. There are no airports within 8 kilometers (5 miles) of the coordinates you provided.	
Your Specifications	
NAD83 Coordinates	
Latitude	44-06-57.1 north
Longitude	123-00-00.4 west
Measurements (Meters)	
Overall Structure Height (AGL)	61
Support Structure Height (AGL)	61
Site Elevation (AMSL)	641.9
Structure Type	
GTOWER - Guyed Structure Used for Communication Purposes	

The site change and proposed facilities are believed to comply with FCC policy and rules based on the following:

The proposed CH 25 LPTV protected contour totally envelops the licensed contour as depicted on Figure 1 attached.

The proposed site is located a distance of 15.65 kilometers (9.7 miles) from the licensed site coordinates in compliance with rule section 74.787 (b) (iii).

The proposed antenna system consists of an Alive Telecom UHF slot antenna model C3RS elliptically polarized with 2 degrees of electrical beam tilt and 3 degrees of mechanical beam tilt. The antenna radiation center is 48.5 meters AGL. Utilizing formula 10 of OET Bulletin No. 65, Edition 97-01, a value F of 0.25 has been used to calculate the power density 2 meters above ground. The maximum power density is 8.8 uw/cm squared calculated for an ERP of 6,500 watts H. Polarization and 2,600 watts V. Polarization. This value is 2.5% of the Public Exposure MPE of 357 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.

Below is a copy of the TVStudy interference analysis for CH 25 based on the facilities described above with the antenna pattern lobe oriented at 180 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: 2024.02.12 13:48:11

Study build station data: LMS TV 2024-02-12

Proposal: KCKW-LD D25 LD LIC EUGENE, OR  
File number: BLANK0000166016  
Facility ID: 188579  
Station data: User record

Record ID: 1475

Country: U.S.

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
Yes	K24LY-D	D24	LD	LIC	COTTAGE GROVE, OR	BLANK0000066928	37.7 km
No	K24MF-D	D24	LD	LIC	FLORENCE, OR	BLANK0000055171	87.7
No	K24FH-D	D24	LD	LIC	GLIDE, ETC., OR	BLANK0000222290	82.9
No	K24KG-D	D24	LD	LIC	MADRAS, OR	BLDTT20120430ACW	155.5
No	KATU	D24	DT	LIC	PORTLAND, OR	BLANK0000158168	157.0
No	K24MH-D	D24	LD	LIC	POWERS, OR	BLANK0000058817	159.2
No	K24JE-D	D24	LD	LIC	SUNRIVER, OR	BLANK0000216479	122.6
No	K25NO-D	D25	LD	LIC	GASQUET, CA	BLDTL20120606ABM	263.9
No	KRHT-LD	D25	LD	LIC	REDDING, CA	BLANK0000143760	386.7
Yes	KEZI	D25	LD	LIC	EUGENE, OR	BLCDDT20120626ACP	61.5
No	K25EN-D	D25	LD	LIC	GOLD BEACH, OR	BLDTT20100204ABD	218.7
No	K25JW-D	D25	LD	LIC	HUGO, ETC., OR	BLDTT20091118ACD	182.5
Yes	K25NI-D	D25	LD	LIC	MAPLETON, OR	BLDTT20120608AAW	68.0
No	K25IM-D	D25	LD	LIC	MEDFORD, OR	BLDTL20110125ACR	231.9
Yes	KOIN	D25	DT	LIC	PORTLAND, OR	BLANK0000107804	157.0
No	K25GA-D	D25	LD	LIC	REDMOND/PRINEVILLE, OR	BLANK0000073362	166.7
No	K25KS-D	D25	LD	LIC	THE DALLES, OR	BLDTT20120405AAO	231.1
Yes	K25OK-D	D25	LD	LIC	YONCALLA, OR	BLANK0000058776	59.2
No	K25CG-D	D25	LD	LIC	ABERDEEN, WA	BLDTL20110812ACG	317.8
No	K25FP-D	D25	LD	LIC	ELLENSBURG, WA	BLDTL20120612ABA	366.8
No	KING-TV	D25	DT	LIC	SEATTLE, WA	BLANK0000127843	394.0
No	K25PV-D	D25	LD	LIC	YAKIMA, WA	BLANK0000074746	330.7
No	KOHD	D26	LD	CP	BEND, OR	BDRTCDT20130425AAK	122.6
Yes	K26MZ-D	D26	LD	LIC	COTTAGE GROVE, OR	BLANK0000066923	37.7
No	K26NE-D	D26	LD	LIC	FLORENCE, OR	BLANK0000055170	87.7
No	K26HO-D	D26	LD	LIC	GLIDE, OR	BLDTT20101008ABC	82.9
No	K26NX-D	D26	LD	LIC	MADRAS, OR	BLANK0000063048	155.5
No	KMVU-DT	D26	DT	LIC	MEDFORD, OR	BLCDDT20090527ABF	203.1
No	KGW	D26	DT	LIC	PORTLAND, OR	BLANK0000153359	157.6
No	K26NJ-D	D26	LD	LIC	POWERS, OR	BLANK0000058818	159.2

No DK26HS-D D26 LD APP TILLAMOOK, OR BLDTL20120621ACL 135.8

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D25  
Mask: Full Service  
Latitude: 44 6 57.10 N (NAD83)  
Longitude: 123 0 0.40 W  
Height AMSL: 690.5 m  
HAAT: 0.0 m  
Peak ERP: 6.50 kW  
Antenna: ATC C3RS 180.0 deg  
Elev Pattn: ATC 8 SLOT 2DEG BT  
Tilts: elec 2.00, mech 3.00 @ 0.0 deg

49.9 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.000 kW	223.0 m	5.1 km
45.0	0.001	337.2	11.0
90.0	3.66	406.6	54.2
135.0	6.19	432.2	58.3
180.0	2.91	536.4	57.0
225.0	6.15	535.3	61.5
270.0	3.72	569.4	59.3
315.0	0.001	575.5	14.5

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: 452 m

Distance to Canadian border: 458.6 km

Distance to Mexican border: 1368.1 km

Conditions at FCC monitoring station: Ferndale WA  
Bearing: 3.5 degrees Distance: 539.0 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:  
Bearing: 100.6 degrees Distance: 1524.2 km

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 SagamoreHill of Portland, LLC 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  
February 13, 2024