

ENGINEERING STATEMENT

IN SUPPORT OF

MINOR MODIFICATION OF A LICENSED DIGITAL TRANSLATOR FACILITY

K28ER-D

DULCE & LUMBERTON, NM

Background

Hearst Properties Inc. (Hearst) is the licensee of digital television translator station K28ER-D (LMS File No. 0000152595, Facility ID. 53937) near Dulce & Lumberton, NM. The station currently operates on Ch. 28 with an ERP of 0.2 kW. Hearst, in the instant application, is seeking to change the station's antenna from a Scala ODD94041HF to a Scala 4DR-8S, change the antenna radiation center height from 9m AGL to 6.1m AGL, and increase the ERP from 0.2 kW to 1.4 kW.

Site and Tower

The tower is located at 36° 59' 01.9" N and 106° 58' 16.0" W (NAD83). The proposed changes will not have any effect on the overall height of the tower which will remain 7.6m AGL. The tower passes the TOWAIR program. Therefore, the tower does not require an ASR, nor notification to the FAA.

Antenna and Power

Hearst is proposing to change the station's antenna to a Scala 4DR-8S directional antenna with a horizontally polarized ERP of 1.4 kW (no vertical polarization component).

Interference

An interference check study was run using the FCC TVStudy software (Version 2.2.5) for the proposed facility parameters (including the use of a Simple Mask). The results of the study (copy attached hereto) show that potential interference is not predicted to exceed 0.49% to any full-service DTV or Class A stations or 1.99% to any digital low power stations as required by the Commission's Rules.

Environmental/RFR

This report addresses only the conditions specified in 47CFR1.1307 that deal with Radio Frequency Radiation. Any other non-RFR conditions that might require the preparation of an EA are beyond the scope of this report.

The location of the proposed facility is assumed to currently be "in compliance" with FCC guidelines for human exposure to RFR (as defined in OET-65). The worst-case ground level RFR contributed to the site by this proposal in public areas is calculated to be 0.173906 mW/cm², which is less than the MPE for public exposure (0.371333 mW/cm²) at Ch. 28.

Hearst agrees to comply with the Commission's requirements regarding power adjustments or cessation of operation as may be necessary to ensure a compliant environment for worker access. Workers will be trained on RFR issues and encouraged to wear personal RFR monitors when on the structure.

Certification

I hereby certify that the foregoing report or statement was prepared by me but may include work performed by others under my supervision or direction. The statements of fact contained therein are believed to be true and correct based on personal knowledge, information and belief unless otherwise stated; with respect to facts not known of my own personal knowledge, I believe them to be true and correct based on their origin from sources known to me to be generally reliable and accurate. I have prepared this document with due care and in accordance with applicable standards of professional practice.



Benjamin Pidek, P.E.
May 18, 2024

Attached:
TVStudy Interference Check Report

TVStudy TV Interference Check Report for K28ER-D on Ch. 28

Study created: 2024.05.18 15:03:16

Study build station data: LMS TV 2024-05-17

Proposal: K28ER-D D28+ LD LIC DULCE & LUMBERTON, NM
 File number: K28ER-4DR8Sr180-1_4k
 Facility ID: 53937
 Station data: User record
 Record ID: 72
 Country: U.S.

Build options:
 Protect pre-transition records not on baseline channel

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	K27IG-D	D27	LD	LIC	CORTEZ, ETC, CO	BLDTT20090522ACA	112.5 km
No	K27LK-D	D27	LD	LIC	GATEVIEW, CO	BLDTT20120106ABO	144.2
No	K27KA-D	D27	LD	LIC	PARLIN, CO	BLDTT20100713APC	171.3
No	KVSN-DT	D27	DT	LIC	PUEBLO, CO	BLANK0000074846	269.4
No	K27MT-D	D27	LD	LIC	ROME0, CO	BLANK0000055052	85.8
No	K27ND-D	D27	LD	LIC	AZTEC, NM	BLANK0000067943	84.0
Yes	KASA-TV	D27	DT	LIC	SANTA FE, NM	BLANK0000136792	202.2
No	K28HI-D	D28	LD	LIC	BRECKENRIDGE/DILLON, CO	BLANK0000068743	304.0
No	K28KC-D	D28	LD	LIC	CANON CITY, CO	BLDTL20090708AAT	226.2
No	K28JY-D	D28	LD	LIC	CARBONDALE, CO	BLDTT20091221AAV	273.4
No	K11PS-D	D28	LD	CP	COLLBRAN, CO	BLANK0000221329	265.4
No	K28EB-D	D28	LD	LIC	CORTEZ, ETC, CO	BLDTT20090522ABX	112.5
No	K28KU-D	D28	LD	LIC	CRESTED BUTTE, CO	BLDTL20121119AOU	213.3
No	KTFD-TV	D28	DT	LIC	DENVER, CO	BLANK0000066076	340.9
No	K28HA-D	D28	LD	LIC	GRAND VALLEY, CO	BLDTT20101007AAR	286.8
No	K28AD-D	D28	LD	LIC	MONTROSE, CO	BLDTT20090929AHW	187.2
No	K28PZ-D	D28	LD	LIC	PARLIN, CO	BLANK0000068626	171.3
No	K28QA-D	D28	LD	LIC	SAPINERO, CO	BLANK0000063160	152.2
No	KSBK-LD	D28	LD	LIC	WALSENBURG, CO	BLANK0000058258	203.0
No	K28GE-D	D28+	LD	LIC	WOODLAND PARK, CO	BLANK0000040556	278.0
No	K28GE-D	N28+	TX	LIC	WOODLAND PARK, CO	BLTTL19991203AAV	278.1
No	K28GF-D	D28	LD	LIC	CIMARRON, NM	BLDTT20101008ACF	165.0
Yes	K28GT-D	D28	LD	LIC	CROWNPOINT, NM	BLDTT20120127AGO	179.1
No	K28NX-D	D28	LD	LIC	MONTOYA & NEWKIRK, NM	BLANK0000055209	338.3
No	K28GV-D	D28	LD	LIC	TRES PIEDRAS, NM	BLDTT20090827ABC	85.7
No	K28OR-D	D28	LD	LIC	CAINEVILLE, UT	BLANK0000081913	377.5
No	K28OK-D	D28	LD	LIC	HANKSVILLE, UT	BLANK0000080675	362.5
No	K29ME-D	D29	LD	LIC	Antonito, CO	BLANK0000150631	85.7
No	K29GO-D	D29	LD	LIC	CORTEZ, ETC, CO	BLDTT20090522ABU	112.5
No	K29IT-D	D29	LD	LIC	GATEVIEW, CO	BLDTT20120106ABN	148.1
No	K29IU-D	D29	LD	LIC	PARLIN, CO	BLDTT20100713APD	171.3
No	K29HR-D	D29	LD	LIC	FARMINGTON, NM	BLDTT20080528ABA	117.5
Yes	KWBQ	D29	DT	LIC	SANTA FE, NM	BLANK0000203859	202.2

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D28+
 Mask: Simple
 Latitude: 36 59 2.00 N (NAD83)
 Longitude: 106 58 16.10 W
 Height AMSL: 2754.3 m (Adjusted based on actual ground elevation calculation)

Ben Pidek Consulting, LLC

HAAT: 0.0 m
Peak ERP: 1.40 kW
Antenna: SCA 4DR-8S 180.0 deg
Elev Pattnr: Generic

50.1 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.017 kW	364.4 m	21.9 km
45.0	0.000	387.2	9.6
90.0	0.004	400.6	15.3
135.0	0.504	524.5	45.8
180.0	1.40	516.1	51.8
225.0	0.504	523.8	45.8
270.0	0.004	530.8	18.1
315.0	0.000	462.3	10.3

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 464 m

Distance to Canadian border: 1335.6 km

Distance to Mexican border: 578.0 km

Conditions at FCC monitoring station: Douglas AZ
Bearing: 202.8 degrees Distance: 657.3 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 22.7 degrees Distance: 379.0 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.