

EXHIBIT A

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of TV-49, INC., permittee of new digital television station KKEL-DT, Channel 27 in Ely, NV, in support of its application for modification of Construction Permit LMS-0000195589 to specify a new transmitter site.

It is proposed to mount an Dielectric DLP-8M(SP) directional, horizontally polarized slotted cylinder antenna at the 10.7-meter level of an existing 27-meter tower. Exhibit B is a map upon which the predicted service contours of proposed KKEL-DT are plotted. As shown, the entire community of license, Ely, Nevada, is encompassed by the proposed 48 dBu city-grade service contour. Exhibit C is a map on which the authorized and proposed noise-limited, dipole-adjusted service contours are plotted. Since this facility has not been constructed, no "loss-area" will be created by this proposal.

Azimuth and elevation pattern data for the Dielectric directional antenna is included in Exhibit D. Exhibit E contains the summary results from a TVStudy interference study, which was conducted using a cell size of 2.0 kilometers and increment spacing of 1.0 kilometer. It concludes that the proposed KKEL-DT facility meets the Commission's de minimis interference criteria to all co-channel and adjacent-channel full-power and Class A television facilities.

A detailed power density calculation is provided in Exhibit F.

Since no change in the overall height or location of the existing tower is proposed herein, the Federal Aviation Administration has not been notified of this application. Due to the diminutive height of the existing tower and its location with respect to the nearest airport

EXHIBIT A

runways no FCC antenna structure registration is required. This conclusion is supported by the commissions TOWAIR program.

I declare under penalty of perjury that the foregoing statements and the attached exhibits, which were prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.

A handwritten signature in blue ink, appearing to read 'Kyle T. Fisher', with a stylized flourish at the end.

KYLE T. FISHER

October 24, 2023

CONTOUR POPULATION (2020 U.S. CENSUS
DATA)
CITY-GRADE (48 DBU) : 8,465 (3,8510 HH)
NOISE-LIMITED SERVICE : 8,550 (3,859 HH)



PROPOSED KKEL-DT
N/L SERVICE CONTOUR

PROPOSED KKEL-DT
CITY-GRADE CONTOUR

White Pine

NEW/KKEL-D.C
ELY
NEW/KKEL-D.C

Scale 1:750,000



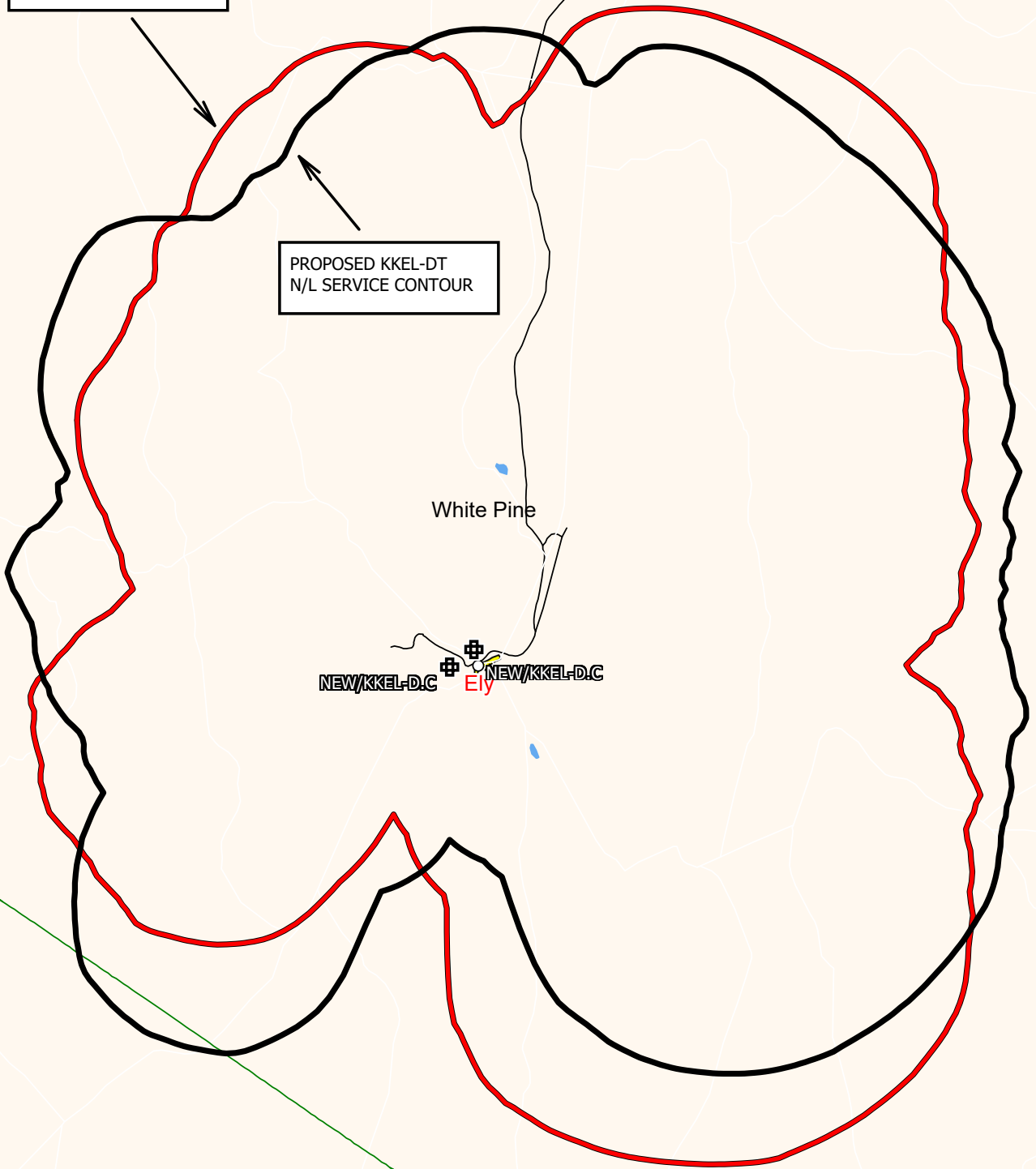
EXHIBIT B
PREDICTED SERVICE CONTOURS
PROPOSED KKEL-DT
CHANNEL 27 - ELY, NEVADA

AUTHORIZED KKEL-DT
N/L SERVICE CONTOUR

PROPOSED KKEL-DT
N/L SERVICE CONTOUR

White Pine

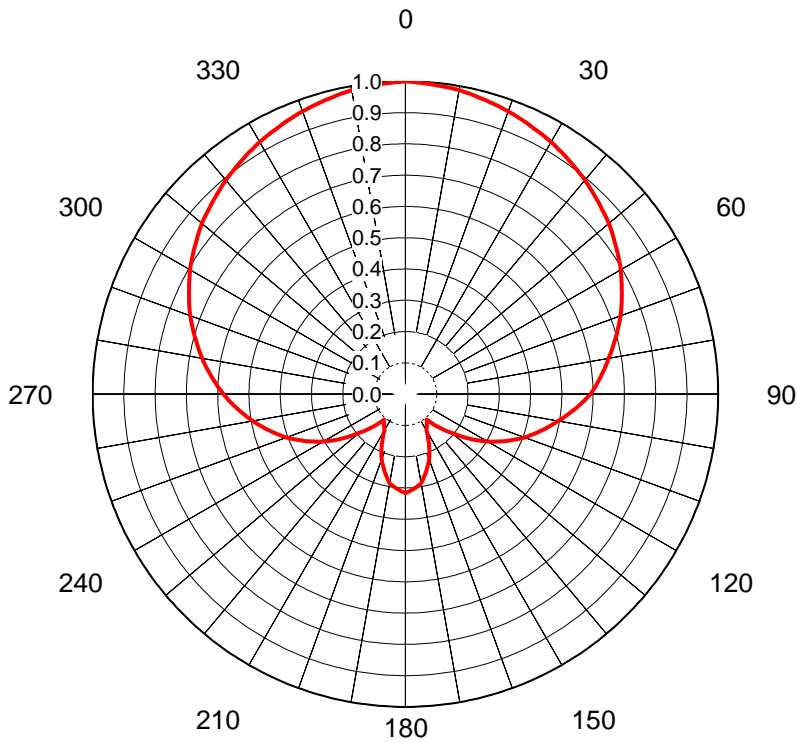
NEW/KKEL-D.C
ELY
NEW/KKEL-D.C



Scale 1:750,000

0 10 20 30 km

EXHIBIT C
CONTOUR COMPARISON
AUTHORIZED & PROPOSED KKEL-DT
CHANNEL 27 - ELY, NEVADA



AZIMUTH PATTERN Horizontal Polarization

Proposal No. **C-80079**
 Date **3-Aug-23**
 Call Letters **—**
 Channel **27**
 Frequency **551 MHz**
 Antenna Type **DLP-8M(SP)**
 Gain **2.41 (3.82dB)**
 Calculated

Pattern Number **TLP-M-27 Hpol**

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	1.000	36	0.908	72	0.718	108	0.423	144	0.117	180	0.317	216	0.117	252	0.423	288	0.718
1	0.999	37	0.904	73	0.710	109	0.414	145	0.120	181	0.314	217	0.114	253	0.432	289	0.725
2	0.997	38	0.901	74	0.703	110	0.405	146	0.123	182	0.312	218	0.112	254	0.441	290	0.732
3	0.996	39	0.897	75	0.696	111	0.395	147	0.126	183	0.309	219	0.109	255	0.451	291	0.738
4	0.995	40	0.893	76	0.689	112	0.385	148	0.128	184	0.306	220	0.106	256	0.460	292	0.745
5	0.994	41	0.889	77	0.682	113	0.374	149	0.131	185	0.304	221	0.115	257	0.469	293	0.751
6	0.992	42	0.884	78	0.674	114	0.364	150	0.134	186	0.301	222	0.123	258	0.478	294	0.757
7	0.991	43	0.880	79	0.667	115	0.354	151	0.143	187	0.298	223	0.132	259	0.487	295	0.764
8	0.990	44	0.875	80	0.660	116	0.344	152	0.152	188	0.295	224	0.140	260	0.496	296	0.770
9	0.988	45	0.871	81	0.653	117	0.334	153	0.160	189	0.293	225	0.149	261	0.505	297	0.776
10	0.987	46	0.867	82	0.646	118	0.323	154	0.169	190	0.290	226	0.158	262	0.513	298	0.782
11	0.985	47	0.862	83	0.640	119	0.313	155	0.178	191	0.283	227	0.166	263	0.522	299	0.789
12	0.982	48	0.858	84	0.633	120	0.303	156	0.187	192	0.276	228	0.175	264	0.530	300	0.795
13	0.980	49	0.853	85	0.626	121	0.292	157	0.196	193	0.270	229	0.183	265	0.539	301	0.800
14	0.977	50	0.849	86	0.619	122	0.281	158	0.204	194	0.263	230	0.192	266	0.548	302	0.806
15	0.975	51	0.844	87	0.612	123	0.270	159	0.213	195	0.256	231	0.203	267	0.556	303	0.811
16	0.972	52	0.838	88	0.606	124	0.259	160	0.222	196	0.249	232	0.214	268	0.565	304	0.817
17	0.970	53	0.833	89	0.599	125	0.248	161	0.229	197	0.242	233	0.225	269	0.573	305	0.822
18	0.967	54	0.827	90	0.592	126	0.236	162	0.236	198	0.236	234	0.236	270	0.582	306	0.827
19	0.965	55	0.822	91	0.582	127	0.225	163	0.242	199	0.229	235	0.248	271	0.590	307	0.833
20	0.962	56	0.817	92	0.573	128	0.214	164	0.249	200	0.222	236	0.259	272	0.598	308	0.838
21	0.959	57	0.811	93	0.563	129	0.203	165	0.256	201	0.213	237	0.270	273	0.605	309	0.844
22	0.956	58	0.806	94	0.554	130	0.192	166	0.263	202	0.204	238	0.281	274	0.613	310	0.849
23	0.953	59	0.800	95	0.544	131	0.183	167	0.270	203	0.196	239	0.292	275	0.621	311	0.853
24	0.950	60	0.795	96	0.534	132	0.175	168	0.276	204	0.187	240	0.303	276	0.629	312	0.858
25	0.947	61	0.789	97	0.525	133	0.166	169	0.283	205	0.178	241	0.313	277	0.637	313	0.862
26	0.943	62	0.782	98	0.515	134	0.158	170	0.290	206	0.169	242	0.323	278	0.644	314	0.867
27	0.940	63	0.776	99	0.506	135	0.149	171	0.293	207	0.160	243	0.334	279	0.652	315	0.871
28	0.937	64	0.770	100	0.496	136	0.140	172	0.295	208	0.152	244	0.344	280	0.660	316	0.875
29	0.934	65	0.764	101	0.487	137	0.132	173	0.298	209	0.143	245	0.354	281	0.667	317	0.880
30	0.931	66	0.757	102	0.478	138	0.123	174	0.301	210	0.134	246	0.364	282	0.674	318	0.884
31	0.927	67	0.751	103	0.469	139	0.115	175	0.304	211	0.131	247	0.374	283	0.682	319	0.889
32	0.923	68	0.745	104	0.460	140	0.106	176	0.306	212	0.128	248	0.385	284	0.689	320	0.893
33	0.920	69	0.738	105	0.451	141	0.109	177	0.309	213	0.126	249	0.395	285	0.696	321	0.897
34	0.916	70	0.732	106	0.441	142	0.112	178	0.312	214	0.123	250	0.405	286	0.703	322	0.901
35	0.912	71	0.725	107	0.432	143	0.114	179	0.314	215	0.120	251	0.414	287	0.710	323	0.904

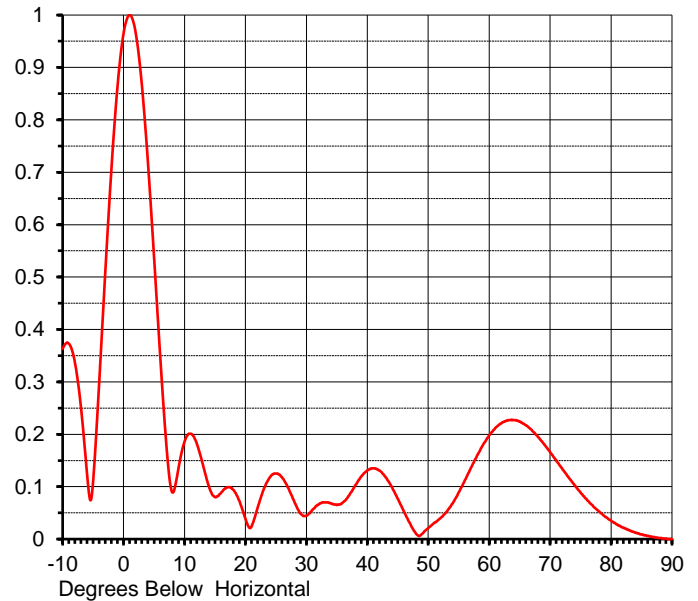
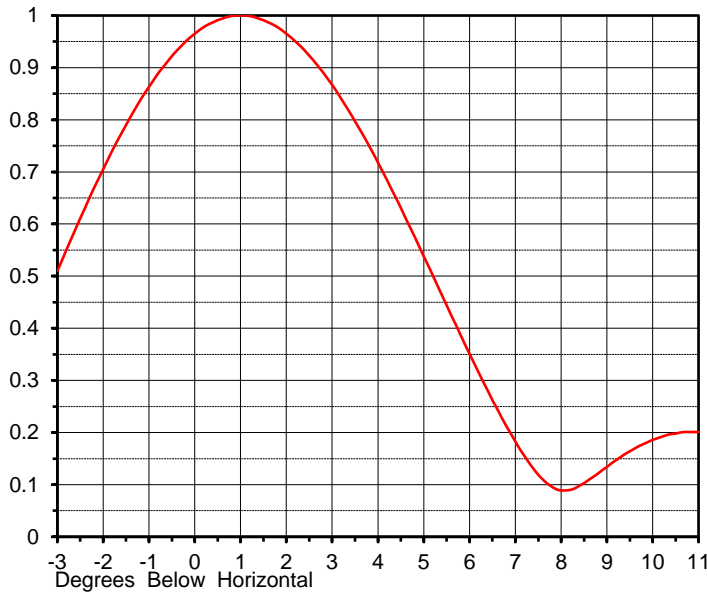
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ELEVATION PATTERN

Proposal No. **C-80079**
 Date **3-Aug-23**
 Call Letters **—**
 Channel **27**
 Frequency **551 MHz**
 Antenna Type **DLP-8M(SP)**

RMS Directivity at Main Lobe **8.1 (9.10 dB)**
 RMS Directivity at Horizontal **7.6 (8.81 dB)**
Calculated

Beam Tilt **1.00 deg**
 Pattern Number **08L081100-27**



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.363	10.0	0.186	30.0	0.045	50.0	0.021	70.0	0.166
-9.0	0.373	11.0	0.201	31.0	0.056	51.0	0.031	71.0	0.150
-8.0	0.338	12.0	0.183	32.0	0.066	52.0	0.040	72.0	0.134
-7.0	0.252	13.0	0.143	33.0	0.070	53.0	0.052	73.0	0.118
-6.0	0.125	14.0	0.101	34.0	0.068	54.0	0.068	74.0	0.103
-5.0	0.110	15.0	0.080	35.0	0.065	55.0	0.089	75.0	0.089
-4.0	0.299	16.0	0.088	36.0	0.070	56.0	0.112	76.0	0.076
-3.0	0.510	17.0	0.099	37.0	0.083	57.0	0.136	77.0	0.064
-2.0	0.705	18.0	0.094	38.0	0.102	58.0	0.159	78.0	0.053
-1.0	0.863	19.0	0.073	39.0	0.119	59.0	0.180	79.0	0.043
0.0	0.965	20.0	0.039	40.0	0.131	60.0	0.198	80.0	0.035
1.0	1.000	21.0	0.024	41.0	0.135	61.0	0.212	81.0	0.028
2.0	0.965	22.0	0.060	42.0	0.131	62.0	0.221	82.0	0.022
3.0	0.867	23.0	0.095	43.0	0.118	63.0	0.226	83.0	0.017
4.0	0.718	24.0	0.118	44.0	0.100	64.0	0.227	84.0	0.012
5.0	0.538	25.0	0.125	45.0	0.077	65.0	0.224	85.0	0.009
6.0	0.351	26.0	0.118	46.0	0.053	66.0	0.217	86.0	0.006
7.0	0.183	27.0	0.098	47.0	0.030	67.0	0.208	87.0	0.004
8.0	0.089	28.0	0.072	48.0	0.010	68.0	0.195	88.0	0.002
9.0	0.134	29.0	0.049	49.0	0.010	69.0	0.181	89.0	0.001
								90.0	0.000

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TVSTUDY INTERFERENCE ANALYSIS RESULTS
PROPOSED KKel-DT
CHANNEL 27 – ELY, NEVADA

Study created: 2023.10.24 10:30:43

Study build station data: LMS TV 2023-10-23

Proposal: KKel D27 DT CP ELY, NV

File number: BLANK0000195589

Facility ID: 776228

Station data: User record

Record ID: 58

Country: U.S.

Zone: II

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	KNSO	D27	DT	LIC	CLOVIS, CA	BLANK0000190993	461.7 km
No	KUED	D27	DT	LIC	SALT LAKE CITY, UT	BLANK0000067865	280.3

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D27

Latitude: 39 14 45.70 N (NAD83)

Longitude: 114 55 42.00 W

Height AMSL: 2414.2 m

HAAT: 254.2 m

Peak ERP: 20.0 kW

Antenna: DIE-DLP-8M(SP) 35.0 deg

Elev Pattn: Generic

Elec Tilt: 1.00

40.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	16.6 kW	414.4 m	77.7 km
45.0	19.5	436.3	79.9
90.0	13.5	310.4	69.1
135.0	4.92	363.8	66.6
180.0	0.288	-327.6	22.8
225.0	1.68	323.7	58.5
270.0	1.23	208.2	50.3
315.0	8.71	305.0	66.3

Distance to Canadian border: 1084.1 km

Distance to Mexican border: 725.7 km

Conditions at FCC monitoring station: Livermore CA

Bearing: 256.3 degrees Distance: 617.3 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 80.2 degrees Distance: 832.8 km

Study cell size: 2.00 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.

POWER DENSITY CALCULATION

PROPOSED KKEL-DT
CHANNEL 27 – ELY, NEVADA

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Ely facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 20 kW (H) an antenna radiation center 10.7 meters above ground, and the specific elevation pattern of the proposed Dielectric DLP-8M(SP) antenna, a maximum power density value two meters above ground of 0.002 mW/cm^2 is calculated to occur northeast of the base of the tower. Since this is 0.669 percent of the 0.37 mW/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 27 (548-554 MHz), a grant of this proposal may be considered a minor environmental action with respect to public exposure to non-ionizing electromagnetic radiation.

Further, the station owner will take whatever precautionary steps are necessary, such as reducing power or leaving the air temporarily, to ensure that workers operating in the vicinity of the antenna are not exposed to excessive non-ionizing radiation.