



**STATEMENT OF JOHN E. HIDLE, P.E.  
IN SUPPORT OF AN APPLICATION FOR A  
CONSTRUCTION PERMIT TO SPECIFY CHANNEL 20  
IN LIEU OF CHANNEL 7 IN THE DIGITAL  
TELEVISION TABLE OF ALLOTMENTS  
KVII-TV - AMARILLO, TEXAS  
DTV - CH. 20 - 1000 kW - 519 m HAAT**

Prepared for: KVII LICENSEE, LLC

I am a Consulting Engineer, an employee in the firm of Carl T. Jones Corporation, with offices located in Springfield, Virginia. My education and experience are a matter of record with the Federal Communications Commission. I am a Licensed Professional Engineer in the Commonwealth of Virginia, No. 7418, and in New York State, No. 63418.

**GENERAL**

This office has been authorized by KVII LICENSEE, LLC, licensee of KVII-TV, channel 7, licensed to Amarillo, Texas, to prepare this statement, FCC Form 2100, Schedule A, its technical sections, and the associated exhibits in support of an application for a minor change application to specify channel 20 in lieu of channel 7 as ordered in the REPORT AND ORDER in MB Docket No. 21-52, DA 21-594.

**DETERMINATION OF THE “LARGEST STATION IN THE MARKET”**

It appears from an analysis of the stations that are licensed to communities that are located in the Amarillo, Texas Designated Market Area (DMA) that the station with the largest service area is KFDA-TV, channel 10, Amarillo, TX, license number BLCDDT-20111114BLB, with a coverage area of 45,952.5 square kilometers. The instant application for a minor modification of license results in a coverage area of 44,472.0 square kilometers for KVII-TV’s proposed modification. Clearly KVII-TV is entitled, according to Section

**STATEMENT OF JOHN E. HIDLE, P.E.**  
**KVII-TV - Amarillo, Texas**  
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73.622(f)(5), to its proposed change, in compliance with R&O DA 21-594 to use channel 20 in lieu of channel 7 for its digital television broadcasting operation as described herein.

**NON-DIRECTIONAL ANTENNA**

The applicant intends to install a Dielectric model TFU-33ETT/VP-R O6 elliptically polarized omni-directional antenna. The antenna's center of radiation will be located at a height above ground of 482 meters, and a height above average terrain of 519 meters. The antenna's horizontal azimuth radiation patterns for both its horizontally and vertically polarized components and its vertical elevation pattern, showing its radiation characteristics above and below the horizontal plane are shown and tabulated in the antenna exhibit.

**PREDICTED COVERAGE CONTOURS**

The predicted coverage contours were calculated in accordance with the method described in Section 73.625(b) of the Rules, utilizing the appropriate F(50,90) propagation curves (47 CFR Section 73.699, Figure 9), proposed Effective Radiated Power, and antenna height above average terrain as determined for each profile radial. The average terrain on the eight cardinal radials from 3 kilometers to 16 kilometers from the site, was determined using the NED Three Second US Terrain Database as permitted in the FCC Rules. The antenna site elevation and coordinates were determined from FCC antenna registration data. The map exhibit shows the predicted Noise Limited (39.36 dBu) contour, and the principal community (48 dBu) contour which completely encompasses the principal community of license, Amarillo, Texas.

## **ALLOCATION CONSIDERATIONS**

### ***Post-Transition DTV Considerations***

A study was performed, using the FCC's application processing software, *tvstudy*, v. 2.2.5, to determine if the instant application for construction permit is predicted to cause new prohibited interference to post reassignment DTV stations, construction permits, DTV allotments or Class A DTV stations. The study results, shown in Appendix B, indicate that the instant application for construction permit is predicted to cause no new interference exceeding 0.5% to the populations served by any post reassignment DTV station, construction permit, allotment or Class A DTV stations. (See Appendix B)

### ***International DTV Considerations***

The KVII-TV site is located more than 1500 kilometers from the nearest point on the US-Canadian border and more than 500 kilometers from the nearest point on the US-Mexican border. Therefore no international coordination is necessary.

### ***Class A Television Allocation Considerations***

As required in Section 73.616(f) of the FCC's Rules, the study results in Appendix B shows no Class A station predicted to be affected by the re-allotment of KVII-TV.

### ***Land Mobile and FM radio Considerations***

The *tvstudy* results found no Land Mobile violations for this site, and the site is deemed OK toward AM radio stations.

## **BLANKETING AND INTERMODULATION INTERFERENCE**

Other broadcast and non-broadcast facilities are either co-located with, or located within 10 kilometers of the KVII-TV site. The applicant does recognize its responsibility to remedy complaints of interference that might result from this proposal in accordance with applicable Rules.

## **RADIO FREQUENCY IMPACT, SAFETY & STATEMENT OF COMPLIANCE**

The licensee of KVII-TV is committed to the protection of station personnel and/or tower contractors working in the vicinity of the KVII-TV antenna and will reduce power or cease operation, when necessary, to ensure protection to personnel.

As shown in Appendix A the KVII-TV channel 20 request for Amendment of the Table of Allotments as proposed herein will operate with a maximum ERP of 1000 kW from an elliptically polarized non-directional transmitting antenna with a centerline height of 482 meters above ground level (AGL). Considering the elevation pattern provided elsewhere in this submission, the vertical plane relative field factor is less than 0.100 at all depression angles greater than 7 degrees. The proposed KVII-TV channel 20 facility is predicted to produce a worst-case power density at two meters above ground level, at 336.1 meters from the tower base, of  $0.112 \mu\text{W}/\text{cm}^2$ , which is 0.03% of the FCC guideline value of  $375.33 \mu\text{W}/\text{cm}^2$  for an "uncontrolled" environment, and 0.007% of the FCC's guideline value for "controlled" environments. Therefore, pursuant to Section 1.1307(b)(3) of the FCC Rules, the proposed facility would not exceed 5% of the uncontrolled and controlled exposure limits, so the proposal's power density contribution is considered insignificant.

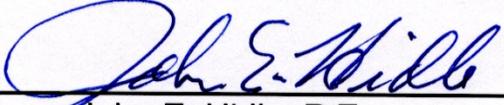
**STATEMENT OF JOHN E. HIDLE, P.E.**  
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Further, the Applicant will continue to cooperate/coordinate with other site users and reduce power and/or cease operation during times of service or maintenance of the transmission systems as necessary to avoid potentially harmful exposure to personnel. In light of the above, the proposed facility should be categorically excluded from RF environmental processing under Section 1.1307(b) of the Commission's Rules.

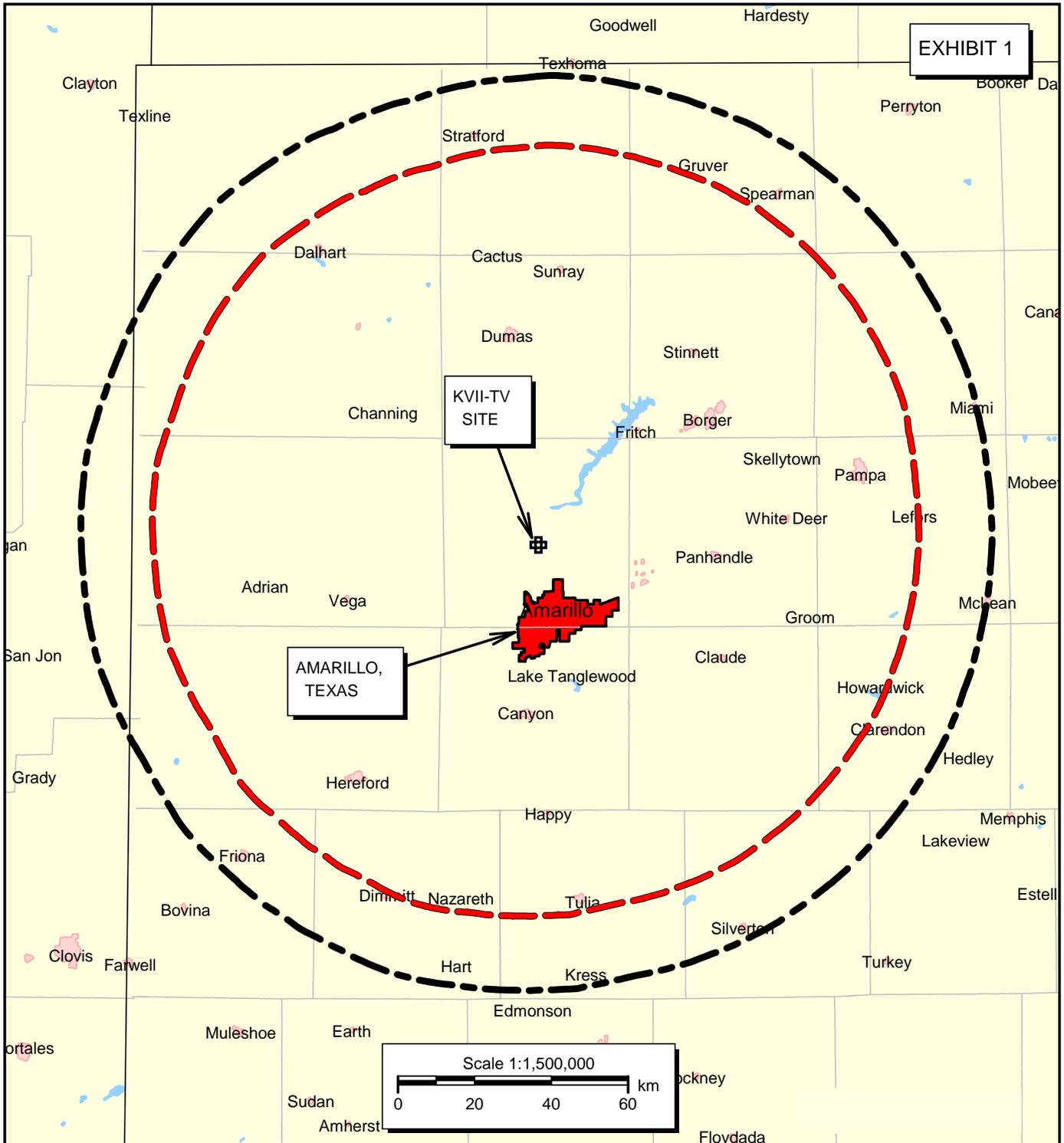
**SUMMARY**

It is submitted that the instant application for construction permit for KVII-TV to broadcast on channel 20 in lieu of channel 7, as described herein, complies with the Rules, Regulations and relevant Policies of the Federal Communications Commission. This statement was prepared by me, or under my direct supervision, and its contents are believed to be true and correct to the best of my knowledge and belief.

DATED: June 9, 2021

  
\_\_\_\_\_  
John E. Hidle, P.E.





# PREDICTED COVERAGE CONTOURS

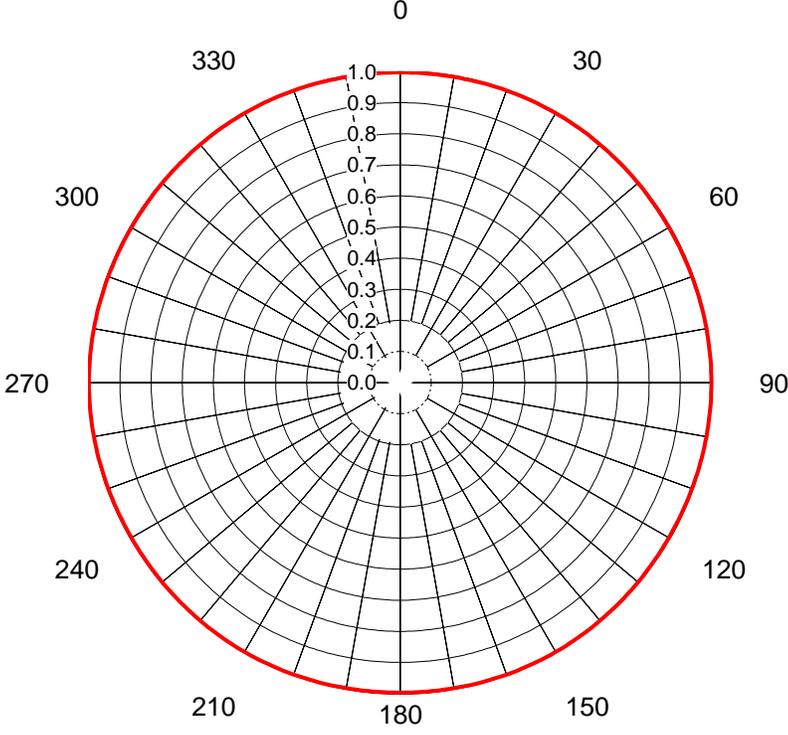
KVII-TV - AMARILLO, TX  
 DTV Channel 20 - 1000 kW ERP - 519.0 M HAAT  
 JUNE, 2021

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 Predicted Noise Limited 39.36 dBu  
 F(50,90) Coverage Contour

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 Predicted Principal Community 48 dBu  
 F(50,90) Coverage Contour



## AZIMUTH PATTERN Horizontal Polarization

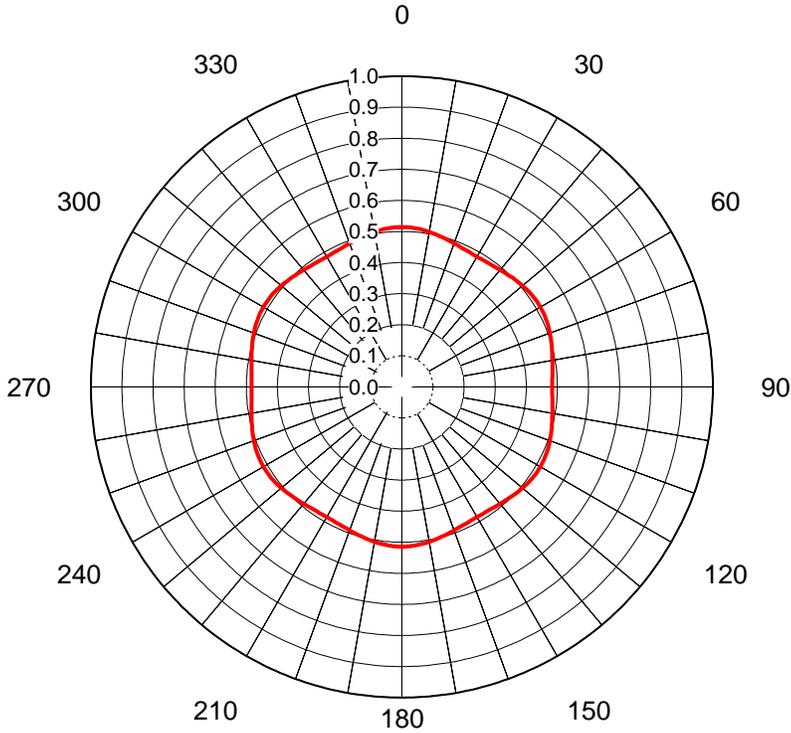


Proposal No. **C-71636**  
 Date **9-Nov-20**  
 Call Letters **KVII**  
 Channel **20**  
 Frequency **509 MHz**  
 Antenna Type **TFU-33ETT/VP-R O6**  
 Gain **1 (0.01dB)**  
 Calculated  
 Circularity **+/- 1.0 dB**

Deg	Value																		
0	0.997	36	1.000	72	0.998	108	0.998	144	1.000	180	0.997	216	1.000	252	0.998	288	0.998	324	1.000
1	0.997	37	1.000	73	0.998	109	0.998	145	1.000	181	0.997	217	1.000	253	0.998	289	0.998	325	1.000
2	0.997	38	1.000	74	0.998	110	0.998	146	1.000	182	0.997	218	1.000	254	0.998	290	0.998	326	1.000
3	0.997	39	0.999	75	0.999	111	0.998	147	1.000	183	0.997	219	0.999	255	0.999	291	0.998	327	1.000
4	0.997	40	0.999	76	0.999	112	0.998	148	1.000	184	0.997	220	0.999	256	0.999	292	0.998	328	1.000
5	0.997	41	0.999	77	0.999	113	0.998	149	1.000	185	0.997	221	0.999	257	0.999	293	0.998	329	1.000
6	0.997	42	0.999	78	0.999	114	0.997	150	1.000	186	0.997	222	0.999	258	0.999	294	0.997	330	1.000
7	0.998	43	0.999	79	0.999	115	0.997	151	1.000	187	0.998	223	0.999	259	0.999	295	0.997	331	1.000
8	0.998	44	0.999	80	0.999	116	0.997	152	1.000	188	0.998	224	0.999	260	0.999	296	0.997	332	1.000
9	0.998	45	0.999	81	0.999	117	0.997	153	1.000	189	0.998	225	0.999	261	0.999	297	0.997	333	1.000
10	0.998	46	0.998	82	1.000	118	0.997	154	1.000	190	0.998	226	0.998	262	1.000	298	0.997	334	1.000
11	0.998	47	0.998	83	1.000	119	0.997	155	1.000	191	0.998	227	0.998	263	1.000	299	0.997	335	1.000
12	0.998	48	0.998	84	1.000	120	0.997	156	1.000	192	0.998	228	0.998	264	1.000	300	0.997	336	1.000
13	0.998	49	0.998	85	1.000	121	0.997	157	1.000	193	0.998	229	0.998	265	1.000	301	0.997	337	1.000
14	0.998	50	0.998	86	1.000	122	0.997	158	1.000	194	0.998	230	0.998	266	1.000	302	0.997	338	1.000
15	0.999	51	0.998	87	1.000	123	0.997	159	0.999	195	0.999	231	0.998	267	1.000	303	0.997	339	0.999
16	0.999	52	0.998	88	1.000	124	0.997	160	0.999	196	0.999	232	0.998	268	1.000	304	0.997	340	0.999
17	0.999	53	0.998	89	1.000	125	0.997	161	0.999	197	0.999	233	0.998	269	1.000	305	0.997	341	0.999
18	0.999	54	0.997	90	1.000	126	0.997	162	0.999	198	0.999	234	0.997	270	1.000	306	0.997	342	0.999
19	0.999	55	0.997	91	1.000	127	0.998	163	0.999	199	0.999	235	0.997	271	1.000	307	0.998	343	0.999
20	0.999	56	0.997	92	1.000	128	0.998	164	0.999	200	0.999	236	0.997	272	1.000	308	0.998	344	0.999
21	0.999	57	0.997	93	1.000	129	0.998	165	0.999	201	0.999	237	0.997	273	1.000	309	0.998	345	0.999
22	1.000	58	0.997	94	1.000	130	0.998	166	0.998	202	1.000	238	0.997	274	1.000	310	0.998	346	0.998
23	1.000	59	0.997	95	1.000	131	0.998	167	0.998	203	1.000	239	0.997	275	1.000	311	0.998	347	0.998
24	1.000	60	0.997	96	1.000	132	0.998	168	0.998	204	1.000	240	0.997	276	1.000	312	0.998	348	0.998
25	1.000	61	0.997	97	1.000	133	0.998	169	0.998	205	1.000	241	0.997	277	1.000	313	0.998	349	0.998
26	1.000	62	0.997	98	1.000	134	0.998	170	0.998	206	1.000	242	0.997	278	1.000	314	0.998	350	0.998
27	1.000	63	0.997	99	0.999	135	0.999	171	0.998	207	1.000	243	0.997	279	0.999	315	0.999	351	0.998
28	1.000	64	0.997	100	0.999	136	0.999	172	0.998	208	1.000	244	0.997	280	0.999	316	0.999	352	0.998
29	1.000	65	0.997	101	0.999	137	0.999	173	0.998	209	1.000	245	0.997	281	0.999	317	0.999	353	0.998
30	1.000	66	0.997	102	0.999	138	0.999	174	0.997	210	1.000	246	0.997	282	0.999	318	0.999	354	0.997
31	1.000	67	0.998	103	0.999	139	0.999	175	0.997	211	1.000	247	0.998	283	0.999	319	0.999	355	0.997
32	1.000	68	0.998	104	0.999	140	0.999	176	0.997	212	1.000	248	0.998	284	0.999	320	0.999	356	0.997
33	1.000	69	0.998	105	0.999	141	0.999	177	0.997	213	1.000	249	0.998	285	0.999	321	0.999	357	0.997
34	1.000	70	0.998	106	0.998	142	1.000	178	0.997	214	1.000	250	0.998	286	0.998	322	1.000	358	0.997
35	1.000	71	0.998	107	0.998	143	1.000	179	0.997	215	1.000	251	0.998	287	0.998	323	1.000	359	0.997

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## AZIMUTH PATTERN Vertical Polarization



Proposal No. **C-71636**  
 Date **9-Nov-20**  
 Call Letters **KVII**  
 Channel **20**  
 Frequency **509 MHz**  
 Antenna Type **TFU-33ETT/VP-R O6**  
 Gain **1.06 (0.26dB)**  
 Calculated  
 Circularity **+/- 1.0 dB**

Deg	Value																		
0	0.514	36	0.486	72	0.503	108	0.503	144	0.486	180	0.514	216	0.486	252	0.503	288	0.503	324	0.486
1	0.514	37	0.487	73	0.502	109	0.505	145	0.486	181	0.514	217	0.487	253	0.502	289	0.505	325	0.486
2	0.514	38	0.489	74	0.500	110	0.506	146	0.485	182	0.514	218	0.489	254	0.500	290	0.506	326	0.485
3	0.513	39	0.490	75	0.499	111	0.508	147	0.484	183	0.513	219	0.490	255	0.499	291	0.508	327	0.484
4	0.513	40	0.491	76	0.497	112	0.509	148	0.484	184	0.513	220	0.491	256	0.497	292	0.509	328	0.484
5	0.512	41	0.493	77	0.496	113	0.510	149	0.484	185	0.512	221	0.493	257	0.496	293	0.510	329	0.484
6	0.511	42	0.494	78	0.494	114	0.511	150	0.484	186	0.511	222	0.494	258	0.494	294	0.511	330	0.484
7	0.510	43	0.496	79	0.493	115	0.512	151	0.484	187	0.510	223	0.496	259	0.493	295	0.512	331	0.484
8	0.509	44	0.497	80	0.491	116	0.513	152	0.484	188	0.509	224	0.497	260	0.491	296	0.513	332	0.484
9	0.508	45	0.499	81	0.490	117	0.513	153	0.484	189	0.508	225	0.499	261	0.490	297	0.513	333	0.484
10	0.506	46	0.500	82	0.489	118	0.514	154	0.485	190	0.506	226	0.500	262	0.489	298	0.514	334	0.485
11	0.505	47	0.502	83	0.487	119	0.514	155	0.486	191	0.505	227	0.502	263	0.487	299	0.514	335	0.486
12	0.503	48	0.503	84	0.486	120	0.514	156	0.486	192	0.503	228	0.503	264	0.486	300	0.514	336	0.486
13	0.502	49	0.505	85	0.486	121	0.514	157	0.487	193	0.502	229	0.505	265	0.486	301	0.514	337	0.487
14	0.500	50	0.506	86	0.485	122	0.514	158	0.489	194	0.500	230	0.506	266	0.485	302	0.514	338	0.489
15	0.499	51	0.508	87	0.484	123	0.513	159	0.490	195	0.499	231	0.508	267	0.484	303	0.513	339	0.490
16	0.497	52	0.509	88	0.484	124	0.513	160	0.491	196	0.497	232	0.509	268	0.484	304	0.513	340	0.491
17	0.496	53	0.510	89	0.484	125	0.512	161	0.493	197	0.496	233	0.510	269	0.484	305	0.512	341	0.493
18	0.494	54	0.511	90	0.484	126	0.511	162	0.494	198	0.494	234	0.511	270	0.484	306	0.511	342	0.494
19	0.493	55	0.512	91	0.484	127	0.510	163	0.496	199	0.493	235	0.512	271	0.484	307	0.510	343	0.496
20	0.491	56	0.513	92	0.484	128	0.509	164	0.497	200	0.491	236	0.513	272	0.484	308	0.509	344	0.497
21	0.490	57	0.513	93	0.484	129	0.508	165	0.499	201	0.490	237	0.513	273	0.484	309	0.508	345	0.499
22	0.489	58	0.514	94	0.485	130	0.506	166	0.500	202	0.489	238	0.514	274	0.485	310	0.506	346	0.500
23	0.487	59	0.514	95	0.486	131	0.505	167	0.502	203	0.487	239	0.514	275	0.486	311	0.505	347	0.502
24	0.486	60	0.514	96	0.486	132	0.503	168	0.503	204	0.486	240	0.514	276	0.486	312	0.503	348	0.503
25	0.486	61	0.514	97	0.487	133	0.502	169	0.505	205	0.486	241	0.514	277	0.487	313	0.502	349	0.505
26	0.485	62	0.514	98	0.489	134	0.500	170	0.506	206	0.485	242	0.514	278	0.489	314	0.500	350	0.506
27	0.484	63	0.513	99	0.490	135	0.499	171	0.508	207	0.484	243	0.513	279	0.490	315	0.499	351	0.508
28	0.484	64	0.513	100	0.491	136	0.497	172	0.509	208	0.484	244	0.513	280	0.491	316	0.497	352	0.509
29	0.484	65	0.512	101	0.493	137	0.496	173	0.510	209	0.484	245	0.512	281	0.493	317	0.496	353	0.510
30	0.484	66	0.511	102	0.494	138	0.494	174	0.511	210	0.484	246	0.511	282	0.494	318	0.494	354	0.511
31	0.484	67	0.510	103	0.496	139	0.493	175	0.512	211	0.484	247	0.510	283	0.496	319	0.493	355	0.512
32	0.484	68	0.509	104	0.497	140	0.491	176	0.513	212	0.484	248	0.509	284	0.497	320	0.491	356	0.513
33	0.484	69	0.508	105	0.499	141	0.490	177	0.513	213	0.484	249	0.508	285	0.499	321	0.490	357	0.513
34	0.485	70	0.506	106	0.500	142	0.489	178	0.514	214	0.485	250	0.506	286	0.500	322	0.489	358	0.514
35	0.486	71	0.505	107	0.502	143	0.487	179	0.514	215	0.486	251	0.505	287	0.502	323	0.487	359	0.514

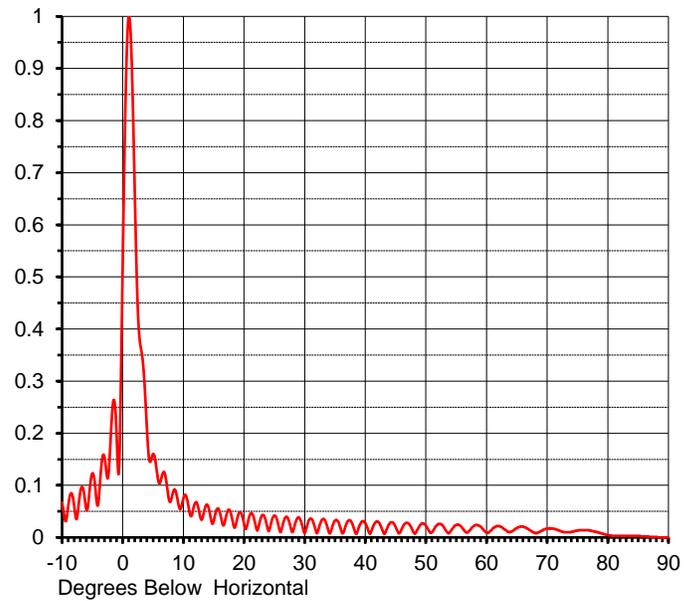
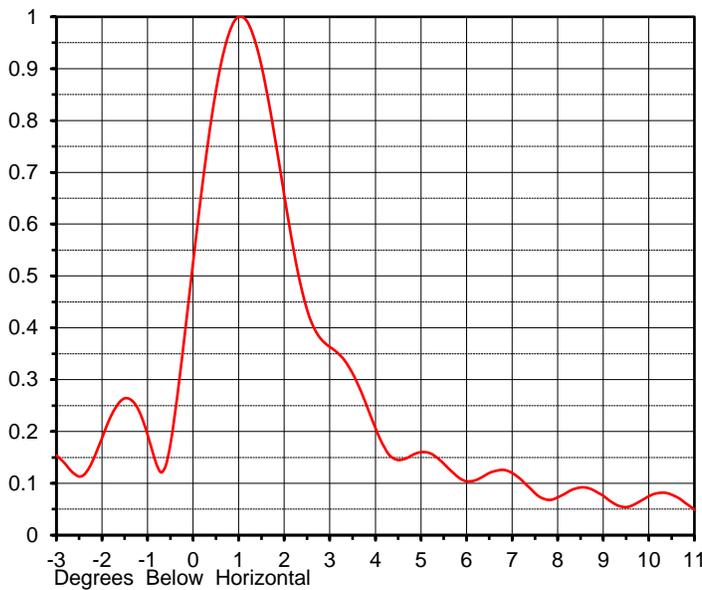
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## ELEVATION PATTERN

Proposal No. **C-71636**  
 Date **9-Nov-20**  
 Call Letters **KVII**  
 Channel **20**  
 Frequency **509 MHz**  
 Antenna Type **TFU-33ETT/VP-R O6**

RMS Directivity at Main Lobe **30.0 ( 14.77 dB )**  
 RMS Directivity at Horizontal **8.3 ( 9.19 dB )**  
**Calculated**

Beam Tilt **1.05 deg**  
 Pattern Number **105**



Angle	Field								
-10.0	0.067	10.0	0.075	30.0	0.008	50.0	0.023	70.0	0.017
-9.0	0.059	11.0	0.049	31.0	0.036	51.0	0.010	71.0	0.017
-8.0	0.060	12.0	0.067	32.0	0.008	52.0	0.025	72.0	0.013
-7.0	0.087	13.0	0.034	33.0	0.035	53.0	0.019	73.0	0.010
-6.0	0.054	14.0	0.062	34.0	0.010	54.0	0.011	74.0	0.011
-5.0	0.123	15.0	0.031	35.0	0.032	55.0	0.024	75.0	0.013
-4.0	0.068	16.0	0.049	36.0	0.015	56.0	0.018	76.0	0.014
-3.0	0.154	17.0	0.038	37.0	0.029	57.0	0.011	77.0	0.013
-2.0	0.187	18.0	0.038	38.0	0.022	58.0	0.023	78.0	0.011
-1.0	0.194	19.0	0.041	39.0	0.021	59.0	0.021	79.0	0.008
0.0	0.526	20.0	0.027	40.0	0.028	60.0	0.009	80.0	0.005
1.0	1.000	21.0	0.044	41.0	0.012	61.0	0.017	81.0	0.003
2.0	0.656	22.0	0.019	42.0	0.031	62.0	0.022	82.0	0.003
3.0	0.363	23.0	0.043	43.0	0.009	63.0	0.015	83.0	0.003
4.0	0.207	24.0	0.013	44.0	0.026	64.0	0.011	84.0	0.003
5.0	0.160	25.0	0.042	45.0	0.020	65.0	0.018	85.0	0.003
6.0	0.104	26.0	0.010	46.0	0.016	66.0	0.021	86.0	0.002
7.0	0.120	27.0	0.040	47.0	0.028	67.0	0.015	87.0	0.001
8.0	0.073	28.0	0.010	48.0	0.009	68.0	0.009	88.0	0.001
9.0	0.076	29.0	0.039	49.0	0.023	69.0	0.012	89.0	0.000
						90.0	0.000	90.0	0.000

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**KVII-TV**  
**Channel 20 - Amarillo, Texas**  
**ERP = 1000000.00 WATTS**

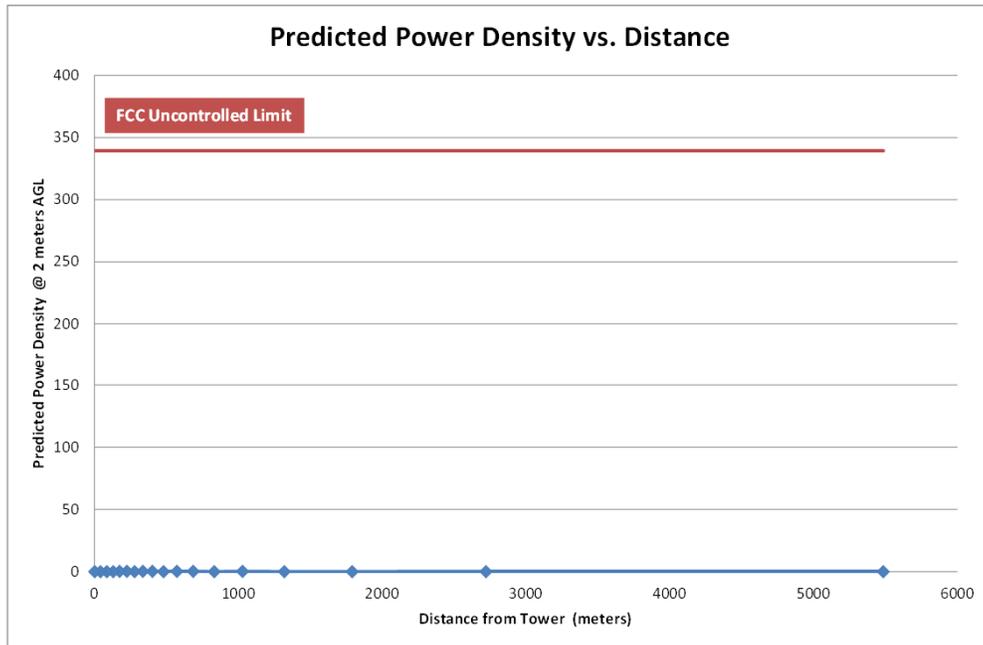
**APPENDIX A**

Maximum ERP 1000 kW

Polarization ----- 2 Circular  
 Antenna Height Above Ground -- 482 meters 1581.4 feet  
 FCC Uncontrolled RFR Limit ---- 339.33  $\mu\text{W}/\text{cm}^2$

Maximum Computed Power Density 0.112  $\mu\text{W}/\text{cm}^2$   
 0.03% of limit

Angle Below Horizontal (degrees)	<Point X> Horiz Distance from tower to 2 m AGL (meters)	Slant Distance from antenna to Point X (meters)	Vertical Pattern (REL. FIELD)	KVII-TV ERP (kW)	KVII-TV Calculated Power Density $\mu\text{W}/\text{cm}^2$	Percent Limit	Limit Exceeded?
0			1.000	1000.0000			
5	5486.4	5507.4	0.160	25.6000	0.056	0.02%	No
10	2722.2	2764.2	0.075	5.6250	0.049	0.01%	No
15	1791.4	1854.6	0.031	0.9610	0.019	0.01%	No
20	1318.8	1403.4	0.027	0.7290	0.025	0.01%	No
25	1029.4	1135.8	0.042	1.7640	0.091	0.03%	No
30	831.4	960.0	0.008	0.0640	0.005	0.00%	No
35	685.5	836.9	0.032	1.0240	0.098	0.03%	No
40	572.0	746.7	0.028	0.7840	0.094	0.03%	No
45	480.0	678.8	0.020	0.4000	0.058	0.02%	No
50	402.8	626.6	0.023	0.5290	0.090	0.03%	No
55	336.1	586.0	0.024	0.5760	0.112	0.03%	No
60	277.1	554.3	0.009	0.0810	0.018	0.01%	No
65	223.8	529.6	0.018	0.3240	0.077	0.02%	No
70	174.7	510.8	0.017	0.2890	0.074	0.02%	No
75	128.6	496.9	0.013	0.1690	0.046	0.01%	No
80	84.6	487.4	0.005	0.0250	0.007	0.00%	No
85	42.0	481.8	0.003	0.0090	0.003	0.00%	No
90	0.0	480.0	0.000	0.0000	0.000	0.00%	No





**KVII-TV - AMARILLO, TEXAS  
JUNE 2021  
APPENDIX B  
Longley-Rice Interference Analysis**

tvstudy v2.2.5 (4uoc83)  
Database: localhost, Study: KVII-TV 20 1MW 1525C 519H, Model: Longley-Rice  
Start: 2021.06.09 13:52:34

Study created: 2021.06.09 13:52:34

Study build station data: LMS TV 2021-06-09

Proposal: KVII-TV D20 DT CP AMARILLO, TX  
File number: BLANK0000127671  
Facility ID: 40446  
Station data: LMS TV 2021-06-09  
Record ID: 25076ff37529362a017546b9726d2037  
Country: U.S.  
Zone: II

Search options:  
Non-U.S. records included  
Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
Yes	KAMR-TV	D19	DT	LIC	AMARILLO, TX	BLCDT20080519ACZ	6.5 km
Yes	KTXS-TV	D20	DT	CP	SWEETWATER, TX	BLANK0000035779	367.7
Yes	KTXS-TV	D20	DT	LIC	SWEETWATER, TX	BLCDT20080815ABJ	367.7
No	K20DN-D	D20	DC	LIC	WICHITA FALLS, TX	BLANK0000001589	345.9

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D20  
Latitude: 35 22 30.00 N (NAD83)  
Longitude: 101 52 58.00 W  
Height AMSL: 1525.3 m  
HAAT: 519.0 m  
Peak ERP: 1000 kW  
Antenna: Omnidirectional  
Elev Pattn: Generic  
Elec Tilt: 1.05

39.4 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	1000 kW	560.9 m	122.0 km
45.0	1000	561.9	122.1
90.0	1000	497.2	118.0
135.0	1000	474.7	116.4
180.0	1000	467.0	115.9
225.0	1000	492.0	117.6
270.0	1000	512.3	119.0
315.0	1000	560.5	122.0

Database HAAT does not agree with computed HAAT  
Database HAAT: 519 m Computed HAAT: 516 m

**Appendix B - Interference Analysis**  
**KVII-TV - Amarillo, Texas**  
**Channel 20 -1000 kW - Page 2**

ERP exceeds maximum

ERP: 1000 kW ERP maximum: 471 kW

Distance to Canadian border: 1514.3 km

Distance to Mexican border: 580.9 km

Conditions at FCC monitoring station: Grand Island NE

Bearing: 25.0 degrees Distance: 686.4 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 331.9 degrees Distance: 603.4 km

No land mobile station failures found

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%

-----  
Interference to BLCDT20080519ACZ LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KAMR-TV	D19	DT	LIC	AMARILLO, TX	BLCDT20080519ACZ	
Undesireds:	KVII-TV	D20	DT	BL	AMARILLO, TX	DTVBL40446	6.5 km
	KVII-TV	D20	DT	CP	AMARILLO, TX	BLANK0000127671	6.5
	KAUT-TV	D19	DT	LIC	OKLAHOMA CITY, OK	BLANK0000121785	393.1
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
35115.5	366,476	34579.6	366,335	34056.3	365,657	34048.2 365,651	0.02 0.00
Undesired			Total IX	Unique IX, before	Unique IX, after		
KVII-TV D20 DT BL		515.2	678	515.2	678		
KVII-TV D20 DT CP		523.2	684			523.2 684	
KAUT-TV D19 DT LIC		8.1	0	8.1	0	8.1 0	

-----  
Interference to BLCDT20080519ACZ LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KAMR-TV	D19	DT	LIC	AMARILLO, TX	BLCDT20080519ACZ	
Undesireds:	KVII-TV	D20	DT	BL	AMARILLO, TX	DTVBL40446	6.5 km
	KVII-TV	D20	DT	CP	AMARILLO, TX	BLANK0000127671	6.5
	KAUT-TV	D19	DT	CP	OKLAHOMA CITY, OK	BLANK0000127590	393.1
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
35115.5	366,476	34579.6	366,335	34056.3	365,657	34048.2 365,651	0.02 0.00
Undesired			Total IX	Unique IX, before	Unique IX, after		
KVII-TV D20 DT BL		515.2	678	515.2	678		
KVII-TV D20 DT CP		523.2	684			523.2 684	
KAUT-TV D19 DT CP		8.1	0	8.1	0	8.1 0	

-----  
Interference to BLANK0000035779 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KTXS-TV	D20	DT	CP	SWEETWATER, TX	BLANK0000035779	

**Appendix B - Interference Analysis**  
**KVII-TV - Amarillo, Texas**  
**Channel 20 -1000 kW - Page 3**

Undesireds:	KVII-TV	D20	DT	BL	AMARILLO, TX	DTVBL40446	367.7 km
	KVII-TV	D20	DT	CP	AMARILLO, TX	BLANK0000127671	367.7
	KIDY	D19	DT	LIC	SAN ANGELO, TX	BLCDT20110520ADN	99.4
	K20DN-D	D20	DC	LIC	WICHITA FALLS, TX	BLANK0000001589	218.4

	Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
	37774.4	261,433	37165.0	258,739	36787.6	254,172	36771.6	254,161	0.04 0.00

Undesired				Total IX	Unique IX, before	Unique IX, after
KVII-TV D20 DT BL		115.9		3	115.9	3
KVII-TV D20 DT CP		131.9		14		131.9 14
KIDY D19 DT LIC		241.5		4,561	241.5	4,561
K20DN-D D20 DC LIC		20.0		3	20.0	3

-----  
Interference to BLCDT20080815ABJ LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KTXS-TV	D20	DT	LIC	SWEETWATER, TX	BLCDT20080815ABJ	
Undesireds:	KVII-TV	D20	DT	BL	AMARILLO, TX	DTVBL40446	367.7 km
	KVII-TV	D20	DT	CP	AMARILLO, TX	BLANK0000127671	367.7
	KIDY	D19	DT	LIC	SAN ANGELO, TX	BLCDT20110520ADN	99.4
	K20DN-D	D20	DC	LIC	WICHITA FALLS, TX	BLANK0000001589	218.4

	Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
	30363.6	247,603	29986.5	246,760	29827.3	246,749	29823.3	246,749	0.01 0.00

Undesired				Total IX	Unique IX, before	Unique IX, after
KVII-TV D20 DT BL		59.9		3	59.9	3
KVII-TV D20 DT CP		63.9		3		63.9 3
KIDY D19 DT LIC		67.3		7	67.3	7
K20DN-D D20 DC LIC		32.1		1	32.1	1

-----  
Interference to proposal scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KVII-TV	D20	DT	CP	AMARILLO, TX	BLANK0000127671	
Undesireds:	KAMR-TV	D19	DT	LIC	AMARILLO, TX	BLCDT20080519ACZ	6.5 km
	KTXS-TV	D20	DT	CP	SWEETWATER, TX	BLANK0000035779	367.7

	Service area		Terrain-limited		IX-free		Percent IX
	44653.7	382,920	43873.0	382,180	43591.1	382,133	0.64 0.01

Undesired				Total IX	Unique IX	Prcnt Unique IX
KAMR-TV D19 DT LIC		4.0		0	4.0	0 0.01 0.00
KTXS-TV D20 DT CP		277.9		47	277.9	47 0.63 0.01

-----  
Interference to proposal scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KVII-TV	D20	DT	CP	AMARILLO, TX	BLANK0000127671	
Undesireds:	KAMR-TV	D19	DT	LIC	AMARILLO, TX	BLCDT20080519ACZ	6.5 km
	KTXS-TV	D20	DT	LIC	SWEETWATER, TX	BLCDT20080815ABJ	367.7

	Service area		Terrain-limited		IX-free		Percent IX
	44653.7	382,920	43873.0	382,180	43781.7	382,172	0.21 0.00

Undesired				Total IX	Unique IX	Prcnt Unique IX
KAMR-TV D19 DT LIC		4.0		0	4.0	0 0.01 0.00
KTXS-TV D20 DT LIC		87.3		8	87.3	8 0.20 0.00