



**STATEMENT OF JOHN E. HIDLE, P.E.
IN SUPPORT OF AN APPLICATION
FOR A MAJOR MODIFICATION OF CONSTRUCTION PERMIT
FILE NUMBER 0000095494 TO CHANGE CHANNELS BY
MOVING KCVU'S BROADCAST OPERATION TO CHANNEL 30
INTENDED TO RESOLVE UNEXPECTED INTERFERENCE TO
LAND MOBILE OPERATIONS ASSIGNED TO CHANNEL 17
SHARED USE FOR THE SAN FRANCISCO AREA
KCVU - PARADISE, CALIFORNIA
DTV - CH. 30 - 500 kW - 430.6 m HAAT**

Prepared for: Paradise (KCVU-TV) Licensee, Inc.

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 Paradise (KCVU-TV) Licensee, Inc., licensee of KCVU, facility ID number 58605, licensed to Paradise, California, to prepare this statement and associated exhibits in support of an application for a major modification of its construction permit, file number 0000095494, to resolve unexpected reported interference Land Mobile operations using shared TV channel 17 in the San Francisco area. KCVU proposes to move its DTV operation from channel 17 to channel 30, which was KCVU's original analog TV channel. KCVU has determined that its authorized operation can be relocated to channel 30 while retaining all other parameters intact. KCVU's Licensee herein proposes a permanent operation on channel 30 and is herein submitting the instant

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application to modify its construction permit to specify channel 30 in lieu of channel 17. It is submitted that the instant proposal will completely resolve any potential interference to the San Francisco area channel 17 Land Mobile operations.

DIRECTIONAL ANTENNA

The applicant proposes to install a new Dielectric model TFU-24JSC/VP-R C170 directional elliptically polarized transmitting antenna for channel 30. The antenna's center of radiation will be located at the authorized height above ground of 118.0 meters, and at the authorized height above average terrain of 430.6 meters. The antenna manufacturer's antenna data, including the horizontal azimuth patterns of both the horizontal and vertical signal components and the vertical plane elevation radiation pattern, illustrating the antenna's 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. Exhibit 1 shows the predicted Noise Limited (40.32 dBu) contour, and

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the principal community (48 dBu) contour. The 48 dBu contour completely encompasses the principal community of license, Paradise, California.

ALLOCATION CONSIDERATIONS

Post-Transition DTV Considerations

A study was performed, using the FCC's software, *tvstudy*, v. 2.2.5, to determine if the instant application for major modification of 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. The study used a 2.0 km cell size and a 0.1 km terrain profile spacing. (See Appendix B)

International DTV Considerations

The KCVU site is located within neither the Canadian nor the Mexican international coordination zone, therefore there are no international DTV considerations required.

BLANKETING AND INTERMODULATION INTERFERENCE

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

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RADIO FREQUENCY IMPACT, SAFETY & STATEMENT OF COMPLIANCE

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

As shown in Appendix A the KCVU channel 30 application for modification of its construction permit, as proposed herein, will operate with a maximum ERP of 500 kW from an elliptically polarized directional transmitting antenna with a centerline height of 118 meters above ground level (AGL). Considering the elevation pattern submitted elsewhere in this submission, the vertical plane relative field factor is less than 0.100 at all depression angles greater than 9 degrees. The proposed KCVU channel 30 facility is predicted to produce a worst-case power density at two meters above ground level, at 31.1 meters from the tower base, of 16.341 $\mu\text{W}/\text{cm}^2$, which is 4.31% of the FCC guideline value of 379.33 $\mu\text{W}/\text{cm}^2$ for an "uncontrolled" environment, and 0.862% of the FCC's guideline value for "controlled" environments. Therefore, pursuant to Section 1.1307(b)(3) of the FCC Rules, because the proposed facility would not exceed 5% of the uncontrolled and controlled exposure limits, the proposal's power density contribution is considered insignificant.

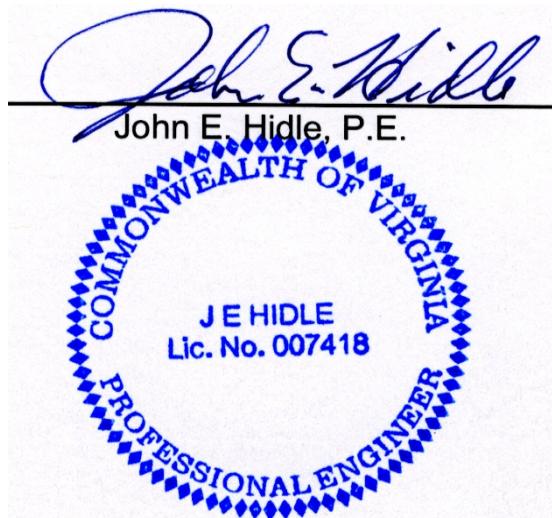
Further, the Applicant will continue to cooperate/coordinate with other site users and reduce power and/or cease operation during times of service or maintenance of the transmission systems as necessary to avoid potentially harmful exposure to personnel. In light of the above, the proposed facility should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

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SUMMARY

It is submitted that the instant application for a major modification of KCVU's construction permit, file number 0000095494, to change from channel 17 to channel 30 in order to resolve interference to Land Mobile operations in the San Francisco area, as described herein, does comply with the Rules, Regulations and relevant Policies of the Federal Communications Commission. This statement, FCC Form 2100, its technical sections, and the attached exhibits were prepared by me or under my direct supervision and are believed to be true and correct to the best of my knowledge and belief.

DATED: September 22, 2020





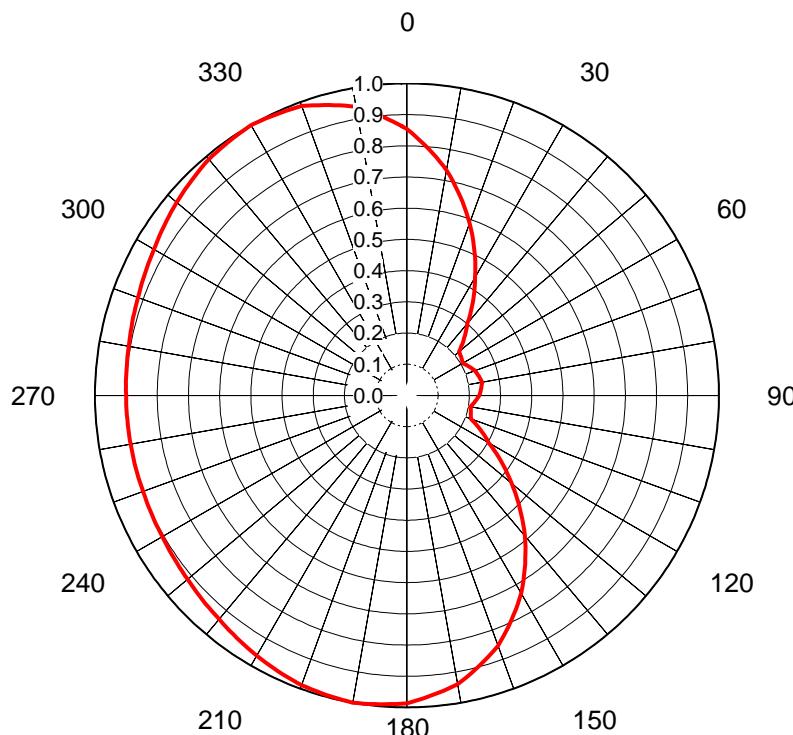
PREDICTED COVERAGE CONTOURS

KCVU APP - PARADISE, CALIFORNIA
DTV Channel 30 - 500 kW ERP - 430.6 M HAAT
SEPTEMBER 2020

Predicted Noise Limited 40.32 dBu
F(50,90) Coverage Contour



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



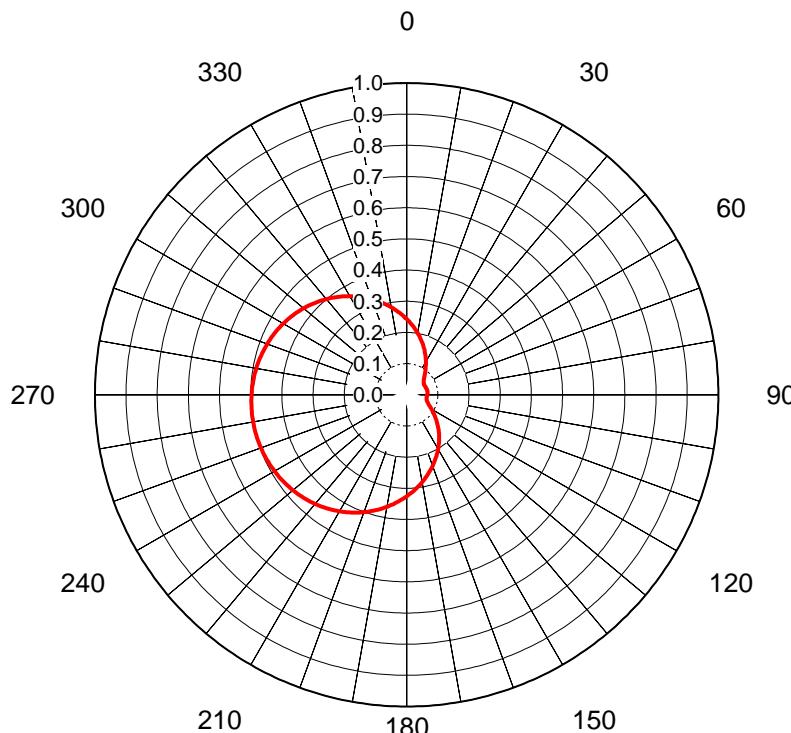
AZIMUTH PATTERN Horizontal Polarization

In Free Space

Proposal No.	C-71576-
Date	24-Aug-20
Call Letters	KCVU
Channel	30
Frequency	569 MHz
Antenna Type	TFU-24JSC/VP-R C170
Gain	1.7 (2.31dB)
	Calculated

Deg	Value																		
0	0.854	36	0.356	72	0.235	108	0.216	144	0.646	180	0.987	216	0.947	252	0.900	288	0.915	324	0.993
1	0.842	37	0.343	73	0.236	109	0.217	145	0.660	181	0.988	217	0.944	253	0.900	289	0.916	325	0.994
2	0.830	38	0.329	74	0.237	110	0.218	146	0.675	182	0.990	218	0.941	254	0.900	290	0.917	326	0.995
3	0.818	39	0.315	75	0.238	111	0.226	147	0.689	183	0.991	219	0.939	255	0.900	291	0.919	327	0.996
4	0.806	40	0.302	76	0.240	112	0.235	148	0.704	184	0.992	220	0.936	256	0.899	292	0.921	328	0.998
5	0.794	41	0.294	77	0.241	113	0.243	149	0.719	185	0.993	221	0.934	257	0.899	293	0.923	329	0.999
6	0.781	42	0.285	78	0.242	114	0.252	150	0.733	186	0.995	222	0.932	258	0.899	294	0.925	330	1.000
7	0.769	43	0.277	79	0.244	115	0.260	151	0.745	187	0.996	223	0.930	259	0.899	295	0.927	331	0.999
8	0.757	44	0.268	80	0.245	116	0.268	152	0.757	188	0.997	224	0.928	260	0.899	296	0.928	332	0.997
9	0.745	45	0.260	81	0.244	117	0.277	153	0.769	189	0.999	225	0.927	261	0.899	297	0.930	333	0.996
10	0.733	46	0.252	82	0.242	118	0.285	154	0.781	190	1.000	226	0.925	262	0.899	298	0.932	334	0.995
11	0.719	47	0.243	83	0.241	119	0.294	155	0.794	191	0.999	227	0.923	263	0.899	299	0.934	335	0.993
12	0.704	48	0.235	84	0.240	120	0.302	156	0.806	192	0.998	228	0.921	264	0.899	300	0.936	336	0.992
13	0.689	49	0.226	85	0.238	121	0.315	157	0.818	193	0.996	229	0.919	265	0.900	301	0.939	337	0.991
14	0.675	50	0.218	86	0.237	122	0.329	158	0.830	194	0.995	230	0.917	266	0.900	302	0.941	338	0.990
15	0.660	51	0.217	87	0.236	123	0.343	159	0.842	195	0.994	231	0.916	267	0.900	303	0.944	339	0.988
16	0.646	52	0.216	88	0.235	124	0.356	160	0.854	196	0.993	232	0.915	268	0.900	304	0.947	340	0.987
17	0.632	53	0.215	89	0.233	125	0.370	161	0.863	197	0.992	233	0.913	269	0.900	305	0.950	341	0.982
18	0.617	54	0.214	90	0.232	126	0.383	162	0.871	198	0.990	234	0.912	270	0.900	306	0.952	342	0.978
19	0.603	55	0.213	91	0.229	127	0.396	163	0.880	199	0.989	235	0.911	271	0.900	307	0.955	343	0.973
20	0.588	56	0.211	92	0.227	128	0.410	164	0.888	200	0.988	236	0.910	272	0.901	308	0.958	344	0.968
21	0.573	57	0.210	93	0.225	129	0.424	165	0.897	201	0.985	237	0.909	273	0.901	309	0.960	345	0.964
22	0.558	58	0.209	94	0.222	130	0.437	166	0.906	202	0.983	238	0.907	274	0.902	310	0.963	346	0.959
23	0.543	59	0.208	95	0.220	131	0.452	167	0.914	203	0.980	239	0.906	275	0.902	311	0.965	347	0.954
24	0.528	60	0.207	96	0.217	132	0.467	168	0.923	204	0.978	240	0.905	276	0.903	312	0.968	348	0.949
25	0.512	61	0.209	97	0.214	133	0.482	169	0.931	205	0.975	241	0.905	277	0.904	313	0.970	349	0.945
26	0.497	62	0.212	98	0.212	134	0.497	170	0.940	206	0.973	242	0.904	278	0.904	314	0.973	350	0.940
27	0.482	63	0.214	99	0.209	135	0.512	171	0.945	207	0.970	243	0.904	279	0.905	315	0.975	351	0.931
28	0.467	64	0.217	100	0.207	136	0.528	172	0.949	208	0.968	244	0.903	280	0.905	316	0.978	352	0.923
29	0.452	65	0.220	101	0.208	137	0.543	173	0.954	209	0.965	245	0.902	281	0.906	317	0.980	353	0.914
30	0.437	66	0.222	102	0.209	138	0.558	174	0.959	210	0.963	246	0.902	282	0.907	318	0.983	354	0.906
31	0.424	67	0.225	103	0.210	139	0.573	175	0.964	211	0.960	247	0.901	283	0.909	319	0.985	355	0.897
32	0.410	68	0.227	104	0.211	140	0.588	176	0.968	212	0.958	248	0.901	284	0.910	320	0.988	356	0.888
33	0.396	69	0.229	105	0.213	141	0.603	177	0.973	213	0.955	249	0.900	285	0.911	321	0.989	357	0.880
34	0.383	70	0.232	106	0.214	142	0.617	178	0.978	214	0.952	250	0.900	286	0.912	322	0.990	358	0.871
35	0.370	71	0.233	107	0.215	143	0.632	179	0.982	215	0.950	251	0.900	287	0.913	323	0.992	359	0.863

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AZIMUTH PATTERN Vertical Polarization

In Free Space

Proposal No. C-71576-
 Date 24-Aug-20
 Call Letters KCVU
 Channel 30
 Frequency 569 MHz
 Antenna Type TFU-24JSC/VP-R C170
 Gain 2.39 (3.79dB)
 Calculated

Deg	Value																		
0	0.243	36	0.103	72	0.067	108	0.069	144	0.177	180	0.326	216	0.447	252	0.498	288	0.479	324	0.387
1	0.239	37	0.100	73	0.067	109	0.070	145	0.181	181	0.330	217	0.450	253	0.499	289	0.478	325	0.383
2	0.235	38	0.097	74	0.067	110	0.071	146	0.185	182	0.334	218	0.452	254	0.499	290	0.476	326	0.380
3	0.231	39	0.095	75	0.067	111	0.073	147	0.189	183	0.338	219	0.455	255	0.499	291	0.475	327	0.376
4	0.227	40	0.092	76	0.067	112	0.074	148	0.193	184	0.342	220	0.457	256	0.500	292	0.473	328	0.372
5	0.222	41	0.089	77	0.068	113	0.076	149	0.197	185	0.346	221	0.459	257	0.500	293	0.471	329	0.369
6	0.218	42	0.087	78	0.068	114	0.078	150	0.202	186	0.350	222	0.461	258	0.500	294	0.469	330	0.365
7	0.214	43	0.084	79	0.068	115	0.080	151	0.206	187	0.354	223	0.463	259	0.500	295	0.467	331	0.361
8	0.210	44	0.082	80	0.068	116	0.082	152	0.210	188	0.357	224	0.465	260	0.500	296	0.465	332	0.357
9	0.206	45	0.080	81	0.068	117	0.084	153	0.214	189	0.361	225	0.467	261	0.500	297	0.463	333	0.354
10	0.202	46	0.078	82	0.068	118	0.087	154	0.218	190	0.365	226	0.469	262	0.500	298	0.461	334	0.350
11	0.197	47	0.076	83	0.068	119	0.089	155	0.222	191	0.369	227	0.471	263	0.500	299	0.459	335	0.346
12	0.193	48	0.074	84	0.067	120	0.092	156	0.227	192	0.372	228	0.473	264	0.500	300	0.457	336	0.342
13	0.189	49	0.073	85	0.067	121	0.095	157	0.231	193	0.376	229	0.475	265	0.499	301	0.455	337	0.338
14	0.185	50	0.071	86	0.067	122	0.097	158	0.235	194	0.380	230	0.476	266	0.499	302	0.452	338	0.334
15	0.181	51	0.070	87	0.067	123	0.100	159	0.239	195	0.383	231	0.478	267	0.499	303	0.450	339	0.330
16	0.177	52	0.069	88	0.067	124	0.103	160	0.243	196	0.387	232	0.479	268	0.498	304	0.447	340	0.326
17	0.173	53	0.068	89	0.066	125	0.107	161	0.247	197	0.390	233	0.481	269	0.498	305	0.445	341	0.322
18	0.169	54	0.067	90	0.066	126	0.110	162	0.252	198	0.394	234	0.482	270	0.497	306	0.442	342	0.318
19	0.165	55	0.066	91	0.066	127	0.113	163	0.256	199	0.397	235	0.484	271	0.497	307	0.440	343	0.314
20	0.161	56	0.066	92	0.066	128	0.116	164	0.260	200	0.401	236	0.485	272	0.496	308	0.437	344	0.310
21	0.157	57	0.065	93	0.065	129	0.120	165	0.264	201	0.404	237	0.486	273	0.496	309	0.434	345	0.306
22	0.153	58	0.065	94	0.065	130	0.123	166	0.268	202	0.407	238	0.487	274	0.495	310	0.432	346	0.301
23	0.149	59	0.065	95	0.065	131	0.127	167	0.272	203	0.410	239	0.489	275	0.494	311	0.429	347	0.297
24	0.146	60	0.065	96	0.065	132	0.131	168	0.277	204	0.414	240	0.490	276	0.493	312	0.426	348	0.293
25	0.142	61	0.065	97	0.065	133	0.134	169	0.281	205	0.417	241	0.491	277	0.493	313	0.423	349	0.289
26	0.138	62	0.065	98	0.065	134	0.138	170	0.285	206	0.420	242	0.492	278	0.492	314	0.420	350	0.285
27	0.134	63	0.065	99	0.065	135	0.142	171	0.289	207	0.423	243	0.493	279	0.491	315	0.417	351	0.281
28	0.131	64	0.065	100	0.065	136	0.146	172	0.293	208	0.426	244	0.493	280	0.490	316	0.414	352	0.277
29	0.127	65	0.065	101	0.065	137	0.149	173	0.297	209	0.429	245	0.494	281	0.489	317	0.410	353	0.272
30	0.123	66	0.065	102	0.065	138	0.153	174	0.301	210	0.432	246	0.495	282	0.487	318	0.407	354	0.268
31	0.120	67	0.065	103	0.065	139	0.157	175	0.306	211	0.434	247	0.496	283	0.486	319	0.404	355	0.264
32	0.116	68	0.066	104	0.066	140	0.161	176	0.310	212	0.437	248	0.496	284	0.485	320	0.401	356	0.260
33	0.113	69	0.066	105	0.066	141	0.165	177	0.314	213	0.440	249	0.497	285	0.484	321	0.397	357	0.256
34	0.110	70	0.066	106	0.067	142	0.169	178	0.318	214	0.442	250	0.497	286	0.482	322	0.394	358	0.252
35	0.107	71	0.066	107	0.068	143	0.173	179	0.322	215	0.445	251	0.498	287	0.481	323	0.390	359	0.247

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ELEVATION PATTERN

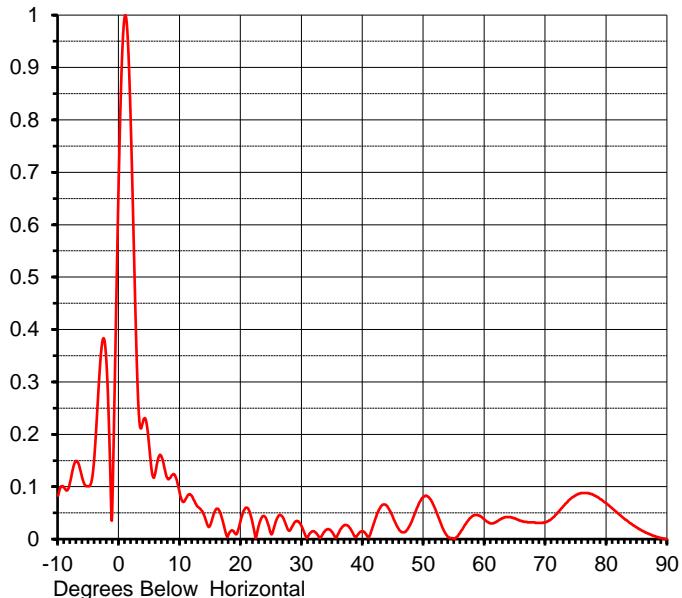
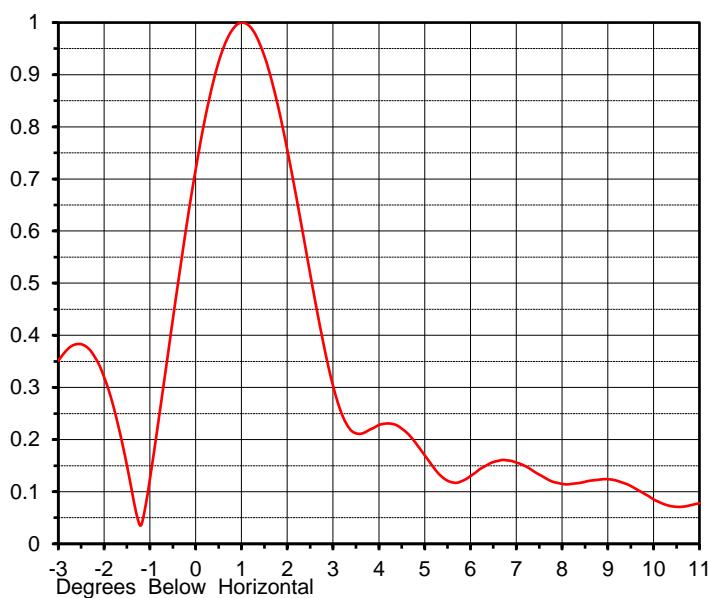
Proposal No. C-71576-
 Date 24-Aug-20
 Call Letters KCVU
 Channel 30
 Frequency 569 MHz
 Antenna Type TFU-24JSC/VP-R C170

RMS Directivity at Main Lobe
 RMS Directivity at Horizontal

22.4 (13.50 dB)
11.5 (10.61 dB)

Calculated

Beam Tilt 1.00 deg
 Pattern Number 24J224100



Angle	Field								
-10.0	0.083	10.0	0.085	30.0	0.023	50.0	0.081	70.0	0.032
-9.0	0.098	11.0	0.078	31.0	0.005	51.0	0.077	71.0	0.039
-8.0	0.111	12.0	0.081	32.0	0.015	52.0	0.054	72.0	0.051
-7.0	0.149	13.0	0.061	33.0	0.002	53.0	0.024	73.0	0.064
-6.0	0.115	14.0	0.044	34.0	0.018	54.0	0.004	74.0	0.076
-5.0	0.101	15.0	0.028	35.0	0.013	55.0	0.000	75.0	0.084
-4.0	0.167	16.0	0.058	36.0	0.011	56.0	0.013	76.0	0.088
-3.0	0.351	17.0	0.035	37.0	0.027	57.0	0.031	77.0	0.088
-2.0	0.320	18.0	0.010	38.0	0.019	58.0	0.044	78.0	0.083
-1.0	0.124	19.0	0.011	39.0	0.006	59.0	0.045	79.0	0.076
0.0	0.718	20.0	0.038	40.0	0.015	60.0	0.037	80.0	0.068
1.0	1.000	21.0	0.060	41.0	0.004	61.0	0.030	81.0	0.058
2.0	0.756	22.0	0.025	42.0	0.037	62.0	0.034	82.0	0.048
3.0	0.303	23.0	0.029	43.0	0.063	63.0	0.040	83.0	0.038
4.0	0.228	24.0	0.042	44.0	0.063	64.0	0.042	84.0	0.030
5.0	0.170	25.0	0.009	45.0	0.040	65.0	0.039	85.0	0.022
6.0	0.130	26.0	0.041	46.0	0.017	66.0	0.035	86.0	0.015
7.0	0.156	27.0	0.039	47.0	0.014	67.0	0.032	87.0	0.010
8.0	0.115	28.0	0.016	48.0	0.033	68.0	0.032	88.0	0.005
9.0	0.124	29.0	0.034	49.0	0.062	69.0	0.031	89.0	0.002
								90.0	0.000

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RADIO FREQUENCY IMPACT, SAFETY & STATEMENT OF COMPLIANCE

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

As shown in Appendix A the KCVU channel 30 application for modification of its construction permit, as proposed herein, will operate with a maximum ERP of 500 kW from an elliptically polarized directional transmitting antenna with a centerline height of 118 meters above ground level (AGL). Considering the elevation pattern submitted elsewhere in this submission, the vertical plane relative field factor is less than 0.100 at all depression angles greater than 9 degrees. The proposed KCVU channel 30 facility is predicted to produce a worst-case power density at two meters above ground level, at 31.1 meters from the tower base, of 16.341 $\mu\text{W}/\text{cm}^2$, which is 4.31% of the FCC guideline value of 379.33 $\mu\text{W}/\text{cm}^2$ for an "uncontrolled" environment, and 0.862% of the FCC's guideline value for "controlled" environments. Therefore, pursuant to Section 1.1307(b)(3) of the FCC Rules, because the proposed facility would not exceed 5% of the uncontrolled and controlled exposure limits, the proposal's power density contribution is considered insignificant.

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.

KCVU
Channel 30 - Paradise, CA
ERP = 500000.00 WATTS

APPENDIX A

Maximum ERP 500 kW

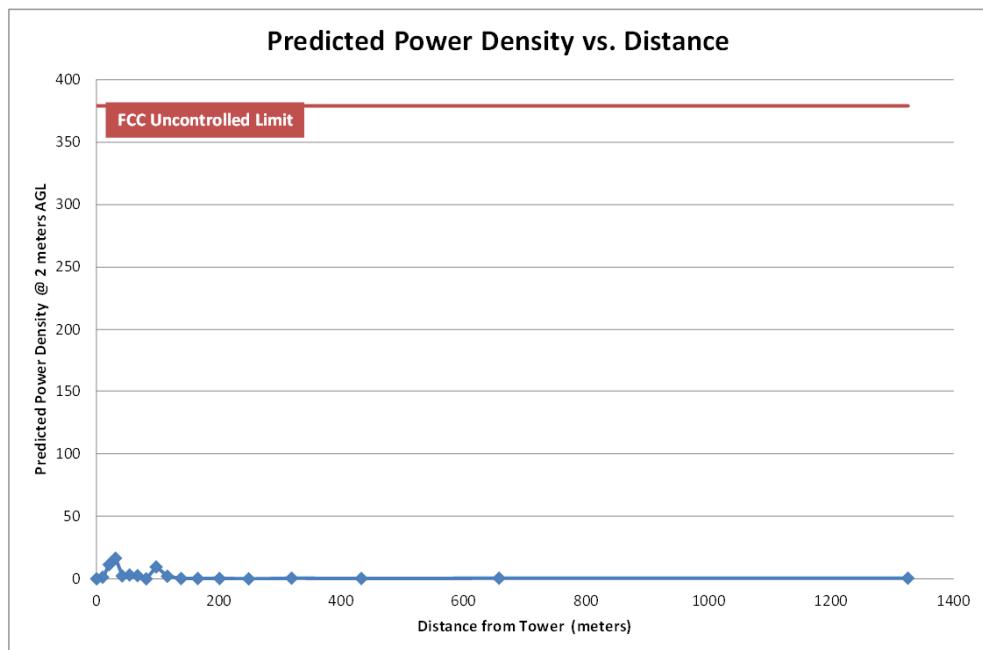
Polarization ----- 2
Antenna Height Above Ground - 118
FCC Uncontrolled RFR Limit --- 379.33

Circular
meters
 $\mu\text{W}/\text{cm}^2$

387.1 feet

Maximum Computed Power Density 16.341 $\mu\text{W}/\text{cm}^2$
4.31% of limit

Angle Below Horizontal (degrees)	<Point X>		Vertical Pattern (REL. FIELD)	KCVU ERP (kW)	KCVU Calculated Power Density $\mu\text{W}/\text{cm}^2$	Percent Limit	Limit Exceeded?
0			0.718	257.7620			
5	1325.9	1331.0	0.170	14.4500	0.545	0.14%	No
10	657.9	668.0	0.085	3.6125	0.541	0.14%	No
15	432.9	448.2	0.028	0.3920	0.130	0.03%	No
20	318.7	339.2	0.038	0.7220	0.419	0.11%	No
25	248.8	274.5	0.009	0.0405	0.036	0.01%	No
30	200.9	232.0	0.023	0.2645	0.328	0.09%	No
35	165.7	202.2	0.013	0.0845	0.138	0.04%	No
40	138.2	180.5	0.015	0.1125	0.231	0.06%	No
45	116.0	164.0	0.040	0.8000	1.986	0.52%	No
50	97.3	151.4	0.081	3.2805	9.557	2.52%	No
55	81.2	141.6	0.000	0.0000	0.000	0.00%	No
60	67.0	133.9	0.037	0.6845	2.549	0.67%	No
65	54.1	128.0	0.039	0.7605	3.101	0.82%	No
70	42.2	123.4	0.032	0.5120	2.244	0.59%	No
75	31.1	120.1	0.084	3.5280	16.341	4.31%	No
80	20.5	117.8	0.068	2.3120	11.131	2.93%	No
85	10.1	116.4	0.022	0.2420	1.192	0.31%	No
90	0.0	116.0	0.000	0.0000	0.000	0.00%	No





KCVU - CHANNEL CHANGE PARADISE, CALIFORNIA

Appendix B - Longley-Rice Interference Analysis Channel 30 - 500 kW SEPTEMBER 2020

tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: KCVU 30 AP C170 500KW 2Xp1 #333, Model: Longley-Rice
Start: 2020.08.17 14:31:46

Study created: 2020.08.17 14:31:46

Study build station data: LMS TV 2020-08-16

Proposal: KCVU D30 DT APP PARADISE, CA
File number: KCVU 30 AP C170 500KW 2Xp1
Facility ID: 58605
Station data: User record
Record ID: 131
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
No	KPIX-TV	D29	DT	LIC	SAN FRANCISCO, CA	BLCDT20091112AIZ	253.5 km
Yes	KFSN-TV	D30	DT	LIC	FRESNO, CA	BLANK0000081720	376.9
Yes	KQED	D30	DT	LIC	SAN FRANCISCO, CA	BLANK0000040845	253.5
No	KBLN-TV	D30	DT	LIC	GRANTS PASS, OR	BLCDT20090224AAAX	299.1
No	KTVU	D31	DT	LIC	OAKLAND, CA	BLANK0000107584	253.5

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D30
Latitude: 39 57 42.70 N (NAD83)
Longitude: 121 42 43.10 W
Height AMSL: 1192.4 m
HAAT: 430.6 m
Peak ERP: 500 kW
Antenna: Dielectric-TFU-24JSC/VP-R C170 (ID 1006195) 0.0 deg
Elev Pattn: Generic
Elec Tilt: 1.00

40.3 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	365 kW	205.4 m	78.6 km
45.0	33.8	125.5	60.4
90.0	26.9	146.6	61.0
135.0	131	359.8	87.5
180.0	487	645.4	117.4
225.0	429	750.6	121.1

Appendix B - Interference Analysis
KCVU - Channel Change
Paradise, California
Channel 30 - 500 kW - Page 2

270.0	405	697.9	118.1
315.0	476	513.4	109.9

Distance to Canadian border: 929.9 km

Distance to Mexican border: 903.2 km

Conditions at FCC monitoring station: Livermore CA
Bearing: 180.9 degrees Distance: 248.7 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 83.8 degrees Distance: 1398.3 km

Study cell size: 2.00 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%

Interference to BLANK0000081720 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KFSN-TV	D30	DT	LIC	FRESNO, CA	BLANK0000081720	
Undesireds:	KCVU	D30	DT	APP	PARADISE, CA	KCVU 30 AP C170 500KW	376.9 km
	KQED	D30	DT	LIC	SAN FRANCISCO, CA	BLANK0000040845	276.9
	KDFS-CD	D30-	DC	LIC	SANTA MARIA, CA	BLANK0000001617	263.6
	KBTF-CD	D31	DC	LIC	BAKERSFIELD, CA	BLDTA20100921ABW	195.4
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
34744.4	1,836,607	31985.9	1,814,430	31802.9	1,814,055	31787.0	1,813,978
Undesired			Total IX		Unique IX, before	Unique IX, after	
KCVU D30 DT APP		19.8	77		15.9	77	
KQED D30 DT LIC		171.0	375	171.0	375	167.0	375
KDFS-CD D30- DC LIC		8.0	0	8.0	0	8.0	0
KBTF-CD D31 DC LIC		4.0	0	4.0	0	4.0	0

Interference to BLANK0000081720 LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KFSN-TV	D30	DT	LIC	FRESNO, CA	BLANK0000081720	
Undesireds:	KCVU	D30	DT	APP	PARADISE, CA	KCVU 30 AP C170 500KW	376.9 km
	KQED	D30	DT	LIC	SAN FRANCISCO, CA	BLANK0000040845	276.9
	KDFS-CD	D30-	DC	LIC	SANTA MARIA, CA	BLANK0000001617	263.6
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
34744.4	1,836,607	31985.9	1,814,430	31806.9	1,814,055	31791.0	1,813,978
Undesired			Total IX		Unique IX, before	Unique IX, after	
KCVU D30 DT APP		19.8	77		15.9	77	
KQED D30 DT LIC		171.0	375	171.0	375	167.0	375
KDFS-CD D30- DC LIC		8.0	0	8.0	0	8.0	0

Interference to BLANK0000040845 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KQED	D30	DT	LIC	SAN FRANCISCO, CA	BLANK0000040845	
Undesireds:	KCVU	D30	DT	APP	PARADISE, CA	KCVU 30 AP C170 500KW	253.5 km

Appendix B - Interference Analysis
KCVU - Channel Change
Paradise, California
Channel 30 - 500 kW - Page 3

KFSN-TV		D30	DT	LIC	FRESNO, CA	BLANK0000081720	276.9	
Service area					Terrain-limited	IX-free, before	IX-free, after	Percent New IX
37935.5	8,195,398	32799.5	7,160,172		31646.2	6,955,556	31161.4	6,929,470
Undesired					Total IX	Unique IX, before	Unique IX, after	
KCVU D30 DT APP		1462.7			220,485		484.8	26,086
KFSN-TV D30 DT LIC		1153.3			204,616	1153.3	204,616	175.5
								10,217

Interference to proposal scenario 1

0.80% interference received

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance	
	KCVU	D30	DT	APP	PARADISE, CA	KCVU 30 AP C170 500KW		
Undesireds:	KFSN-TV	D30	DT	LIC	FRESNO, CA	BLANK0000081720	376.9 km	
	KQED	D30	DT	LIC	SAN FRANCISCO, CA	BLANK0000040845	253.5	
Service area					Terrain-limited	IX-free	Percent IX	
29695.2	684,900	27396.4			674,961	27180.6	669,542	0.79 0.80
Undesired					Total IX	Unique IX	Prcnt Unique IX	
KFSN-TV D30 DT LIC		4.0			14	0.0	0 0.00	0.00
KQED D30 DT LIC		215.8			5,419	211.8	5,405	0.77 0.80

Applicant will accept the predicted received interference from KQED and KFSN-TV to 0.8% of KCVU's population, which totals 5,411 persons.