



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	BLCDT20090224AAX	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	0.05 0.00
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	0.05 0.00
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	1.53 0.38
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.