



Kessler and Gehman Associates
Consultants • Broadcast • Wireless

tvstudy v2.2.2

Database: localhost, Study: **KRON-D7 Maximization 47.5 kW**, Model: Longley-Rice
Start: 2017.06.27 20:13:08

Study created: 2017.06.27 20:11:29

Study build station data: LMS TV 2017-06-25 (13)

Proposal: KRON-TV D7 DT BL SAN FRANCISCO, CA

File number: DTVBL65526
Facility ID: 65526
Station data: User record
Record ID: 458
Country: U.S.
Zone: II

Non-U.S. records included

Stations potentially affected:

Call	Chan	Svc	Status	City, State	File Number	Distance
KAIL	D7	DT	LIC	FRESNO, CA	BLCDT20021002ABH	277.2 km
KAIL	D7	DT	CP	FRESNO, CA	BPCDT20100401ABQ	277.3
KRCR-TV	D7	DT	LIC	REDDING, CA	BLCDT20110930AST	316.9
KQSL	D8	DT	LIC	FORT BRAGG, CA	BLCDT20090610AAS	236.6
KSBW	D8	DT	LIC	SALINAS, CA	BLCDT20090901ACY	139.3

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D7

Latitude: 37 45 19.00 N (NAD83)
Longitude: 122 27 10.00 W
Height AMSL: 531.6 m
HAAT: 507.2 m

Peak ERP: 47.5 kW

Antenna: DIE-THV-6A7-CP-R C140 0.0 deg

36.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	47.2 kW	505.4 m	121.1 km
45.0	46.9	524.7	122.1
90.0	34.0	525.4	119.0
135.0	15.9	514.4	111.7
180.0	13.0	414.1	102.8
225.0	23.9	524.6	115.7
270.0	43.4	525.5	121.4
315.0	47.5	524.0	122.2

****Proposal service area extends beyond baseline plus 1.0% (Not Applicable for Band-Changing Station)
Proposal service area population is more than 95.0% of baseline**

Distance to Canadian border: 1167.0 km

Distance to Mexican border: 731.2 km

****Proposal is within coordination distance of FCC monitoring station**

Conditions at FCC monitoring station: Livermore CA

Bearing: 92.9 degrees Distance: 61.5 km

ERP: 32.6 kW Field strength: 54.3 dBu, 0.5 mV/m

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 74.6 degrees Distance: 1507.5 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%

Interference to BLCDT20021002ABH LIC, scenario 1

Desired:	Call KAIL	Chan D7	Svc DT	Status LIC	City, State FRESNO, CA	File Number BLCDT20021002ABH	Distance
Undesireds:	KRON-TV	D7	DT	BL	SAN FRANCISCO, CA	DTVBL65526	277.2 km
	KRON-TV	D7	DT	BL	SAN FRANCISCO, CA	DTVBL65526	277.2
	KABC-TV	D7	DT	LIC	LOS ANGELES, CA	BLCDT20110503ACD	339.5
	KSBW	D8	DT	LIC	SALINAS, CA	BLCDT20090901ACY	187.3

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
37087.3 1,967,744	35035.5 1,948,341	34527.8 1,943,374	34384.9 1,941,897	0.41 0.08
Undesired	Total IX	Unique IX, before	Unique IX, after	
KRON-TV D7 DT BL	503.7	4,967	503.7 4,967	
KRON-TV D7 DT BL	646.6	6,444	646.6 6,444	
KABC-TV D7 DT LIC	4.0	0	4.0 0	

Interference to BPCDT20100401ABQ CP, scenario 1

Desired:	Call KAIL	Chan D7	Svc DT	Status CP	City, State FRESNO, CA	File Number BPCDT20100401ABQ	Distance
Undesireds:	KRON-TV	D7	DT	BL	SAN FRANCISCO, CA	DTVBL65526	277.3 km
	KRON-TV	D7	DT	BL	SAN FRANCISCO, CA	DTVBL65526	277.3
	KABC-TV	D7	DT	LIC	LOS ANGELES, CA	BLCDT20110503ACD	339.4
	KSBW	D8	DT	LIC	SALINAS, CA	BLCDT20090901ACY	187.3

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
41813.7 1,985,983	38760.5 1,942,619	38217.0 1,940,047	38129.6 1,939,854	0.23 0.01
Undesired	Total IX	Unique IX, before	Unique IX, after	
KRON-TV D7 DT BL	539.5	2,572	539.5 2,572	
KRON-TV D7 DT BL	626.9	2,765	626.9 2,765	
KABC-TV D7 DT LIC	4.0	0	4.0 0	

Interference to BLCDT20110930AST LIC, scenario 1

Desired:	Call KRCR-TV	Chan D7	Svc DT	Status LIC	City, State REDDING, CA	File Number BLCDT20110930AST	Distance
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Undesireds:	KRON-TV	D7	DT	BL	SAN FRANCISCO, CA	DTVBL65526	317.0 km
	KRON-TV	D7	DT	BL	SAN FRANCISCO, CA	DTVBL65526	316.9
	KQSL	D8	DT	LIC	FORT BRAGG, CA	BLCDDT20090610AAS	128.2

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
51457.0	485,749	43836.0	464,698	43615.1	464,666	43554.7	464,138	0.14 0.11

Undesired		Total IX	Unique IX, before	Unique IX, after
KRON-TV D7 DT BL	80.2	6	68.1	6
KRON-TV D7 DT BL	148.6	534		128.5 534
KQSL D8 DT LIC	152.8	26	140.7	26 132.7 26

Interference to BLCDDT20090610AAS LIC, scenario 1
Proposal causes no interference.

Interference to BLCDDT20090901ACY LIC, scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KSBW	D8	DT	LIC	SALINAS, CA	BLCDDT20090901ACY	
Undesireds:	KRON-TV	D7	DT	BL	SAN FRANCISCO, CA	DTVBL65526	139.3 km
	KRON-TV	D7	DT	BL	SAN FRANCISCO, CA	DTVBL65526	139.3
	KAIL	D7	DT	LIC	FRESNO, CA	BLCDDT20021002ABH	187.3
	KQSL	D8	DT	LIC	FORT BRAGG, CA	BLCDDT20090610AAS	373.5
	KOLO-TV	D8	DT	LIC	RENO, NV	BLCDDT20090612ABN	317.6
	KVIE	D9	DT	LIC	SACRAMENTO, CA	BMLDDT20100913ABV	168.4

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
47633.6	5,083,461	40391.7	4,429,165	36791.5	3,728,383	36787.6	3,710,151	0.01 0.49

Undesired		Total IX	Unique IX, before	Unique IX, after
KRON-TV D7 DT BL	816.6	474,719	768.8	422,986
KRON-TV D7 DT BL	820.5	492,951		772.7 441,218
KAIL D7 DT LIC	1956.5	123,196	1936.6	123,171 1936.6 123,171
KQSL D8 DT LIC	79.6	42,143	12.0	498 12.0 498
KOLO-TV D8 DT LIC	700.2	105,478	310.9	9,277 310.9 9,277
KVIE D9 DT LIC	496.3	85,408	150.8	14,719 150.8 14,719

Interference to BLCDT20090901ACY LIC, scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KSBW	D8	DT	LIC	SALINAS, CA	BLCDT20090901ACY	
Undesireds:	KRON-TV	D7	DT	BL	SAN FRANCISCO, CA	DTVBL65526	139.3 km
	KRON-TV	D7	DT	BL	SAN FRANCISCO, CA	DTVBL65526	139.3
	KAIL	D7	DT	CP	FRESNO, CA	BPCDT20100401ABQ	187.3
	KQSL	D8	DT	LIC	FORT BRAGG, CA	BLCDT20090610AAS	373.5
	KOLO-TV	D8	DT	LIC	RENO, NV	BLCDT20090612ABN	317.6
	KVIE	D9	DT	LIC	SACRAMENTO, CA	BMLEDT20100913ABV	168.4
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
47633.6	5,083,461	40391.7	4,429,165	36655.1	3,727,609	36651.1 3,709,377	0.01 0.49
Undesired		Total IX		Unique IX, before		Unique IX, after	
KRON-TV D7 DT BL		816.6	474,719	768.8	422,986		
KRON-TV D7 DT BL		820.5	492,951			772.7	441,218
KAIL D7 DT CP		2092.9	123,970	2073.0	123,945	2073.0	123,945
KQSL D8 DT LIC		79.6	42,143	12.0	498	12.0	498
KOLO-TV D8 DT LIC		700.2	105,478	310.9	9,277	310.9	9,277
KVIE D9 DT LIC		496.3	85,408	150.8	14,719	150.8	14,719

Interference to proposal, scenario 1
11.36% interference

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KRON-TV	D7	DT	BL	SAN FRANCISCO, CA	DTVBL65526	
Undesireds:	KAIL	D7	DT	LIC	FRESNO, CA	BLCDT20021002ABH	277.2 km
	KRCR-TV	D7	DT	LIC	REDDING, CA	BLCDT20110930AST	316.9
	KSBW	D8	DT	LIC	SALINAS, CA	BLCDT20090901ACY	139.3
Service area		Terrain-limited		IX-free		Percent IX	
43162.4	8,559,344	38573.3	7,990,395	34188.2	7,083,036	11.37 11.36	
Undesired		Total IX		Unique IX		Prct Unique IX	

KAIL D7 DT LIC	3236.2	782,045	2433.7	623,939	6.31	7.81
KRCR-TV D7 DT LIC	1646.9	264,497	980.6	108,233	2.54	1.35
KSBW D8 DT LIC	304.4	18,923	168.2	17,081	0.44	0.21

Interference to proposal, scenario 2
10.86% interference

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KRON-TV	D7	DT	BL	SAN FRANCISCO, CA	DTVBL65526	
Undesireds:	KAIL	D7	DT	CP	FRESNO, CA	BPCDT20100401ABQ	277.3 km
	KRCR-TV	D7	DT	LIC	REDDING, CA	BLCDT20110930AST	316.9
	KSBW	D8	DT	LIC	SALINAS, CA	BLCDT20090901ACY	139.3

Service area		Terrain-limited		IX-free		Percent IX	
43162.4	8,559,344	38573.3	7,990,395	34386.4	7,122,663	10.85	10.86

Undesired		Total IX	Unique IX	Prcnt Unique IX
KAIL D7 DT CP	2784.4	709,327	584,312	5.80 7.31
KRCR-TV D7 DT LIC	1646.9	264,497	140,792	3.13 1.76
KSBW D8 DT LIC	304.4	18,923	17,613	0.51 0.22