

**K21MO-D MINOR MODIFICATION TO CONSTRUCTION PERMIT FOR CH 21 15 kW DIRECTIONAL
FACILITY ID 181667 FILE NUMBER BNPDTL-20090825AAL
RIVERSIDE, CALIFORNIA
ENGINEERING NARRATIVE AND RF RADIATION ENVIRONMENTAL ANALYSIS
APRIL 2019**

K21MO-D is authorized for operation on CH 21. This application proposes a minor change to those CP facilities, BNPDTL-20090825AAL. The proposed facility qualifies is believed to qualify as a minor change as there is no change in channel of operation, there is abundant contour overlap between the proposed and authorized facilities as depicted on Figure 1 and the proposed site location is 27.1 kilometers from the current CP site in compliance with 74.787 (b) (iii). FCC TVStudy software was utilized to determine the interference levels associated with the proposed K21MO-D facility and they are pasted in below.

The applicant proposes herein to locate at a tower utilized by FM Broadcast station KGGN(FM). The proposed antenna system is an ER AL-N-EL antenna with a DA pattern oriented at 315 degrees True. The antenna is a UHF, 8 slot, antenna, elliptically polarized with 0.75 degrees of beam tilt. The maximum relative field in the elevation pattern across the depression angle range of 30 to 90 degrees is less than 0.12 with a radiation center 24 meters above ground. Utilizing formula 10 OF OET Bulletin No. 65, Edition 97-01, a value F of 0.12 has been used to calculate the power density 2 meters above ground. The maximum power density is 29.8 uw/cm squared calculated for an ERP of 15,000 watts H. polarization and 15,000 watts V. polarization. This value is 8.73% of the Public Exposure MPE per section 1.1310. Based on this analysis it is believed that the proposed facility follows OET-65 Guidelines.

The applicant will reduce power or cease transmission as required to meet FCC OET-65 Guidelines.

The proposed tower is existing along with the transmitter building, access road and power.

Below is a copy of the TVStudy interference analysis for CH 21 based on the facilities described above with the antenna orientation of 315 degrees true. As can be seen at the conclusion of the report there is no impermissible ISIX interference. **It is believed that the proposed facility provides full protection to other television facilities based on the following:**

- 1 The only interference caused is to deleted CH 21 KDUG-LD, CH 21+, BLTTL20080813ABI, Hemet, CA

It is noted that the DA Pattern is directed NW and the ERP toward the Mexican border is far less than 10 kW.

The proposed site is located outside the 130 km protected radius for LM CH 20 operation in Los Angeles and the applicant will employ an 8 pole mask filter to fully attenuate any out of band emission in CH 20 that could cause interference to LM operations. In an abundance of caution a waiver of 74.709 is requested for that purpose but it is not believed to be necessary since the Rule was written for analog TV stations and the proposed facility is a LPTV DTV. The proposed site is also outside the top 100 markets 75 mile (121 kilometer) preclusion radius.

TVStudy Report: Proposed facility

Study created: 2019.04.17 16:02:10

Study build station data: LMS TV 2019-04-14

Proposal: K21MO-D D21 LD CP RIVERSIDE, CA
File number: BNPDTL20090825AAL
Facility ID: 181667
Station data: User record
Record ID: 211
Country: U.S.

Stations potentially affected by proposal:

IX	Call	Chan	Svc Status	City, State	File Number	Distance
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No	K14JT	N14	TX	LIC	JOSHUA TREE, ETC., CA	BLTVL19980330JH	105.7 km
No	K17KD	N17	TX	LIC	LUCERNE VALLEY, CA	BLTT20120112AFA	97.1
No	KODG-LD	N17z	TX	LIC	PALM SPRINGS, CA	BLTTL20001219ABP	70.2
No	K17GJ-D	N17-	TX	LIC	Twentynine Palms, CA	BLTT20080902AED	84.1
No	K19BT	N19-	TX	LIC	LUCERNE VALLEY, CA	BLTT19880307ID	97.1
No	K20IM-D	D20	LD	LIC	BARSTOW, CA	BLDTL20100630BDO	141.0
No	KCWQ-LD	D20	LD	CP	PALM SPRINGS, CA	BLANK0000052544	55.9
No	KZSD-LD	D20+	LD	LIC	SAN DIEGO, CA	BLANK0000067691	99.4
No	K21EG-D	D21	LD	LIC	GOLDEN VALLEY, AZ	BLDTT20130308ABB	309.1
No	K21EA-D	D21	LD	LIC	LAKE HAVASU CITY, AZ	BLDTT20130308ABO	261.9
No	K38GR-D	D21	LD	CP	MEADVIEW, AZ	BLANK0000053722	362.3
No	NEW	D21	LD	APP	PARKER, AZ	BNPDTL20100514ADI	252.2
No	KRPO-LD	D21	LD	LIC	QUARTZSITE, AZ	BLDTL20110926AEA	307.8
No	KRPO-LD	D21	LD	APP	QUARTZSITE, AZ	BPDTL20120606AAC	350.3
No	K21FU-D	D21	LD	LIC	TOPOCK, AZ	BLDTT20130308ACK	285.4
No	K21MN-D	D21	LD	CP	BAKERSFIELD, CA	BNPDTL20100514ABR	272.3
No	K21MH-D	D21	LD	LIC	Daggett, CA	BLANK0000004555	144.0
No	KFTV-DT	D21	DT	CP	HANFORD, CA	BLANK0000034318	448.1
Yes	DKDUG-LD	N21+	TX	APP	HEMET, CA	BLTTL20080813ABI	23.6
Yes	K21GI	D21	LD	CP	MORONGO VALLEY, CA	BDFCDTT20120109ACZ	64.1
No	K21GI	N21+	TX	LIC	MORONGO VALLEY, CA	BLTT20050516AUD	64.1
Yes	K21DO-D	D21	DC	LIC	PALM SPRINGS, CA	BLDTA20150209ABF	55.9
No	K21IN-D	D21	LD	LIC	RIDGECREST, ETC., CA	BLDTT20090622AAK	220.7
Yes	KPMR	D21	DT	LIC	SANTA BARBARA, CA	BLCDT20110607ABB	296.8
Yes	KPMR	D21	DT	APP	SANTA BARBARA, CA	BPCDT20120817ABD	297.9
No	K21AC	N21	TX	LIC	VICTORVILLE, ETC., CA	BLTT19820105IG	117.8
No	NEW	D21	LD	APP	WINTERHAVEN, CA	BNPDTL20100510AAG	208.6
No	KLSV - LD	D21	LD	LIC	LAS VEGAS, NV	BLANK0000064058	321.6
No	K21OQ-D	D21	LD	CP	LUFKIN, TX	BMJADTL20100517AAU	166.6
No	KVYE	D22	DT	LIC	EL CENTRO, CA	BLCDT20070604ABN	205.2
No	KHTV-CD	D22	DC	LIC	LOS ANGELES, CA	BLANK0000068679	124.5
No	KHTV-CD	D22	DC	CP	LOS ANGELES, CA	BLANK0000067843	124.5
No	KJHP-LP	D22	LD	CP	MORONGO VALLEY, CA	BLANK0000052124	56.0
No	KMRZ-LD	D22	LD	LIC	Pomona, CA	BLANK0000029037	126.4
No	K12QV	D22+	LD	CP	VICTORVILLE, CA	BLANK0000054552	94.0
No	K25GK	N25+	TX	LIC	JOSHUA TREE, CA	BLTT20000605AOK	105.8
No	K29GK	N29-	TX	LIC	TWENTYNINE PALMS, ETC., CA	BLTT20060119ADC	105.8

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D21
Mask: Full Service
Latitude: 33 35 25.80 N (NAD83)
Longitude: 116 56 26.40 W
Height AMSL: 850.0 m
HAAT: 0.0 m
Peak ERP: 15.0 kW
Antenna: ERI AL-N C. POL. 315.0 deg
Elev Pattn: Generic
Elec Tilt: 0.75

49.5 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	6.57 kW	244.5 m	49.9 km
45.0	1.50	-69.4	20.3
90.0	0.172	-273.3	11.8
135.0	0.835	32.4	18.1
180.0	0.172	267.2	31.8
225.0	1.50	359.9	47.9
270.0	6.57	358.3	55.9
315.0	15.0	228.8	53.2

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 144 m

Distance to Canadian border: 1712.7 km

**Proposal is within coordination distance of Mexican border
Distance to Mexican border: 115.1 km

Conditions at FCC monitoring station: Livermore CA
Bearing: 318.0 degrees Distance: 632.4 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 51.7 degrees Distance: 1265.8 km

No land mobile station failures found

Study cell size: 1.00 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%

**MX with BLTTTL20080813ABI APP scenario 1, 47.46% interference caused Facility Deleted

---- Below is IX received by proposal BNPDTL20090825AAL ----

**MX with BLTTTL20080813ABI APP scenario 1, 10.68% interference received
**MX with scenario 2, 11.17% interference received

TVIX

tvstudy v2.2.5 (4uoc83)
Database: 127.0.0.1, Study: BNPDTL20090825AAL #302, Model: Longley-Rice
Start: 2019.04.17 16:02:11

Study created: 2019.04.17 16:02:10

Study build station data: LMS TV 2019-04-14

Proposal: K21MO-D D21 LD CP RIVERSIDE, CA
File number: BNPDTL20090825AAL
Facility ID: 181667
Station data: User record
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Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	K14JT	N14	TX	LIC	JOSHUA TREE, ETC., CA	BLTVL19980330JH	105.7 km
No	K17KD	N17	TX	LIC	LUCERNE VALLEY, CA	BLTT20120112AFA	97.1
No	KODG-LD	N17z	TX	LIC	PALM SPRINGS, CA	BLTTTL20001219ABP	70.2
No	K17GJ-D	N17-	TX	LIC	Twentynine Palms, CA	BLTT20080902AED	84.1
No	K19BT	N19-	TX	LIC	LUCERNE VALLEY, CA	BLTT19880307ID	97.1
No	K20IM-D	D20	LD	LIC	BARSTOW, CA	BLDTL20100630BDO	141.0

No	KCWQ-LD	D20	LD	CP	PALM SPRINGS, CA	BLANK0000052544	55.9
No	KZSD-LD	D20+	LD	LIC	SAN DIEGO, CA	BLANK0000067691	99.4
No	K21EG-D	D21	LD	LIC	GOLDEN VALLEY, AZ	BLDTT20130308ABB	309.1
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No	K38GR-D	D21	LD	CP	MEADVIEW, AZ	BLANK0000053722	362.3
No	NEW	D21	LD	APP	PARKER, AZ	BNPDTL20100514ADI	252.2
No	KRPO-LD	D21	LD	LIC	QUARTZSITE, AZ	BLDTL20110926AEA	307.8
No	KRPO-LD	D21	LD	APP	QUARTZSITE, AZ	BPDTL20120606AAC	350.3
No	K21FU-D	D21	LD	LIC	TOPOCK, AZ	BLDTT20130308ACK	285.4
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No	K21MH-D	D21	LD	LIC	Daggett, CA	BLANK0000004555	144.0
No	KFTV-DT	D21	DT	CP	HANFORD, CA	BLANK0000034318	448.1
Yes	DKDUG-LD	N21+	TX	APP	HEMET, CA	BLTTL20080813ABI	23.6
Yes	K21GI	D21	LD	CP	MORONGO VALLEY, CA	BDFCDTT20120109ACZ	64.1
No	K21GI	N21+	TX	LIC	MORONGO VALLEY, CA	BLTT20050516AUD	64.1
Yes	K21DO-D	D21	DC	LIC	PALM SPRINGS, CA	BLDTA20150209ABF	55.9
No	K21IN-D	D21	LD	LIC	RIDGECREST, ETC., CA	BLDTT20090622AAK	220.7
Yes	KPMR	D21	DT	LIC	SANTA BARBARA, CA	BLCDT20110607ABB	296.8
Yes	KPMR	D21	DT	APP	SANTA BARBARA, CA	BPCDT20120817ABD	297.9
No	K21AC	N21	TX	LIC	VICTORVILLE, ETC., CA	BLTT19820105IG	117.8
No	NEW	D21	LD	APP	WINTERHAVEN, CA	BNPDTL20100510AAG	208.6
No	KLSV - LD	D21	LD	LIC	LAS VEGAS, NV	BLANK0000064058	321.6
No	K21OQ-D	D21	LD	CP	LUFKIN, TX	BMJADTL20100517AAU	166.6
No	KVYE	D22	DT	LIC	EL CENTRO, CA	BLCDT20070604ABN	205.2
No	KHTV-CD	D22	DC	LIC	LOS ANGELES, CA	BLANK0000068679	124.5
No	KHTV-CD	D22	DC	CP	LOS ANGELES, CA	BLANK0000067843	124.5
No	KJHP-LP	D22	LD	CP	MORONGO VALLEY, CA	BLANK0000052124	56.0
No	KMRZ-LD	D22	LD	LIC	Pomona, CA	BLANK0000029037	126.4
No	K12QV	D22+	LD	CP	VICTORVILLE, CA	BLANK0000054552	94.0
No	K25GK	N25+	TX	LIC	JOSHUA TREE, CA	BLTT20000605AOK	105.8
No	K29GK	N29-	TX	LIC	TWENTYNINE PALMS,ETC, CA	BLTT20060119ADC	105.8

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Peak ERP: 15.0 kW

Antenna: ERI AL-N C. POL. 315.0 deg
Elev Pattn: Generic
Elec Tilt: 0.75

49.5 dBu contour:

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135.0	0.835	32.4	18.1
180.0	0.172	267.2	31.8
225.0	1.50	359.9	47.9
270.0	6.57	358.3	55.9
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Conditions at FCC monitoring station: Livermore CA
Bearing: 318.0 degrees Distance: 632.4 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 51.7 degrees Distance: 1265.8 km

Proposal has contour overlap to land mobile station: Los Angeles CA ch. 20
No land mobile station failures found

Study cell size: 1.00 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 BLTTL20080813ABI APP scenario 1
**MX: 47.46% interference caused

Call	Chan	Svc	Status	City, State	File Number	Distance		
Desired: DKDUG-LD	N21+	TX	APP	HEMET, CA	BLTTL20080813ABI			
Undesireds: K21MO-D	D21	LD	CP	RIVERSIDE, CA	BNPDTL20090825AAL	23.6 km		
K21GI	D21	LD	CP	MORONGO VALLEY, CA	BDFCDTT20120109ACZ	79.2		
KPMR	D21	DT	LIC	SANTA BARBARA, CA	BLCDDT20110607ABB	274.5		
KHTV-CD	D22	DC	LIC	LOS ANGELES, CA	BLANK0000068679	105.0		
Service area	Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
381.4	233,907	334.9	209,250	334.9	209,250	197.1	109,944	41.14 47.46
Undesired	Total IX		Unique IX, before		Unique IX, after			
K21MO-D D21 LD CP	137.8	99,306	137.8	99,306				

Interference to BDFCDTT20120109ACZ CP scenario 1

Call	Chan	Svc	Status	City, State	File Number	Distance		
Desired: K21GI	D21	LD	CP	MORONGO VALLEY, CA	BDFCDTT20120109ACZ			
Undesireds: K21MO-D	D21	LD	CP	RIVERSIDE, CA	BNPDTL20090825AAL	64.1 km		
KRPO-LD	D21	LD	LIC	QUARTZSITE, AZ	BLDTL20110926AEA	272.7		
K21DO-D	D21	DC	LIC	PALM SPRINGS, CA	BLDTA20150209ABF	24.3		
NEW	D21	LD	APP	WINTERHAVEN, CA	BNPDTL20100510AAG	210.4		
K21OQ-D	D21	LD	CP	LUFKIN, TX	BMJADTL20100517AAU	180.1		
KJHP-LP	D22	LD	CP	MORONGO VALLEY, CA	BLANK0000052124	24.4		
Service area	Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
1265.7	173,341	1160.7	166,208	1059.0	166,131	1057.0	166,131	0.19 0.00
Undesired	Total IX		Unique IX, before		Unique IX, after			
K21MO-D D21 LD CP	4.0	0	2.0	0				
K21DO-D D21 DC LIC	100.7	77	98.7	65	96.7	65		
NEW D21 LD APP	1.0	0	0.0	0	0.0	0		
K21OQ-D D21 LD CP	2.0	0	1.0	0	1.0	0		
KJHP-LP D22 LD CP	2.0	12	0.0	0	0.0	0		

Interference to BLDTA20150209ABF LIC scenario 1

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: K21DO-D	D21	DC	LIC	PALM SPRINGS, CA	BLDTA20150209ABF	
Undesireds: K21MO-D	D21	LD	CP	RIVERSIDE, CA	BNPDTL20090825AAL	55.9 km

KPMR	D21	DT	LIC	SANTA BARBARA, CA	BLCDT20110607ABB	332.2		
Service area	Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
6336.1	550,229	4873.7	461,294	4872.7	461,294	4860.9	459,790	0.24 0.33
Undesired	Total IX		Unique IX, before		Unique IX, after			
K21MO-D D21 LD CP	12.8	1,504			11.8	1,504		
KPMR D21 DT LIC	1.0	0	1.0	0	0.0	0		

Interference to BLDTA20150209ABF LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance	
	K21DO-D	D21	DC	LIC	PALM SPRINGS, CA	BLDTA20150209ABF		
Undesireds:	K21MO-D	D21	LD	CP	RIVERSIDE, CA	BNPDTL20090825AAL	55.9 km	
	KPMR	D21	DT	APP	SANTA BARBARA, CA	BPCDT20120817ABD	333.3	
Service area	Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
6336.1	550,229	4873.7	461,294	4871.7	461,294	4859.9	459,790	0.24 0.33
Undesired	Total IX		Unique IX, before		Unique IX, after			
K21MO-D D21 LD CP	12.8	1,504			11.8	1,504		
KPMR D21 DT APP	2.0	0	2.0	0	1.0	0		

Interference to BLCDT20110607ABB LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance	
	KPMR	D21	DT	LIC	SANTA BARBARA, CA	BLCDT20110607ABB		
Undesireds:	K21MO-D	D21	LD	CP	RIVERSIDE, CA	BNPDTL20090825AAL	296.8 km	
	KFTV-DT	D21	DT	CP	HANFORD, CA	BLANK0000034318	287.2	
	KHTV-CD	D22	DC	LIC	LOS ANGELES, CA	BLANK0000068679	177.6	
	KNXT	D22	DT	CP	VISALIA, CA	BLANK0000028226	220.7	
Service area	Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
43404.1	1,758,463	33276.4	1,466,233	32673.0	1,446,851	32657.0	1,446,181	0.05 0.05
Undesired	Total IX		Unique IX, before		Unique IX, after			
K21MO-D D21 LD CP	22.1	670			16.0	670		
KFTV-DT D21 DT CP	558.5	5,111	557.5	5,111	556.5	5,111		
KHTV-CD D22 DC LIC	45.8	14,271	44.8	14,271	40.8	14,271		

Interference to BLCDT20110607ABB LIC scenario 2

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: KPMR	D21	DT	LIC	SANTA BARBARA, CA	BLCDT20110607ABB	
Undesireds: K21MO-D	D21	LD	CP	RIVERSIDE, CA	BNPDTL20090825AAL	296.8 km
KFTV-DT	D21	DT	BL	HANFORD, CA	DTVBL34439	287.2
KHTV-CD	D22	DC	LIC	LOS ANGELES, CA	BLANK0000068679	177.6
KNXT	D22	DT	CP	VISALIA, CA	BLANK0000028226	220.7
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
43404.1 1,758,463	33276.4 1,466,233	32635.2 1,446,014	32619.2 1,445,344	0.05 0.05		
Undesired	Total IX	Unique IX, before	Unique IX, after			
K21MO-D D21 LD CP	22.1 670	595.4 5,948	16.0 670			
KFTV-DT D21 DT BL	596.4 5,948	595.4 5,948	594.3 5,948			
KHTV-CD D22 DC LIC	45.8 14,271	44.8 14,271	40.8 14,271			

Interference to BLCDT20110607ABB LIC scenario 3

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: KPMR	D21	DT	LIC	SANTA BARBARA, CA	BLCDT20110607ABB	
Undesireds: K21MO-D	D21	LD	CP	RIVERSIDE, CA	BNPDTL20090825AAL	296.8 km
KFTV-DT	D21	DT	CP	HANFORD, CA	BLANK0000034318	287.2
KHTV-CD	D22	DC	CP	LOS ANGELES, CA	BLANK0000067843	177.6
KNXT	D22	DT	CP	VISALIA, CA	BLANK0000028226	220.7
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
43404.1 1,758,463	33276.4 1,466,233	32673.0 1,446,851	32657.0 1,446,181	0.05 0.05		
Undesired	Total IX	Unique IX, before	Unique IX, after			
K21MO-D D21 LD CP	22.1 670	557.5 5,111	16.0 670			
KFTV-DT D21 DT CP	558.5 5,111	557.5 5,111	556.5 5,111			
KHTV-CD D22 DC CP	45.8 14,271	44.8 14,271	40.8 14,271			

Interference to BLCDT20110607ABB LIC scenario 4

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: KPMR	D21	DT	LIC	SANTA BARBARA, CA	BLCDT20110607ABB	
Undesireds: K21MO-D	D21	LD	CP	RIVERSIDE, CA	BNPDTL20090825AAL	296.8 km
KFTV-DT	D21	DT	BL	HANFORD, CA	DTVBL34439	287.2

KHTV-CD	D22	DC	CP	LOS ANGELES, CA	BLANK0000067843	177.6
KNXT	D22	DT	CP	VISALIA, CA	BLANK0000028226	220.7

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
43404.1	1,758,463	33276.4	1,466,233	32635.2	1,446,014	32619.2	1,445,344	0.05 0.05

Undesired			Total IX	Unique IX, before		Unique IX, after	
K21MO-D D21 LD CP	22.1		670			16.0	670
KFTV-DT D21 DT BL	596.4		5,948	595.4	5,948	594.3	5,948
KHTV-CD D22 DC CP	45.8		14,271	44.8	14,271	40.8	14,271

Interference to BPCDT20120817ABD APP scenario 1

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: KPMR	D21	DT	APP	SANTA BARBARA, CA	BPCDT20120817ABD	
Undesireds: K21MO-D	D21	LD	CP	RIVERSIDE, CA	BNPDTL20090825AAL	297.9 km
KFTV-DT	D21	DT	CP	HANFORD, CA	BLANK0000034318	287.2
KHTV-CD	D22	DC	LIC	LOS ANGELES, CA	BLANK0000068679	178.6
KNXT	D22	DT	CP	VISALIA, CA	BLANK0000028226	221.0

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
42008.9	1,637,433	32729.3	1,437,756	32049.6	1,428,945	32036.5	1,428,822	0.04 0.01

Undesired			Total IX	Unique IX, before		Unique IX, after	
K21MO-D D21 LD CP	16.1		123			13.1	123
KFTV-DT D21 DT CP	649.9		4,529	648.9	4,529	647.9	4,529
KHTV-CD D22 DC LIC	30.9		4,282	29.9	4,282	28.9	4,282

Interference to BPCDT20120817ABD APP scenario 2

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: KPMR	D21	DT	APP	SANTA BARBARA, CA	BPCDT20120817ABD	
Undesireds: K21MO-D	D21	LD	CP	RIVERSIDE, CA	BNPDTL20090825AAL	297.9 km
KFTV-DT	D21	DT	BL	HANFORD, CA	DTVBL34439	287.2
KHTV-CD	D22	DC	LIC	LOS ANGELES, CA	BLANK0000068679	178.6
KNXT	D22	DT	CP	VISALIA, CA	BLANK0000028226	221.0

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
42008.9	1,637,433	32729.3	1,437,756	31990.7	1,428,217	31977.7	1,428,094	0.04 0.01

Undesired			Total IX	Unique IX, before		Unique IX, after	
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K21MO-D	D21	LD	CP	16.1	123		13.1	123
KFTV-DT	D21	DT	BL	708.7	5,257	707.7	5,257	706.7
KHTV-CD	D22	DC	LIC	30.9	4,282	29.9	4,282	28.9

Interference to BPCDT20120817ABD APP scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KPMR	D21	DT	APP	SANTA BARBARA, CA	BPCDT20120817ABD	
Undesireds:	K21MO-D	D21	LD	CP	RIVERSIDE, CA	BNPDTL20090825AAL	297.9 km
	KFTV-DT	D21	DT	CP	HANFORD, CA	BLANK0000034318	287.2
	KHTV-CD	D22	DC	CP	LOS ANGELES, CA	BLANK0000067843	178.6
	KNXT	D22	DT	CP	VISALIA, CA	BLANK0000028226	221.0
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
42008.9	1,637,433	32729.3	1,437,756	32049.6	1,428,945	32036.5	1,428,822
Undesired			Total IX		Unique IX, before	Unique IX, after	
K21MO-D	D21	LD	CP	16.1	123	13.1	123
KFTV-DT	D21	DT	CP	649.9	4,529	648.9	4,529
KHTV-CD	D22	DC	CP	30.9	4,282	29.9	4,282

Interference to BPCDT20120817ABD APP scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KPMR	D21	DT	APP	SANTA BARBARA, CA	BPCDT20120817ABD	
Undesireds:	K21MO-D	D21	LD	CP	RIVERSIDE, CA	BNPDTL20090825AAL	297.9 km
	KFTV-DT	D21	DT	BL	HANFORD, CA	DTVBL34439	287.2
	KHTV-CD	D22	DC	CP	LOS ANGELES, CA	BLANK0000067843	178.6
	KNXT	D22	DT	CP	VISALIA, CA	BLANK0000028226	221.0
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
42008.9	1,637,433	32729.3	1,437,756	31990.7	1,428,217	31977.7	1,428,094
Undesired			Total IX		Unique IX, before	Unique IX, after	
K21MO-D	D21	LD	CP	16.1	123	13.1	123
KFTV-DT	D21	DT	BL	708.7	5,257	707.7	5,257
KHTV-CD	D22	DC	CP	30.9	4,282	29.9	4,282

Interference to proposal scenario 1

**MX: 10.68% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K21MO-D	D21	LD	CP	RIVERSIDE, CA	BNPDTL20090825AAL	
Undesireds:	KRPO-LD	D21	LD	LIC	QUARTZSITE, AZ	BLDTL20110926AEA	307.8 km
	DKDUG-LD	N21+	TX	APP	HEMET, CA	BLTTL20080813ABI	23.6
	K21GI	D21	LD	CP	MORONGO VALLEY, CA	BDFCDTT20120109ACZ	64.1
	K21DO-D	D21	DC	LIC	PALM SPRINGS, CA	BLDTA20150209ABF	55.9
	KPMR	D21	DT	LIC	SANTA BARBARA, CA	BLCDDT20110607ABB	296.8
	KHTV-CD	D22	DC	LIC	LOS ANGELES, CA	BLANK0000068679	124.5

Service area	Terrain-limited	IX-free	Percent IX
4995.7 1,214,619	3621.0 812,798	3308.2 725,979	8.64 10.68

Undesired	Total IX	Unique IX	Prcnt Unique IX
DKDUG-LD N21+ TX APP	290.1 77,526	276.3 75,575	7.63 9.30
K21DO-D D21 DC LIC	3.0 23	1.0 0	0.03 0.00
KPMR D21 DT LIC	34.6 11,244	21.7 9,293	0.60 1.14

Interference to proposal scenario 2
**MX: 11.17% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K21MO-D	D21	LD	CP	RIVERSIDE, CA	BNPDTL20090825AAL	
Undesireds:	KRPO-LD	D21	LD	LIC	QUARTZSITE, AZ	BLDTL20110926AEA	307.8 km
	DKDUG-LD	N21+	TX	APP	HEMET, CA	BLTTL20080813ABI	23.6
	K21GI	D21	LD	CP	MORONGO VALLEY, CA	BDFCDTT20120109ACZ	64.1
	K21DO-D	D21	DC	LIC	PALM SPRINGS, CA	BLDTA20150209ABF	55.9
	KPMR	D21	DT	APP	SANTA BARBARA, CA	BPCDDT20120817ABD	297.9
	KHTV-CD	D22	DC	LIC	LOS ANGELES, CA	BLANK0000068679	124.5

Service area	Terrain-limited	IX-free	Percent IX
4995.7 1,214,619	3621.0 812,798	3308.2 722,041	8.64 11.17

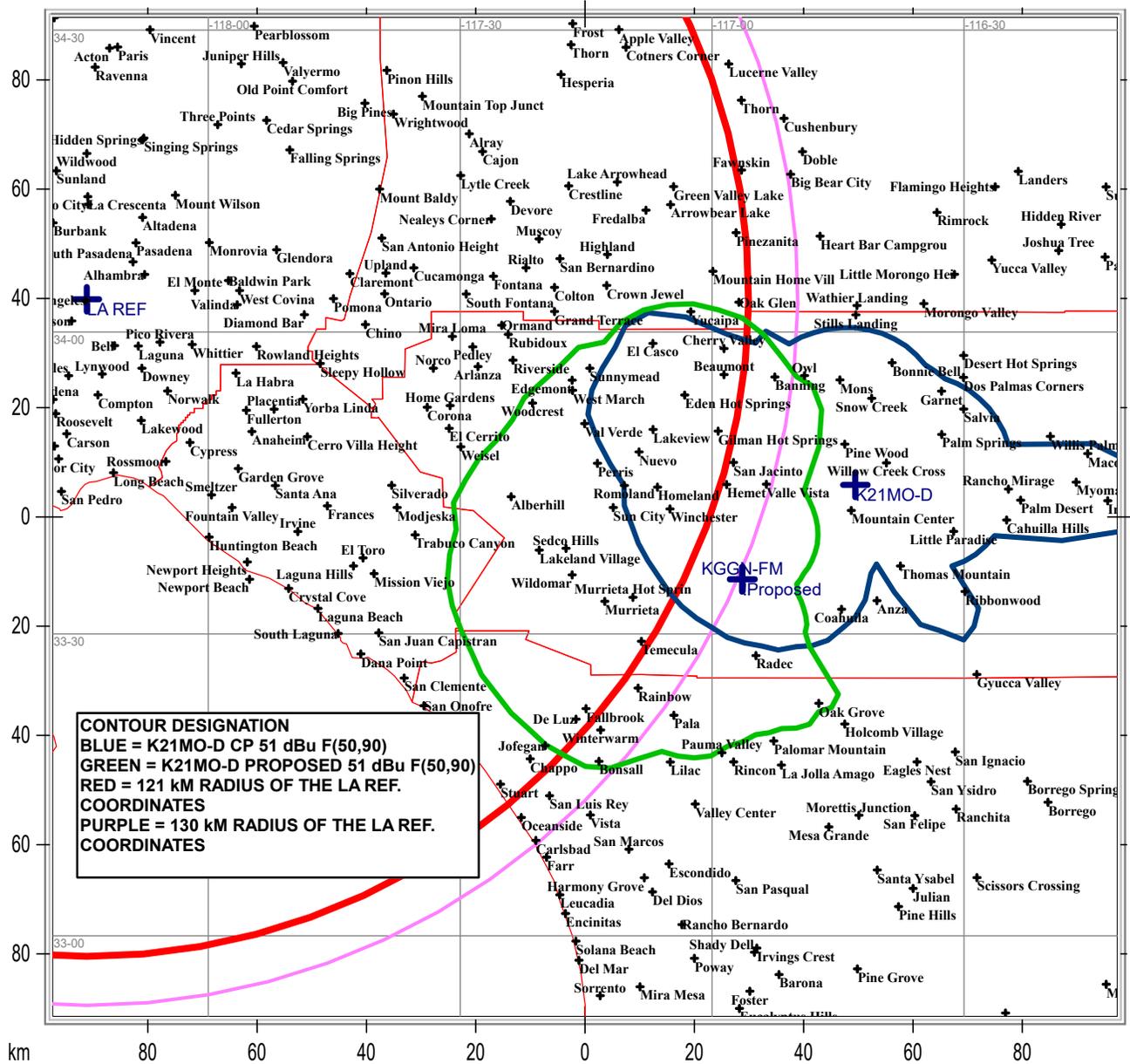
Undesired	Total IX	Unique IX	Prcnt Unique IX
DKDUG-LD N21+ TX APP	290.1 77,526	276.3 74,428	7.63 9.16
K21DO-D D21 DC LIC	3.0 23	1.0 0	0.03 0.00
KPMR D21 DT APP	35.5 16,329	21.7 13,231	0.60 1.63

The foregoing was prepared on behalf of Mount Wilson FM Broadcasters, Inc. by Clarence M. Beverage of *Communications Technologies, Inc.*, Marlton, New Jersey, whose qualifications are a matter of record with the Federal Communications Commission. The statements herein are true and correct of his own knowledge, except such statements made on information and belief, and as to these statements she believes them to be true and correct.



Clarence M. Beverage
for Communications Technologies, Inc.
Marlton, New Jersey
April 17, 2019

K21MO-D MINOR MOD TO CP RIVERSIDE, CALIFORNIA



Communications Technologies, Inc. Marlton, New Jersey

County Borders Lat/Lon Grid