

REQUEST TO WAIVE
PHASE ASSIGNMENT, TESTING PERIOD, AND PHASE COMPLETION DATE

KVMM LLC seeks waiver of the post-Incentive Auction Transition Phase assignment, and corresponding testing dates and construction completion deadlines, for KVMM-CD, Santa Barbara, CA (Facility ID No. 18741) (“Station”). Pursuant to the *Closing and Reassignment Public Notice*, Station has been assigned to Transition Phase 8, for which the Phase Completion Date is March 13, 2020.¹ KVMM LLC seeks to transition the Station early, with expected transition completion on or before June 1, 2018, with a testing period to commence immediately preceding said date.

The *Transition Scheduling Adoption Public Notice* permitted stations to propose “alternative transition solutions that could create efficiencies,” and held that a request to modify a station’s transition deadline — including by moving to an earlier phase — would be viewed favorably if the request is “otherwise compliant with [FCC] rules and [has] little or no impact on the phase assignments or transition schedule.”² As demonstrated below, KVMM LLC’s instant request qualifies for such favorable treatment.

The FCC may grant a waiver for good cause shown.³ A waiver is appropriate where the particular facts make strict compliance inconsistent with the public interest.⁴ In considering a

¹ *Incentive Auction Closing and Channel Reassignment Public Notice: The Broadcast Television Incentive Auction Closes; Reverse Auction and Forward Auction Results Announced; Final Television Band Channel Assignments Announced; Post-Auction Deadlines Announced*, Public Notice, 32 FCC Red 2786 (WTB & MB 2017) (*Closing and Channel Reassignment Public Notice*).

² *Incentive Auction Task Force and Media Bureau Adopt A Post-Incentive Auction Transition Scheduling Plan*, MB Docket No. 16-306 and GN Docket No. 12-268, 32 FCC Rcd 890, 913 ¶ 51 (MB 2017) (*Transition Scheduling Adoption Public Notice*), citing *Incentive Auction Task Force and Media Bureau Seek Comment on Post-Incentive Auction Transition Scheduling Plan*, Public Notice, 31 FCC Rcd 10802 (MB 2016) (*Transition Scheduling Proposal Public Notice*).

³ 47 C.F.R. § 1.3.

waiver, the FCC may take into account considerations of hardship, equity, or more effective implementation of overall policy on an individual basis.⁵ Such a waiver is appropriate if circumstances warrant a deviation from the general rule, and such deviation will serve the public interest.⁶

As demonstrated herein, good cause exists for waiver of the assigned Transition Phase and its attendant testing and completion dates because it will serve the public interest by facilitating an orderly and efficient transition to more swiftly deliver new wireless broadband services to the public while minimizing impacts on broadcast television viewers and post-auction transition resources. Specifically, if Station is permitted to complete its transition early, T-Mobile, a winning 600 MHz wireless licensee, will be able to deploy new competitive wireless broadband service to people of Santa Barbara, Santa Maria and San Luis Obispo, a full 21 months earlier than scheduled.

Interference. An Engineering Statement Supporting Request for Waiver Class A Television Station KVMM-CD was prepared by du Treil, Lundin & Rackley, Inc. The attached report analyzed potential new interference caused or received and determined if there was any impact on a link-station set.

Because the analysis shows no cases of outgoing (caused) interference exceeding the normal 0.5% rounding tolerance level to any other protected full-power or Class A television stations now operating, no new pairwise (station-to-station) interference will be created by the

⁴ *Northeast Cellular Tel. Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990).

⁵ *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969), *cert. denied*, 409 U.S. 1027 (1972); *Northeast Cellular*, 897 F.2d at 1166.

⁶ *Northeast Cellular*, 897 F.2d at 1166.

proposed early transition of Station. As such, there is no impact on any linked station set or other transitioning stations.

The proposed early transition will result in the Station receiving no new interference exceeding 0.5% from any station.

Impacts to Transition Plan. The proposed transition will further the overall transition plan. This early out of phase move will in fact permit better utilization of resources by engaging vendors and service providers early in the process rather than have them potentially overloaded further in the transition.

Impact to Viewers. Under the Transition Plan, there is scheduled to be one rescan of the Station's DMA. Grant of the proposed early transition of the Station will result in an increase in the number of rescans. The Commission determined that up to two non-sequential rescans will serve the goals of efficiently clearing DMAs while minimizing viewer disruption.⁷ Because the proposed early transition will still be within the maximum of two rescans deemed to be in the public interest, grant of the instant waiver is appropriate. KVMM LLC pledges to act to further mitigate any viewer disruption by increasing outreach education above and beyond the required public service announcements and crawls to notify the Station audience of the proposed transition and provide detailed instructions on the rescanning process. KVMM LLC will run PSA or crawls three times per day during daytime and two times per day during primetime hours 30 days prior to the switch.

In sum, grant of this waiver will facilitate a more effective and efficient implementation of the overall policy goals of the Incentive Auction and post-auction transition, and thus is in the public interest.

⁷ *Transition Scheduling Adoption Public Notice*, at ¶ 21.

ENGINEERING STATEMENT
SUPPORTING REQUEST FOR WAIVER
CLASS A TELEVISION STATION KVMM-CD
(FACILITY ID NO. 18741)
SANTA BARBARA, CALIFORNIA
CHANNEL 28

Background

This statement was prepared on behalf of KVMM LLC, licensee of KVMM-CD, Santa Barbara, California, in support of a request for waiver of the FCC's Phase Assignment, Testing Period, and Phase Completion Date for television station KVMM-CD in the Santa Barbara-Santa Maria-San Luis Obispo DMA*. KVMM-CD is licensed for operation on RF Channel 41 with a maximum directional effective radiated power (ERP) of 15 kW and an antenna height above mean sea level of 643.9 m.[†]

As a result of the FCC's Incentive Auction repack process, the KVMM-CD facility was reassigned to RF Channel 28. KVMM-CD holds a construction permit for operation on Channel 28 with a maximum directional ERP of 11.5 kW and an antenna height above mean sea level of 643.9 m.[‡] An FCC engineering database summary sheet for the KVMM-CD construction permit facility is attached hereto for reference.

In coordination with the wireless carrier, T-Mobile, KVMM-CD seeks a waiver of the FCC's Phase Assignment, Testing Period, and Phase Completion Date to allow KVMM-CD to make the transition to Channel 28 earlier than its given phase transition date. Specifically, the target date for KVMM-CD to begin operations on Channel 28 is June 1, 2018. This will facilitate the early deployment of new 600 MHz band wireless broadband services.

This statement demonstrates that KVMM-CD can transition to Channel 28 before its assigned phase date without any disruption to the FCC's transition plans. Specifically, it is demonstrated that the operation of KVMM-CD on Channel 28 as authorized in its

* Nielsen Designated Market Area abbreviated as DMA.

[†] See FCC File No. BLDTA-200911113AAF..

[‡] See FCC File No. 0000024835.

construction permit will have no adverse interference consequences, either caused or received, under the current allocation environment.

Assigned Phase

KVMM-CD was assigned to transition Phase 8, with a testing begin date of January 18, 2020. This is based on the latest FCC Phase Assignment spreadsheet dated October 30, 2017.

Linked Station Sets and Linked Station Neighbor Stations

An inspection of the latest FCC Linked Station Set (LSS) and Linked Station Neighbor (LSN) spreadsheet databases indicates that the KVMM-CD facility is not part of any LSSs or LSNs. These are based on the latest LSS and LSN spreadsheets available from the FCC, both dated October 30, 2017.

Interference Caused Analysis Under Current Allocation Environment

An interference analysis was conducted for the KVMM-CD Channel 28 construction permit facility utilizing the latest version[§] of the FCC's *TVStudy* coverage and interference analysis prediction software. The report of the results is attached hereto entitled 'Interference Caused Analysis for KVMM-CD Channel 28 Facility Under Current Allocation Environment.'

The results of the analysis indicate that there are no cases of outgoing (caused) interference exceeding the normal 0.5% rounding tolerance level to any other protected full-power or Class A television stations now operating.

Interference Received Analysis Under Current Allocation Environment

An interference analysis specifically for the 'received case' of interference was conducted for the KVMM-CD Channel 28 construction permit facility utilizing the FCC's *TVStudy* prediction software. The report of the results is attached hereto entitled 'Interference Received Analysis for KVMM-CD Channel 28 Facility Under Current

[§] TVStudy Version 2.2.4

Allocation Environment.' The purpose of this study is to evaluate all current environment records in the received interference analysis.

The results of the analysis indicate that there are no cases of incoming (received) interference exceeding 0.5% to the KVMM-CD Channel 28 construction permit facility.

Effects on Linked Station Sets

Based on these results, the transition of the KVMM-CD facility to Channel 28 in advance of its phase transition date will not create any pairwise interference cases or new linked station sets.

Conclusion

It is concluded that the early transition of the KVMM-CD facility on Channel 28 will not result in any interference cases, either caused or received, that would result in the creation or alteration of any linked station sets established in the Incentive Auction repack process.



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December 20, 2017

TV Inquiry

du Treil, Lundin, & Rackley, Inc., Sarasota, Florida



Callsign: KVMM-CD	Service: DC	Status: CP	App. Status: GRANT	Border Code:	Rec. Type: C
Channel: 28	Offset:	Zone:	Docket Number:		
Fac. ID: 18741 Assoc. ID:			Application File No.: BLANK-0000024835		
City: SANTA BARBARA			State: CA	Country: US	DT Emission Mask: T
Party Name: KVMM LLC			CP Expiration Date:		
			Last Change Date: 6/13/2017		
Latitude (NAD 27): 34-27-56.9	Height AGL (m): 3.7	Polarization: C			
Longitude (NAD 27): 119-40-37.9	Overall Height AGL (m): 8	Electrical Tilt (°): 3			
Latitude (NAD 83): 034-27-56.9	ERP (kW): 11.5	Mechanical Tilt (°):			
Longitude (NAD 83): 119-40-41.4	Maximum ERP (kW):	Mechanical Tilt Azimuth (°):			
RCAMSL (m): 643.9	Maximum ERP (dBk): 10.6	Degrees True (°):			
Site Elevation AMSL (m): 640.2	Maximum ERP at any Angle (kW):	Antenna Make:			
HAAT (m):		Antenna Model:			
Maximum HAAT (m):					
Antenna Type: D Antenna ID: 1001268 Rotation (°): 220					
0° 1.000	90° 0.330	180° 0.250	270° 0.330		
10° 0.980	100° 0.240	190° 0.240	280° 0.520		
20° 0.950	110° 0.240	200° 0.220	290° 0.720		
30° 0.960	120° 0.230	210° 0.210	300° 0.890		
40° 0.980	130° 0.210	220° 0.200	310° 0.970		
50° 0.970	140° 0.200	230° 0.210	320° 0.980		
60° 0.890	150° 0.210	240° 0.230	330° 0.960		
70° 0.720	160° 0.220	250° 0.240	340° 0.950		
80° 0.520	170° 0.240	260° 0.240	350° 0.980		
Standard Pattern:					
Antenna Make: PSI					
Antenna Model: PSILP8BB-28-CP					
Last Change Date:					
<i>Note: Rotation or tilt is not applied to the pattern shown</i>					
Type:	ASRN:	FAA Study No.:	Structure Height (m):		
Latitude (NAD 27):		Date Received:	Structure Height (ft):		
Longitude (NAD 27):		Date Entered:	Ground Elevation (m):		
Latitude (NAD 83):		Date Issued:	Ground Elevation (ft):		
Longitude (NAD 83):		Date Constructed:	Overall Height AGL (m):		
Struct. Address:		Date Dismantled:	Overall Height AGL (ft):		
Entity Name:					

INTERFERENCE CAUSED ANALYSIS FOR KVMM-CD CHANNEL 28 FACILITY UNDER CURRENT ALLOCATION ENVIRONMENT

tvstudy v2.2.4 (Z2Qqz3)
Database: localhost, Study: kvmm28e1, Model: Longley-Rice
Start: 2017.12.18 16:32:23

Proposal: KVMM28E1 D28 DC CP SANTA BARBARA, CA
File number: kvmm28e1
Facility ID: 18741
Station data: User record
Record ID: 1995
Country: U.S.

Build options:
Protect pre-transition records not on baseline channel

Search options:
All post-transition APP, CP, and baseline records excluded

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	KHTV-CD	D27	DC	LIC	LOS ANGELES, CA	BLANK000001566	150.9 km
No	KHTV-CD	D27	DC	APP	LOS ANGELES, CA	BLANK0000035601	150.9
Yes	KEYT-TV	D27	DT	LIC	SANTA BARBARA, CA	BLCDT20061102ABJ	26.6
Yes	KCET	D28	DT	LIC	LOS ANGELES, CA	BLEDT20090615ADO	150.6
Yes	KCET	D28	DT	APP	LOS ANGELES, CA	BLANK0000036117	150.6
Yes	KCET	D28	DT	APP	LOS ANGELES, CA	BMPEDT20090206ACI	150.6
No	KMPH-TV	D28	DT	LIC	VISALIA, CA	BLCDT20030204AGN	255.1
No	KMPH-TV	D28	DT	APP	VISALIA, CA	BLANK0000035647	255.1
No	KBFX-CD	D29	DC	LIC	BAKERSFIELD, CA	BLTTA20101018ACF	147.8
Yes	KFTR-DT	D29	DT	LIC	ONTARIO, CA	BLCDT20100401AFY	150.2
Yes	KFTR-DT	D29	DT	APP	ONTARIO, CA	BLANK0000035667	150.2
Yes	KQMM-CD	D29	DC	LIC	SANTA MARIA, CA	BLDTL20080423AEG	67.8

No non-directional AM stations found within 0.8 km

Directional AM stations within 3.2 km:
KTMS 990 L DA2 D SANTA BARBARA, CA BL19880927AB
KTMS 990 L DA2 N SANTA BARBARA, CA BL19890314AA

Record parameters as studied:

Channel: D28
Mask: Stringent
Latitude: 34 27 56.90 N (NAD83)
Longitude: 119 40 41.40 W
Height AMSL: 664.2 m (Adjusted based on actual ground elevation calculation)
HAAT: 0.0 m
Peak ERP: 11.5 kW
Antenna: PSI-PSILP8BB-28-CP (ID 1001268) 220.0 deg
Elev Pattn: Generic
Elec Tilt: 3.00

50.1 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.460 kW	-22.5 m	14.5 km
45.0	0.690	-53.7	15.9
90.0	0.507	-210.9	14.9
135.0	2.08	644.9	56.9
180.0	11.0	658.3	68.2
225.0	11.3	626.5	67.5
270.0	10.8	507.2	63.8
315.0	0.934	18.5	17.4

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 271 m

Distance to Canadian border: 1562.4 km

Distance to Mexican border: 292.5 km

Conditions at FCC monitoring station: Livermore CA
Bearing: 333.4 degrees Distance: 407.4 km

INTERFERENCE CAUSED ANALYSIS FOR KVMM-CD CHANNEL 28 FACILITY UNDER CURRENT ALLOCATION ENVIRONMENT

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 59.5 degrees Distance: 1419.5 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 BLCDT20061102ABJ LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KEYT-TV	D27	DT	LIC	SANTA BARBARA, CA	BLCDT20061102ABJ	
Undesireds:	KVMM28E1	D28	DC	CP	SANTA BARBARA, CA	kvmm28e1	26.6 km
	KCET	D28	DT	LIC	LOS ANGELES, CA	BLEDT20090615ADO	177.1
Service area		Terrain-limited			IX-free, before	IX-free, after	Percent New IX
39206.2	1,419,564	30933.6	1,239,577	30889.8	1,230,761	30468.5	1,229,844
Undesired		Total IX			Unique IX, before	Unique IX, after	
KVMM28E1 D28 DC CP		421.2		917		421.2	917
KCET D28 DT LIC		43.8		8,816	43.8	8,816	

Interference to BLCDT20061102ABJ LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KEYT-TV	D27	DT	LIC	SANTA BARBARA, CA	BLCDT20061102ABJ	
Undesireds:	KVMM28E1	D28	DC	CP	SANTA BARBARA, CA	kvmm28e1	26.6 km
	KCET	D28	DT	APP	LOS ANGELES, CA	BLANK0000036117	177.1
Service area		Terrain-limited			IX-free, before	IX-free, after	Percent New IX
39206.2	1,419,564	30933.6	1,239,577	30917.7	1,239,577	30496.4	1,238,660
Undesired		Total IX			Unique IX, before	Unique IX, after	
KVMM28E1 D28 DC CP		421.2		917		421.2	917
KCET D28 DT APP		15.9		0	15.9	0	15.9

Interference to BLCDT20061102ABJ LIC scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KEYT-TV	D27	DT	LIC	SANTA BARBARA, CA	BLCDT20061102ABJ	
Undesireds:	KVMM28E1	D28	DC	CP	SANTA BARBARA, CA	kvmm28e1	26.6 km
	KCET	D28	DT	APP	LOS ANGELES, CA	BMPEDT20090206ACI	177.1
Service area		Terrain-limited			IX-free, before	IX-free, after	Percent New IX
39206.2	1,419,564	30933.6	1,239,577	30877.8	1,221,668	30456.5	1,220,751
Undesired		Total IX			Unique IX, before	Unique IX, after	
KVMM28E1 D28 DC CP		421.2		917		421.2	917
KCET D28 DT APP		55.8		17,909	55.8	17,909	55.8

Interference to BLEDT20090615ADO LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KCET	D28	DT	LIC	LOS ANGELES, CA	BLEDT20090615ADO	
Undesireds:	KVMM28E1	D28	DC	CP	SANTA BARBARA, CA	kvmm28e1	150.6 km
	KPOM-CD	D27	DC	LIC	ONTARIO, CA	BLANK0000030167	77.7
	KEYT-TV	D27	DT	LIC	SANTA BARBARA, CA	BLCDT20061102ABJ	177.1
	KMPH-TV	D28	DT	LIC	VISALIA, CA	BLCDT20030204AGN	281.4

INTERFERENCE CAUSED ANALYSIS FOR KVMM-CD CHANNEL 28 FACILITY UNDER CURRENT ALLOCATION ENVIRONMENT

KBFX-CD	D29	DC	LIC	BAKERSFIELD, CA		BLTTA20101018ACF	144.9
KFTR-DT	D29	DT	LIC	ONTARIO, CA		BLCDT20100401AFY	0.5
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
35950.7	16,875,546	26110.9	15,402,588	25627.0	15,138,790	25339.0	15,119,338
Undesired		Total IX		Unique IX, before		Unique IX, after	
KVMM28E1 D28 DC CP	460.1	174,426			288.0	19,452	
KPOM-CD D27 DC LIC	24.1	12,705	20.1	10,121	20.1	10,121	
KEYT-TV D27 DT LIC	168.1	152,497	168.1	152,497	4.0	175	
KMPH-TV D28 DT LIC	39.7	43	31.7	43	31.7	43	
KBFX-CD D29 DC LIC	15.9	0	11.9	0	11.9	0	
KFTR-DT D29 DT LIC	248.0	101,137	240.1	98,553	232.1	95,901	

Interference to BLEDT20090615ADO LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KCET	D28	DT	LIC	LOS ANGELES, CA	BLEDT20090615ADO	
Undesireds:	KVMM28E1	D28	DC	CP	SANTA BARBARA, CA	kvmm28e1	150.6 km
	KPOM-CD	D27	DC	LIC	ONTARIO, CA	BLANK0000030167	77.7
	KEYT-TV	D27	DT	LIC	SANTA BARBARA, CA	BLCDT20061102ABJ	177.1
	KMPH-TV	D28	DT	APP	VISALIA, CA	BLANK0000035647	281.4
	KBFX-CD	D29	DC	LIC	BAKERSFIELD, CA	BLTTA20101018ACF	144.9
	KFTR-DT	D29	DT	LIC	ONTARIO, CA	BLCDT20100401AFY	0.5
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
35950.7	16,875,546	26110.9	15,402,588	25619.1	15,138,790	25331.1	15,119,338
Undesired		Total IX		Unique IX, before		Unique IX, after	
KVMM28E1 D28 DC CP	460.1	174,426			288.0	19,452	
KPOM-CD D27 DC LIC	24.1	12,705	20.1	10,121	20.1	10,121	
KEYT-TV D27 DT LIC	168.1	152,497	168.1	152,497	4.0	175	
KMPH-TV D28 DT APP	47.6	43	39.7	43	39.7	43	
KBFX-CD D29 DC LIC	15.9	0	11.9	0	11.9	0	
KFTR-DT D29 DT LIC	248.0	101,137	240.1	98,553	232.1	95,901	

Interference to BLEDT20090615ADO LIC scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KCET	D28	DT	LIC	LOS ANGELES, CA	BLEDT20090615ADO	
Undesireds:	KVMM28E1	D28	DC	CP	SANTA BARBARA, CA	kvmm28e1	150.6 km
	KPOM-CD	D27	DC	LIC	ONTARIO, CA	BLANK0000030167	77.7
	KEYT-TV	D27	DT	LIC	SANTA BARBARA, CA	BLCDT20061102ABJ	177.1
	KMPH-TV	D28	DT	LIC	VISALIA, CA	BLCDT20030204AGN	281.4
	KBFX-CD	D29	DC	LIC	BAKERSFIELD, CA	BLTTA20101018ACF	144.9
	KFTR-DT	D29	DT	APP	ONTARIO, CA	BLANK0000035667	0.5
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
35950.7	16,875,546	26110.9	15,402,588	25607.0	15,119,617	25319.0	15,100,165
Undesired		Total IX		Unique IX, before		Unique IX, after	
KVMM28E1 D28 DC CP	460.1	174,426			288.0	19,452	
KPOM-CD D27 DC LIC	24.1	12,705	20.1	10,121	20.1	10,121	
KEYT-TV D27 DT LIC	168.1	152,497	164.1	152,497	4.0	175	
KMPH-TV D28 DT LIC	39.7	43	31.7	43	31.7	43	
KBFX-CD D29 DC LIC	15.9	0	11.9	0	11.9	0	
KFTR-DT D29 DT APP	272.1	120,310	260.1	117,726	252.1	115,074	

Interference to BLEDT20090615ADO LIC scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KCET	D28	DT	LIC	LOS ANGELES, CA	BLEDT20090615ADO	
Undesireds:	KVMM28E1	D28	DC	CP	SANTA BARBARA, CA	kvmm28e1	150.6 km
	KPOM-CD	D27	DC	LIC	ONTARIO, CA	BLANK0000030167	77.7
	KEYT-TV	D27	DT	LIC	SANTA BARBARA, CA	BLCDT20061102ABJ	177.1
	KMPH-TV	D28	DT	APP	VISALIA, CA	BLANK0000035647	281.4

INTERFERENCE CAUSED ANALYSIS FOR KVMM-CD CHANNEL 28 FACILITY UNDER CURRENT ALLOCATION ENVIRONMENT

KBFX-CD	D29	DC	LIC	BAKERSFIELD, CA		BLTTA20101018ACF	144.9
KFTR-DT	D29	DT	APP	ONTARIO, CA		BLANK0000035667	0.5
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
35950.7	16,875,546	26110.9	15,402,588	25599.0	15,119,617	25311.0	15,100,165
Undesired		Total IX		Unique IX, before		Unique IX, after	
KVMM28E1 D28 DC CP	460.1	174,426			288.0	19,452	
KPOM-CD D27 DC LIC	24.1	12,705		20.1	10,121	20.1	10,121
KEYT-TV D27 DT LIC	168.1	152,497		164.1	152,497	4.0	175
KMPH-TV D28 DT APP	47.6	43		39.7	43	39.7	43
KBFX-CD D29 DC LIC	15.9	0		11.9	0	11.9	0
KFTR-DT D29 DT APP	272.1	120,310		260.1	117,726	252.1	115,074

Interference to BLANK0000036117 APP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KCET	D28	DT	APP	LOS ANGELES, CA	BLANK0000036117	
Undesireds:	KVMM28E1	D28	DC	CP	SANTA BARBARA, CA	kvmm28e1	150.6 km
	KPOM-CD	D27	DC	LIC	ONTARIO, CA	BLANK0000030167	77.7
	KEYT-TV	D27	DT	LIC	SANTA BARBARA, CA	BLCDT20061102ABJ	177.1
	KMPH-TV	D28	DT	LIC	VISALIA, CA	BLCDT20030204AGN	281.4
	KBFX-CD	D29	DC	LIC	BAKERSFIELD, CA	BLTTA20101018ACF	144.9
	KFTR-DT	D29	DT	LIC	ONTARIO, CA	BLCDT20100401AFY	0.5
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
32402.7	16,840,666	23377.1	15,456,599	22997.7	15,336,062	22925.5	15,332,903
Undesired		Total IX		Unique IX, before		Unique IX, after	
KVMM28E1 D28 DC CP	72.2	3,159			72.2	3,159	
KPOM-CD D27 DC LIC	64.2	25,441		64.2	25,441	64.2	25,441
KEYT-TV D27 DT LIC	4.0	55		0.0	0	0.0	0
KMPH-TV D28 DT APP	43.7	43		35.7	43	35.7	43
KBFX-CD D29 DC LIC	35.7	42		31.7	42	31.7	42
KFTR-DT D29 DT LIC	243.8	95,011		235.8	94,956	235.8	94,956

Interference to BLANK0000036117 APP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KCET	D28	DT	APP	LOS ANGELES, CA	BLANK0000036117	
Undesireds:	KVMM28E1	D28	DC	CP	SANTA BARBARA, CA	kvmm28e1	150.6 km
	KPOM-CD	D27	DC	LIC	ONTARIO, CA	BLANK0000030167	77.7
	KEYT-TV	D27	DT	LIC	SANTA BARBARA, CA	BLCDT20061102ABJ	177.1
	KMPH-TV	D28	DT	APP	VISALIA, CA	BLANK0000035647	281.4
	KBFX-CD	D29	DC	LIC	BAKERSFIELD, CA	BLTTA20101018ACF	144.9
	KFTR-DT	D29	DT	LIC	ONTARIO, CA	BLCDT20100401AFY	0.5
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
32402.7	16,840,666	23377.1	15,456,599	22997.7	15,336,062	22925.5	15,332,903
Undesired		Total IX		Unique IX, before		Unique IX, after	
KVMM28E1 D28 DC CP	72.2	3,159			72.2	3,159	
KPOM-CD D27 DC LIC	64.2	25,441		64.2	25,441	64.2	25,441
KEYT-TV D27 DT LIC	4.0	55		0.0	0	0.0	0
KMPH-TV D28 DT APP	43.7	43		35.7	43	35.7	43
KBFX-CD D29 DC LIC	35.7	42		31.7	42	31.7	42
KFTR-DT D29 DT LIC	243.8	95,011		235.8	94,956	235.8	94,956

Interference to BLANK0000036117 APP scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KCET	D28	DT	APP	LOS ANGELES, CA	BLANK0000036117	
Undesireds:	KVMM28E1	D28	DC	CP	SANTA BARBARA, CA	kvmm28e1	150.6 km
	KPOM-CD	D27	DC	LIC	ONTARIO, CA	BLANK0000030167	77.7
	KEYT-TV	D27	DT	LIC	SANTA BARBARA, CA	BLCDT20061102ABJ	177.1
	KMPH-TV	D28	DT	LIC	VISALIA, CA	BLCDT20030204AGN	281.4

INTERFERENCE CAUSED ANALYSIS FOR KVMM-CD CHANNEL 28 FACILITY UNDER CURRENT ALLOCATION ENVIRONMENT

KBFX-CD	D29	DC	LIC	BAKERSFIELD, CA	BLTTA20101018ACF	144.9
KFTR-DT	D29	DT	APP	ONTARIO, CA	BLANK0000035667	0.5

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
32402.7	16,840,666	23377.1	15,456,599	22941.7	15,314,859	22877.5	15,311,700	0.28 0.02

Undesired		Total IX		Unique IX, before		Unique IX, after	
KVMM28E1 D28 DC CP	72.2	3,159		64.2		3,159	
KPOM-CD D27 DC LIC	64.2	25,441	64.2	25,441	64.2	25,441	
KEYT-TV D27 DT LIC	4.0	55	0.0	0	0.0	0	
KMPH-TV D28 DT LIC	43.7	43	35.7	43	35.7	43	
KBFX-CD D29 DC LIC	35.7	42	31.7	42	31.7	42	
KFTR-DT D29 DT APP	299.8	116,214	291.9	116,159	283.8	116,159	

Interference to BLANK0000036117 APP scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KCET	D28	DT	APP	LOS ANGELES, CA	BLANK0000036117	
Undesireds:	KVMM28E1	D28	DC	CP	SANTA BARBARA, CA	kvmm28e1	150.6 km
	KPOM-CD	D27	DC	LIC	ONTARIO, CA	BLANK0000030167	77.7
	KEYT-TV	D27	DT	LIC	SANTA BARBARA, CA	BLCDT20061102ABJ	177.1
	KMPH-TV	D28	DT	APP	VISALIA, CA	BLANK0000035647	281.4
	KBFX-CD	D29	DC	LIC	BAKERSFIELD, CA	BLTTA20101018ACF	144.9
	KFTR-DT	D29	DT	APP	ONTARIO, CA	BLANK0000035667	0.5

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
32402.7	16,840,666	23377.1	15,456,599	22941.7	15,314,859	22877.5	15,311,700	0.28 0.02

Undesired		Total IX		Unique IX, before		Unique IX, after	
KVMM28E1 D28 DC CP	72.2	3,159		64.2		3,159	
KPOM-CD D27 DC LIC	64.2	25,441	64.2	25,441	64.2	25,441	
KEYT-TV D27 DT LIC	4.0	55	0.0	0	0.0	0	
KMPH-TV D28 DT APP	43.7	43	35.7	43	35.7	43	
KBFX-CD D29 DC LIC	35.7	42	31.7	42	31.7	42	
KFTR-DT D29 DT APP	299.8	116,214	291.9	116,159	283.8	116,159	

Interference to BMPEDT20090206ACI APP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KCET	D28	DT	APP	LOS ANGELES, CA	BMPEDT20090206ACI	
Undesireds:	KVMM28E1	D28	DC	CP	SANTA BARBARA, CA	kvmm28e1	150.6 km
	KPOM-CD	D27	DC	LIC	ONTARIO, CA	BLANK0000030167	77.7
	KEYT-TV	D27	DT	LIC	SANTA BARBARA, CA	BLCDT20061102ABJ	177.1
	KMPH-TV	D28	DT	LIC	VISALIA, CA	BLCDT20030204AGN	281.4
	KBFX-CD	D29	DC	LIC	BAKERSFIELD, CA	BLTTA20101018ACF	144.9
	KFTR-DT	D29	DT	LIC	ONTARIO, CA	BLCDT20100401AFY	0.5

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
38208.1	17,051,750	28229.6	15,679,429	27673.9	15,398,973	27269.9	15,371,990	1.46 0.18

Undesired		Total IX		Unique IX, before		Unique IX, after	
KVMM28E1 D28 DC CP	636.2	200,042		404.0		26,983	
KPOM-CD D27 DC LIC	28.1	12,173	28.1	12,173	28.1	12,173	
KEYT-TV D27 DT LIC	224.2	170,407	224.2	170,407	0.0	0	
KMPH-TV D28 DT LIC	27.8	0	19.8	0	19.8	0	
KBFX-CD D29 DC LIC	31.7	31	27.7	31	27.7	31	
KFTR-DT D29 DT LIC	252.0	97,845	248.0	97,845	240.0	95,193	

Interference to BMPEDT20090206ACI APP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KCET	D28	DT	APP	LOS ANGELES, CA	BMPEDT20090206ACI	
Undesireds:	KVMM28E1	D28	DC	CP	SANTA BARBARA, CA	kvmm28e1	150.6 km
	KPOM-CD	D27	DC	LIC	ONTARIO, CA	BLANK0000030167	77.7
	KEYT-TV	D27	DT	LIC	SANTA BARBARA, CA	BLCDT20061102ABJ	177.1
	KMPH-TV	D28	DT	APP	VISALIA, CA	BLANK0000035647	281.4

INTERFERENCE CAUSED ANALYSIS FOR KVMM-CD CHANNEL 28 FACILITY UNDER CURRENT ALLOCATION ENVIRONMENT

KBFX-CD	D29	DC	LIC	BAKERSFIELD, CA		BLTTA20101018ACF	144.9
KFTR-DT	D29	DT	LIC	ONTARIO, CA		BLCDT20100401AFY	0.5
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
38208.1	17,051,750	28229.6	15,679,429	27669.9	15,398,973	27265.9	15,371,990
Undesired		Total IX		Unique IX, before		Unique IX, after	
KVMM28E1 D28 DC CP		636.2	200,042			404.0	26,983
KPOM-CD D27 DC LIC		28.1	12,173	28.1	12,173	28.1	12,173
KEYT-TV D27 DT LIC		224.2	170,407	224.2	170,407	0.0	0
KMPH-TV D28 DT APP		31.7	0	23.8	0	23.8	0
KBFX-CD D29 DC LIC		31.7	31	27.7	31	27.7	31
KFTR-DT D29 DT LIC		252.0	97,845	248.0	97,845	240.0	95,193

Interference to BMPEDT20090206ACI APP scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KCET	D28	DT	APP	LOS ANGELES, CA	BMPEDT20090206ACI	
Undesireds:	KVMM28E1	D28	DC	CP	SANTA BARBARA, CA	kvmm28e1	150.6 km
	KPOM-CD	D27	DC	LIC	ONTARIO, CA	BLANK0000030167	77.7
	KEYT-TV	D27	DT	LIC	SANTA BARBARA, CA	BLCDT20061102ABJ	177.1
	KMPH-TV	D28	DT	LIC	VISALIA, CA	BLCDT20030204AGN	281.4
	KBFX-CD	D29	DC	LIC	BAKERSFIELD, CA	BLTTA20101018ACF	144.9
	KFTR-DT	D29	DT	APP	ONTARIO, CA	BLANK0000035667	0.5
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
38208.1	17,051,750	28229.6	15,679,429	27653.8	15,398,251	27253.8	15,371,268
Undesired		Total IX		Unique IX, before		Unique IX, after	
KVMM28E1 D28 DC CP		636.2	200,042			400.0	26,983
KPOM-CD D27 DC LIC		28.1	12,173	24.1	9,589	24.1	9,589
KEYT-TV D27 DT LIC		224.2	170,407	224.2	170,407	0.0	0
KMPH-TV D28 DT LIC		27.8	0	19.8	0	19.8	0
KBFX-CD D29 DC LIC		31.7	31	27.7	31	27.7	31
KFTR-DT D29 DT APP		276.0	101,151	268.0	98,567	256.0	95,915

Interference to BMPEDT20090206ACI APP scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KCET	D28	DT	APP	LOS ANGELES, CA	BMPEDT20090206ACI	
Undesireds:	KVMM28E1	D28	DC	CP	SANTA BARBARA, CA	kvmm28e1	150.6 km
	KPOM-CD	D27	DC	LIC	ONTARIO, CA	BLANK0000030167	77.7
	KEYT-TV	D27	DT	LIC	SANTA BARBARA, CA	BLCDT20061102ABJ	177.1
	KMPH-TV	D28	DT	APP	VISALIA, CA	BLANK0000035647	281.4
	KBFX-CD	D29	DC	LIC	BAKERSFIELD, CA	BLTTA20101018ACF	144.9
	KFTR-DT	D29	DT	APP	ONTARIO, CA	BLANK0000035667	0.5
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
38208.1	17,051,750	28229.6	15,679,429	27649.9	15,398,251	27249.9	15,371,268
Undesired		Total IX		Unique IX, before		Unique IX, after	
KVMM28E1 D28 DC CP		636.2	200,042			400.0	26,983
KPOM-CD D27 DC LIC		28.1	12,173	24.1	9,589	24.1	9,589
KEYT-TV D27 DT LIC		224.2	170,407	224.2	170,407	0.0	0
KMPH-TV D28 DT APP		31.7	0	23.8	0	23.8	0
KBFX-CD D29 DC LIC		31.7	31	27.7	31	27.7	31
KFTR-DT D29 DT APP		276.0	101,151	268.0	98,567	256.0	95,915

Interference to BLCDT20100401AFY LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KFTR-DT	D29	DT	LIC	ONTARIO, CA	BLCDT20100401AFY	
Undesireds:	KVMM28E1	D28	DC	CP	SANTA BARBARA, CA	kvmm28e1	150.2 km
	KCET	D28	DT	LIC	LOS ANGELES, CA	BLEDT20090615ADO	0.5
	KBFX-CD	D29	DC	LIC	BAKERSFIELD, CA	BLTTA20101018ACF	144.4

INTERFERENCE CAUSED ANALYSIS FOR KVMM-CD CHANNEL 28 FACILITY UNDER CURRENT ALLOCATION ENVIRONMENT

Service area	Terrain-limited			IX-free, before		IX-free, after		Percent New IX
43264.1 17,560,679	33576.8	16,305,726		33194.3	16,180,412	32817.8	16,173,223	1.13 0.04

Undesired	Total IX			Unique IX, before		Unique IX, after	
KVMM28E1 D28 DC CP	376.4		7,189			376.4	7,189
KCET D28 DT LIC	151.8		50,747	151.8	50,747	151.8	50,747
KBFX-CD D29 DC LIC	230.8		74,567	230.8	74,567	230.8	74,567

Interference to BLCDT20100401AFY LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KFTR-DT	D29	DT	LIC	ONTARIO, CA	BLCDT20100401AFY	

Undesireds:	KVMM28E1	D28	DC	CP	SANTA BARBARA, CA	kvm28e1	150.2 km
	KCET	D28	DT	APP	LOS ANGELES, CA	BLANK0000036117	0.5
	KBFX-CD	D29	DC	LIC	BAKERSFIELD, CA	BLTTA20101018ACF	144.4

Service area	Terrain-limited			IX-free, before		IX-free, after		Percent New IX
43264.1 17,560,679	33576.8	16,305,726		33194.2	16,146,656	32817.8	16,139,467	1.13 0.04

Undesired	Total IX			Unique IX, before		Unique IX, after	
KVMM28E1 D28 DC CP	376.4		7,189			376.4	7,189
KCET D28 DT APP	151.9		84,503	151.9	84,503	151.9	84,503
KBFX-CD D29 DC LIC	230.8		74,567	230.8	74,567	230.8	74,567

Interference to BLCDT20100401AFY LIC scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KFTR-DT	D29	DT	LIC	ONTARIO, CA	BLCDT20100401AFY	

Undesireds:	KVMM28E1	D28	DC	CP	SANTA BARBARA, CA	kvm28e1	150.2 km
	KCET	D28	DT	APP	LOS ANGELES, CA	BMPEDT20090206ACI	0.5
	KBFX-CD	D29	DC	LIC	BAKERSFIELD, CA	BLTTA20101018ACF	144.4

Service area	Terrain-limited			IX-free, before		IX-free, after		Percent New IX
43264.1 17,560,679	33576.8	16,305,726		33194.3	16,180,412	32817.8	16,173,223	1.13 0.04

Undesired	Total IX			Unique IX, before		Unique IX, after	
KVMM28E1 D28 DC CP	376.4		7,189			376.4	7,189
KCET D28 DT APP	151.8		50,747	151.8	50,747	151.8	50,747
KBFX-CD D29 DC LIC	230.8		74,567	230.8	74,567	230.8	74,567

Interference to BLANK0000035667 APP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KFTR-DT	D29	DT	APP	ONTARIO, CA	BLANK0000035667	

Undesireds:	KVMM28E1	D28	DC	CP	SANTA BARBARA, CA	kvm28e1	150.2 km
	KCET	D28	DT	LIC	LOS ANGELES, CA	BLEDT20090615ADO	0.5
	KBFX-CD	D29	DC	LIC	BAKERSFIELD, CA	BLTTA20101018ACF	144.4
	KVCW	D29	DT	LIC	LAS VEGAS, NV	BLCDT20070109AAW	341.4

Service area	Terrain-limited			IX-free, before		IX-free, after		Percent New IX
46415.3 17,717,825	36563.5	16,609,674		36217.0	16,503,365	35884.7	16,500,159	0.92 0.02

Undesired	Total IX			Unique IX, before		Unique IX, after	
KVMM28E1 D28 DC CP	332.3		3,206			332.3	3,206
KCET D28 DT LIC	87.8		5,619	87.8	5,619	87.8	5,619
KBFX-CD D29 DC LIC	258.6		100,690	254.6	100,690	254.6	100,690
KVCW D29 DT LIC	4.0		0	0.0	0	0.0	0

Interference to BLANK0000035667 APP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KFTR-DT	D29	DT	APP	ONTARIO, CA	BLANK0000035667	

Undesireds:	KVMM28E1	D28	DC	CP	SANTA BARBARA, CA	kvm28e1	150.2 km
	KCET	D28	DT	APP	LOS ANGELES, CA	BLANK0000036117	0.5

INTERFERENCE CAUSED ANALYSIS FOR KVMM-CD CHANNEL 28 FACILITY UNDER CURRENT ALLOCATION ENVIRONMENT

KBFX-CD KVCW	D29 D29	DC DT	LIC LIC	BAKERSFIELD, CA LAS VEGAS, NV	BLTTA20101018ACF BLCDT20070109AAW	144.4 341.4
Service area 46415.3	17,717,825	Terrain-limited 36563.5	16,609,674	IX-free, before 36217.0	16,484,961	IX-free, after 35884.7
						Percent New IX 0.92 0.02
Undesired KVMM28E1 D28 DC CP KCET D28 DT APP KBFX-CD D29 DC LIC KVCW D29 DT LIC	332.3 87.9 258.6 4.0	Total IX 3,206 24,023 100,690 0		Unique IX, before 87.9 254.6 0.0		Unique IX, after 332.3 87.9 254.6 0.0
						150.2 km 0.5 144.4 341.4

Interference to BLANK0000035667 APP scenario 3

Desired:	Call KFTR-DT	Chan D29	Svc DT	Status APP	City, State ONTARIO, CA	File Number BLANK0000035667	Distance
Undesireds:	KVMM28E1 KCET KBFX-CD KVCW	D28 D28 D29 D29	DC DT DC DT	CP APP LIC LIC	SANTA BARBARA, CA LOS ANGELES, CA BAKERSFIELD, CA LAS VEGAS, NV	kvmm28e1 BMPEDT20090206ACI BLTTA20101018ACF BLCDT20070109AAW	150.2 km 0.5 144.4 341.4
Service area 46415.3	17,717,825	Terrain-limited 36563.5	16,609,674	IX-free, before 36181.1	16,497,604	IX-free, after 35848.8	Percent New IX 0.92 0.02
Undesired KVMM28E1 D28 DC CP KCET D28 DT APP KBFX-CD D29 DC LIC KVCW D29 DT LIC	332.3 123.7 258.6 4.0	Total IX 3,206 11,380 100,690 0		Unique IX, before 123.7 254.6 0.0		Unique IX, after 332.3 123.7 254.6 0.0	
							150.2 km 0.5 144.4 341.4

Interference to BLDTL20080423AEG LIC scenario 1

Desired:	Call KQMM-CD	Chan D29	Svc DC	Status LIC	City, State SANTA MARIA, CA	File Number BLDTL20080423AEG	Distance
Undesireds:	KVMM28E1 KBFX-CD KFTR-DT KDFS-CD	D28 D29 D29 D30-	DC DC DT DC	CP LIC LIC LIC	SANTA BARBARA, CA BAKERSFIELD, CA ONTARIO, CA SANTA MARIA, CA	kvmm28e1 BLTTA20101018ACF BLCDT20100401AFY BLANK0000001617	67.8 km 157.0 208.3 36.8
Service area 10534.5	361,918	Terrain-limited 7596.0	336,293	IX-free, before 7453.2	336,293	IX-free, after 7449.2	Percent New IX 0.05 0.00
Undesired KVMM28E1 D28 DC CP KBFX-CD D29 DC LIC KFTR-DT D29 DT LIC KDFS-CD D30- DC LIC	4.0 23.8 15.9 119.1	Total IX 0 0 0 0		Unique IX, before 23.8 0.0 0		Unique IX, after 4.0 0 0 0	
							67.8 km 157.0 208.3 36.8

Interference to BLDTL20080423AEG LIC scenario 2

Desired:	Call KQMM-CD	Chan D29	Svc DC	Status LIC	City, State SANTA MARIA, CA	File Number BLDTL20080423AEG	Distance
Undesireds:	KVMM28E1 KBFX-CD KFTR-DT KDFS-CD	D28 D29 D29 D30-	DC DC DT DC	CP LIC APP LIC	SANTA BARBARA, CA BAKERSFIELD, CA ONTARIO, CA SANTA MARIA, CA	kvmm28e1 BLTTA20101018ACF BLANK0000035667 BLANK0000001617	67.8 km 157.0 208.3 36.8
Service area 10534.5	361,918	Terrain-limited 7596.0	336,293	IX-free, before 7429.3	336,293	IX-free, after 7429.3	Percent New IX 0.00 0.00
Undesired KVMM28E1 D28 DC CP KBFX-CD D29 DC LIC KFTR-DT D29 DT APP KDFS-CD D30- DC LIC	4.0 23.8 55.7 119.1	Total IX 0 0 0 0		Unique IX, before 23.8 23.9 19.9 87.3		Unique IX, after 0.0 0 0 0	
							67.8 km 157.0 208.3 36.8

INTERFERENCE RECEIVED ANALYSIS FOR KVMM-CD CHANNEL 28 FACILITY UNDER CURRENT ALLOCATION ENVIRONMENT

tvstudy v2.2.4 (Z2Qqz3)

Database: localhost
Station Data: LMS TV 2017-12-11 (105)
Study: LMS171211
Model: Longley-Rice
Scenario: kvmm28e1r

Desired station	Service area	Terrain-limited	Interference-free
Undesired station	Total interference	Unique interference	
KVMM28E1 D28 DC CP SANTA BARBARA, CA	7035.6	262,885	5988.9
KCET D28 DT LIC LOS ANGELES, CA	312.0	593	304.0
KEYT-TV D27 DT LIC SANTA BARBARA, CA	52.0	179	44.0
KQMM-CD D29 DC LIC SANTA MARIA, CA	0.0	0	0.0
KMPH-TV D28 DT LIC VISALIA, CA	0.0	0	0.0
XHJK D28 DT LIC TIJUANA, BN	0.0	0	0.0



Propagation Systems, Inc.

Quality Broadcast Antenna Systems

January 30, 2018

Mr. Charlie Trice
Director of Engineering
Hero Broadcasting, LLC
14450 Commerce Way
Miami Lakes, FL 33016

Re: KVMM Transmitting Antenna

Dear Mr. Trice:

In regard to the new order you have placed for the channel 28 antenna, model PSILP8BB-28-CP, current delivery is 6-8 weeks from time of receipt of deposit which was received on January 30, 2018.

This antenna order and delivery in no way affects the delivery of our other repack customers that have placed or will be placing antenna orders in the next 45 days.

Best regards,

Douglas A. Ross
President

January 31, 2018

Charlie Trice
Director of Engineering
Hero Broadcasting, LLC
14450 Commerce Way
Miami Lakes, FL 33016

Reference: KVMM-CD
Dear Charlie,

The delivery of KVMM-CD re-channeled transmitter will have no effect on manufacturing, delivery installation and proof of any Phase 1 thru Phase 10 projects for Comark.

If you should have any questions please do not hesitate to contact me.

Sincerely,



Jack McAnulty
Director of Sales