

Post-Transition DTV Considerations

A study was performed using the FCC's software program, *tv\_study*, v.2.2.2, to determine if the facility proposed herein is predicted to cause new prohibited interference to post reassignment DTV station, construction permits, DTV allotments, or Class A DTV stations. As demonstrated in the attached study results, the instant proposal 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. In addition, the attached study also demonstrates that the predicted service area resulting from the technical facility proposed herein is within the baseline service area plus 1% and the proposed service area population is more than 95.0% of the baseline service area population. Accordingly, the instant proposal satisfies all applicable DTV coverage and DTV interference criteria.

International DTV Considerations

As shown in the attached study, the transmitter site specified herein not within 320 kilometers of either the common border between the United States of America and Canada or between the USA and Mexico. Therefore, international notification and coordination of the instant proposal is not required.

tvstudy v2.2.2  
Database: localhost, Study: KRXI\_23\_BL\_2559C\_600K, Model: Longley-Rice  
Start: 2017.07.05 12:00:16

Study created: 2017.07.05 12:00:11

Study build station data: LMS TV 2017-07-02 (22)

Proposal: KRXI-TV D23 DT APP RENO, NV  
File number: KRXI\_23\_BL\_2559C\_600K  
Facility ID: 48360  
Station data: User record  
Record ID: 896  
Country: U.S.

Non-U.S. records included

Stations potentially affected:

Call	Chan	Svc	Status	City, State	File Number	Distance
KSPX-TV	D22	DT	BL	SACRAMENTO, CA	DTVBL52953	199.9 km
KTFF-DT	D23	DT	CP	PORTEVILLE, CA	BLANK0000025094	379.3
KTFF-DT	D23	DT	BL	PORTEVILLE, CA	DTVBL35512	379.3
KRDT-CD	D23	DC	LIC	REDDING, CA	BLDTA20110620AEA	250.1
KQCA	D23	DT	CP	STOCKTON, CA	BLANK0000024621	199.9
KQCA	D23	DT	BL	STOCKTON, CA	DTVBL10242	199.9
KMAX-TV	D24	DT	BL	SACRAMENTO, CA	DTVBL51499	199.9

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D23  
Latitude: 39 35 22.97 N (NAD83)

Longitude: 119 55 40.91 W  
Height AMSL: 2559.0 m  
HAAT: 854.0 m  
Peak ERP: 600 kW  
Antenna: DIELECTRIC-TFU-24DSB-J (C) (ID 1000671) 0.0 deg

39.7 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	439 kW	945.9 m	129.7 km
45.0	40.2	1021.8	108.4
90.0	16.1	987.9	98.7
135.0	38.0	1044.9	108.4
180.0	7.39	760.9	85.8
225.0	7.80	674.3	83.8
270.0	43.1	503.7	89.5
315.0	465	891.5	128.5

ERP exceeds maximum

ERP: 600 kW    ERP maximum: 178 kW

Proposal service area is within baseline plus 1.0%

Proposal service area population is more than 95.0% of baseline

Distance to Canadian border: 1002.0 km

Distance to Mexican border: 808.8 km

Conditions at FCC monitoring station: Livermore CA

Bearing: 218.0 degrees    Distance: 260.9 km

ERP: 3.09 kW    Field strength: -27.4 dBu, 0.0 mV/m

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 82.4 degrees    Distance: 1252.0 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%

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Interference to DTVBL52953 BL, scenario 1

Proposal causes no interference.

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Interference to DTVBL52953 BL, scenario 2

Proposal causes no interference.

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Interference to DTVBL52953 BL, scenario 3

Proposal causes no interference.

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Interference to DTVBL52953 BL, scenario 4

Proposal causes no interference.

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Interference to DTVBL52953 BL, scenario 5

Proposal causes no interference.

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Interference to DTVBL52953 BL, scenario 6

Proposal causes no interference.

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Interference to DTVBL52953 BL, scenario 7

Proposal causes no interference.

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Interference to DTVBL52953 BL, scenario 8  
Proposal causes no interference.

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Interference to BLANK0000025094 CP, scenario 1  
Proposal causes no interference.

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Interference to BLANK0000025094 CP, scenario 2  
Proposal causes no interference.

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Interference to BLANK0000025094 CP, scenario 3  
Proposal causes no interference.

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Interference to BLANK0000025094 CP, scenario 4  
Proposal causes no interference.

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Interference to DTVBL35512 BL, scenario 1  
Proposal causes no interference.

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Interference to DTVBL35512 BL, scenario 2  
Proposal causes no interference.

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Interference to DTVBL35512 BL, scenario 3  
Proposal causes no interference.

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Interference to DTVBL35512 BL, scenario 4  
Proposal causes no interference.

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Interference to BLDTA20110620AEA LIC, scenario 1  
Proposal causes no interference.

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Interference to BLDTA20110620AEA LIC, scenario 2  
Proposal causes no interference.

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Interference to BLANK0000024621 CP, scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KQCA	D23	DT	CP	STOCKTON, CA	BLANK0000024621	
Undesireds:	KRXI-TV	D23	DT	BL	RENO, NV	DTVBL48360	199.9 km
	KRXI-TV	D23	DT	APP	RENO, NV	KRXI_23_BL_2559C_600K	199.9
	KSPX-TV	D22	DT	BL	SACRAMENTO, CA	DTVBL52953	0.0
	KAXT-CD	D22	DC	BL	SAN FRANCISO, SAN JO, CA	DTVBL37689	91.5
	KTFF-DT	D23	DT	CP	PORTERVILLE, CA	BLANK0000025094	321.5
	KRDT-CD	D23	DC	LIC	REDDING, CA	BLDTA20110620AEA	279.8
	KMAX-TV	D24	DT	BL	SACRAMENTO, CA	DTVBL51499	0.0
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
41037.5	10,077,891	35328.7	6,276,197	34612.0	6,210,045	34612.0	6,210,045
Undesired		Total	IX	Unique IX, before	Unique IX, after		
KRXI-TV D23 DT BL		4.0	0	4.0	0		
KRXI-TV D23 DT APP		4.0	0		4.0	0	
KSPX-TV D22 DT BL		4.0	0	0.0	0	0.0	0
KAXT-CD D22 DC BL		67.7	36,690	67.7	36,690	67.7	36,690
KTFF-DT D23 DT CP		541.4	28,763	541.4	28,763	541.4	28,763
KRDT-CD D23 DC LIC		71.9	111	71.9	111	71.9	111
KMAX-TV D24 DT BL		31.8	588	27.8	588	27.8	588

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Interference to BLANK0000024621 CP, scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KQCA	D23	DT	CP	STOCKTON, CA	BLANK0000024621	
Undesireds:	KRXI-TV	D23	DT	BL	RENO, NV	DTVBL48360	199.9 km
	KRXI-TV	D23	DT	APP	RENO, NV	KRXI_23_BL_2559C_600K	199.9
	KSPX-TV	D22	DT	BL	SACRAMENTO, CA	DTVBL52953	0.0
	KAXT-CD	D22	DC	BL	SAN FRANCISO, SAN JO, CA	DTVBL37689	91.5
	KTFF-DT	D23	DT	BL	PORTEVILLE, CA	DTVBL35512	321.5
	KRDT-CD	D23	DC	LIC	REDDING, CA	BLDTA20110620AEA	279.8
	KMAX-TV	D24	DT	BL	SACRAMENTO, CA	DTVBL51499	0.0
Service area			Terrain-limited		IX-free, before	IX-free, after	Percent New IX
41037.5	10,077,891	35328.7	6,276,197	34627.9	6,213,415	34627.9	6,213,415
Undesired			Total	IX	Unique IX, before	Unique IX, after	
KRXI-TV D23 DT BL		4.0		0	4.0	0	
KRXI-TV D23 DT APP		4.0		0		4.0	0
KSPX-TV D22 DT BL		4.0		0	0.0	0	0.0
KAXT-CD D22 DC BL		67.7		36,690	67.7	36,690	67.7
KTFF-DT D23 DT BL		525.4		25,393	525.4	25,393	525.4
KRDT-CD D23 DC LIC		71.9		111	71.9	111	71.9
KMAX-TV D24 DT BL		31.8		588	27.8	588	27.8

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 Interference to DTVBL10242 BL, scenario 1  
 Proposal causes no interference.

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 Interference to DTVBL10242 BL, scenario 2  
 Proposal causes no interference.

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 Interference to DTVBL51499 BL, scenario 1  
 Proposal causes no interference.

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Interference to DTVBL51499 BL, scenario 2  
Proposal causes no interference.

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Interference to DTVBL51499 BL, scenario 3  
Proposal causes no interference.

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Interference to DTVBL51499 BL, scenario 4  
Proposal causes no interference.

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Interference to proposal, scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KRXI-TV	D23	DT	APP	RENO, NV	KRXI_23_BL_2559C_600K	
Undesireds:	KTFF-DT	D23	DT	CP	PORTEVILLE, CA	BLANK0000025094	379.3 km
	KRDT-CD	D23	DC	LIC	REDDING, CA	BLDTA20110620AEA	250.1
	KQCA	D23	DT	CP	STOCKTON, CA	BLANK0000024621	199.9
	K23EX-D	D23	DC	LIC	MEDFORD, OR	BLDTA20131125BZO	400.0
	Service area		Terrain-limited			IX-free	Percent IX
34692.7	713,192	21495.9	528,876	21363.9	528,876	0.61	0.00
Undesired			Total IX		Unique IX	Prcnt Unique IX	
KQCA	D23	DT	CP	132.0	0	132.0	0
					0	0.61	0.00

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Interference to proposal, scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KRXI-TV	D23	DT	APP	RENO, NV	KRXI_23_BL_2559C_600K	
Undesireds:	KTFF-DT	D23	DT	BL	PORTEVILLE, CA	DTVBL35512	379.3 km

KRDT-CD	D23	DC	LIC	REDDING, CA	BLDTA20110620AEA	250.1
KQCA	D23	DT	CP	STOCKTON, CA	BLANK0000024621	199.9
K23EX-D	D23	DC	LIC	MEDFORD, OR	BLDTA20131125BZO	400.0
Service area		Terrain-limited			IX-free	Percent IX
34692.7	713,192	21495.9	528,876	21363.9	528,876	0.61 0.00
Undesired		Total IX			Unique IX	Prcnt Unique IX
KQCA D23 DT CP		132.0	0	132.0	0	0.61 0.00

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Interference to proposal, scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KRXI-TV	D23	DT	APP	RENO, NV	KRXI_23_BL_2559C_600K	
Undesireds:	KTFF-DT	D23	DT	CP	PORTEVILLE, CA	BLANK0000025094	379.3 km
	KRDT-CD	D23	DC	LIC	REDDING, CA	BLDTA20110620AEA	250.1
	KQCA	D23	DT	BL	STOCKTON, CA	DTVBL10242	199.9
	K23EX-D	D23	DC	LIC	MEDFORD, OR	BLDTA20131125BZO	400.0
Service area		Terrain-limited			IX-free	Percent IX	
34692.7	713,192	21495.9	528,876	21376.0	528,876	0.56 0.00	
Undesired		Total IX			Unique IX	Prcnt Unique IX	
KQCA D23 DT BL		119.9	0	119.9	0	0.56 0.00	

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Interference to proposal, scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KRXI-TV	D23	DT	APP	RENO, NV	KRXI_23_BL_2559C_600K	
Undesireds:	KTFF-DT	D23	DT	BL	PORTEVILLE, CA	DTVBL35512	379.3 km
	KRDT-CD	D23	DC	LIC	REDDING, CA	BLDTA20110620AEA	250.1
	KQCA	D23	DT	BL	STOCKTON, CA	DTVBL10242	199.9

K23EX-D	D23	DC	LIC	MEDFORD, OR	BLDTA20131125BZO	400.0
34692.7	Service area 713,192	21495.9	Terrain-limited 528,876	21376.0	IX-free 528,876	Percent IX 0.56 0.00
Undesired KQCA D23 DT BL		119.9	Total IX 0	119.9	Unique IX 0	Prcnt Unique IX 0.56 0.00