

Interference Analysis
prepared 04/14/2019 for
KTVW License Partnership, G.P.
KDOS-LD Globe, AZ
Ch 19 12 kW-DA 1001 m

The attached TVStudy “interference check” data output, run with the default 1 km cell size and ***a terrain sampling interval of 0.5 km***, shows that the proposed channel 19 operation of the KDOS-LD will cause no impermissible interference.

KDOS-LD was listed by the FCC as having been displaced by the new channel assignments arising from the Spectrum Auction. The station did not seek a new channel during the Special Displacement Window, because it believed that a change of antenna would resolve an interference issues on its pre-repack channel. KDOS-LD filed for and was granted a construction permit to continue operation on its pre-repack channel, 29, based on the replacement of the station’s antenna. Following the grant of that application, the licensee of KTAZ, Phoenix, AZ, which operates on channel 29, submitted analyses to the KDOS-LD licensee demonstrating that interference was likely to occur in areas outside KTAZ’s noise-limited coverage contour, where KHRR has viewers, based on TVStudy parameters that it considered more pertinent to those viewers’ situations than the TVStudy default values, thereby privately objecting to post-repack use of channel 29. The instant application seeks to move KDOS-LD to non-conflicting channel 19.

tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: BLANK0000067173, Model: Longley-Rice
Start: 2019.04.14 13:18:54

Study last edited: 2019.04.14 13:18:48

Proposal: KDOS-LD D19 LD APP GLOBE, AZ
File number: BLANK0000067173
Facility ID: 129078
Station data: User record
Record ID: 142
Country: U.S.

Proposal "before": (none)

Study has been edited. Stations studied for impact of proposal:

Call	Chan	Svc	Status	City, State	File Number	Distance
KGRF-LD	D19		LD LIC	GILA RIVER INDIAN CO, AZ	BLANK0000001685	130.0 km
K19JT-D	D19		LD CP	GILA RIVER INDIAN CO, AZ	BNPDTL20100713APS	105.2
KTTU	D19		DT LIC	TUCSON, AZ	BLCDT20030926ANZ	97.7
KPAZ-TV	D20		DT LIC	PHOENIX, AZ	BLCDT20131121AHS	114.6
K22JD-D	N22-		TX LIC	MADERA PEAK, AZ	BLTT20091029ABD	6.8

Record parameters as studied:

Channel: D19
Mask: Stringent
Latitude: 33 17 20.20 N (NAD83)
Longitude: 110 49 47.30 W
Height AMSL: 2330.0 m
HAAT: 0.0 m
Peak ERP: 12.0 kW
Antenna: RFS-PEPL-3A (ID 1004561) 20.0 deg
Elev Pattn: Generic
Tilts: elec 2.00, mech 1.00 @ 20.0 deg

49.3 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	8.67 kW	1116.4 m	77.3 km
45.0	6.75	1108.7	75.1
90.0	0.281	982.8	51.0
135.0	0.013	827.5	29.6
180.0	0.001	1107.3	18.3
225.0	0.002	1023.9	20.5
270.0	0.015	1037.2	32.7
315.0	0.459	799.9	51.2

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 1000 m

Distance to Canadian border: 1746.1 km

**Proposal is within coordination distance of Mexican border
Distance to Mexican border: 211.5 km

Conditions at FCC monitoring station: Douglas AZ
Bearing: 150.6 degrees Distance: 227.3 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 31.6 degrees Distance: 906.8 km

No land mobile station failures found

Study cell size: 1.00 km
Profile point spacing: 0.50 km

Maximum new IX to full-service and Class A: 0.50%
Maximum new IX to LPTV: 2.00%

Interference to BLANK0000001685 LIC scenario 1

Broadcast Transmission Services, LLC

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KGRF-LD	D19	LD	LIC	GILA RIVER INDIAN CO, AZ	BLANK0000001685	
Undesireds:	KDOS-LD	D19	LD	APP	GLOBE, AZ	BLANK0000067173	130.0 km
	K18JL-D	D18	LD	LIC	PHOENIX, AZ	BLDTL20141203AAT	15.6
	K19FD	N19+	TX	LIC	CAMP VERDE, AZ	BLTTL20050506ACT	125.2
	K19JT-D	D19	LD	CP	GILA RIVER INDIAN CO, AZ	BNPDTL20100713APS	26.4
	KTTU	D19	DT	LIC	TUCSON, AZ	BLCDT20030926ANZ	177.0
	KPAZ-TV	D20	DT	LIC	PHOENIX, AZ	BLCDT20131121AHS	15.9

	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
	2328.9 1,078,713	1743.8 980,191	1242.1 661,703	1242.1 661,703	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
KDOS-LD D19 LD APP	14.9 2,557	0.0 0	0.0 0
K18JL-D D18 LD LIC	58.6 38,984	2.0 62	2.0 62
K19JT-D D19 LD CP	56.7 30,983	1.0 2,085	1.0 2,085
KTTU D19 DT LIC	222.5 207,418	118.1 99,668	118.1 99,668
KPAZ-TV D20 DT LIC	379.6 214,999	222.5 101,479	222.5 101,479

Interference to BLANK0000001685 LIC scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KGRF-LD	D19	LD	LIC	GILA RIVER INDIAN CO, AZ	BLANK0000001685	
Undesireds:	KDOS-LD	D19	LD	APP	GLOBE, AZ	BLANK0000067173	130.0 km
	K18JL-D	D18	LD	CP	PHOENIX, AZ	BLANK0000063101	15.6
	K19FD	N19+	TX	LIC	CAMP VERDE, AZ	BLTTL20050506ACT	125.2
	K19JT-D	D19	LD	CP	GILA RIVER INDIAN CO, AZ	BNPDTL20100713APS	26.4
	KTTU	D19	DT	LIC	TUCSON, AZ	BLCDT20030926ANZ	177.0
	KPAZ-TV	D20	DT	LIC	PHOENIX, AZ	BLCDT20131121AHS	15.9

	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
	2328.9 1,078,713	1743.8 980,191	1244.1 661,765	1244.1 661,765	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
KDOS-LD D19 LD APP	14.9 2,557	0.0 0	0.0 0
K18JL-D D18 LD CP	9.9 2,863	0.0 0	0.0 0
K19JT-D D19 LD CP	56.7 30,983	1.0 2,085	1.0 2,085
KTTU D19 DT LIC	222.5 207,418	118.1 99,668	118.1 99,668
KPAZ-TV D20 DT LIC	379.6 214,999	246.4 108,197	238.4 105,640

Interference to BNPDTL20100713APS CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K19JT-D	D19	LD	CP	GILA RIVER INDIAN CO, AZ	BNPDTL20100713APS	
Undesireds:	KDOS-LD	D19	LD	APP	GLOBE, AZ	BLANK0000067173	105.2 km
	K18JL-D	D18	LD	LIC	PHOENIX, AZ	BLDTL20141203AAT	11.0
	K19FD	N19+	TX	LIC	CAMP VERDE, AZ	BLTTL20050506ACT	131.1
	KGRF-LD	D19	LD	LIC	GILA RIVER INDIAN CO, AZ	BLANK0000001685	26.4
	KTTU	D19	DT	LIC	TUCSON, AZ	BLCDT20030926ANZ	151.5
	KPAZ-TV	D20	DT	LIC	PHOENIX, AZ	BLCDT20131121AHS	10.6

	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
	1202.4 601,374	1189.4 601,370	524.5 295,504	524.5 295,504	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
KDOS-LD D19 LD APP	2.0 8	0.0 0	0.0 0
KGRF-LD D19 LD LIC	5.0 0	0.0 0	0.0 0
KTTU D19 DT LIC	490.5 287,046	188.0 116,590	188.0 116,590
KPAZ-TV D20 DT LIC	476.9 189,276	169.4 18,820	168.4 18,820

Interference to BLCDT20030926ANZ LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KTTU	D19	DT	LIC	TUCSON, AZ	BLCDT20030926ANZ	
Undesireds:	KDOS-LD	D19	LD	APP	GLOBE, AZ	BLANK0000067173	97.7 km
	KFTU-CD	D18	DC	LIC	TUCSON, AZ	BLDTA20120110ADO	0.2
	KPAZ-TV	D20	DT	LIC	PHOENIX, AZ	BLCDT20131121AHS	162.0

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
48781.8 1,324,373	36535.2 1,028,477	36164.2 1,020,094	36047.1 1,017,415	0.32 0.26
2451.1 222,120	1376.7 76,132	1376.7 76,132	1376.7 76,132	0.00 0.00 (in Mexico)

Undesired	Total IX	Unique IX, before	Unique IX, after
KDOS-LD D19 LD APP	190.0 2,845		117.1 2,679
KFTU-CD D18 DC LIC	194.2 5,451	192.2 5,451	192.2 5,451
KPAZ-TV D20 DT LIC	178.8 2,932	176.8 2,932	103.9 2,766

Interference to BLCDDT20131121AHS LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KPAZ-TV	D20	DT	LIC	PHOENIX, AZ	BLCDDT20131121AHS	
Undesireds:	KDOS-LD	D19	LD	APP	GLOBE, AZ	BLANK0000067173	114.6 km
	KTTU	D19	DT	LIC	TUCSON, AZ	BLCDDT20030926ANZ	162.0
	KWBA-TV	D21	DT	LIC	SIERRA VISTA, AZ	BLANK0000063600	211.2

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
43158.8 4,190,014	35898.3 4,175,496	35843.1 4,175,477	35756.1 4,175,477	0.24 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
KDOS-LD D19 LD APP	87.0 0		87.0 0
KTTU D19 DT LIC	45.2 4	22.1 4	22.1 4
KWBA-TV D21 DT LIC	33.1 15	10.0 15	10.0 15

Interference to BLTT20091029ABD LIC scenario 1
Proposal causes no interference.

Interference to BLTT20091029ABD LIC scenario 2
Proposal causes no interference.

Interference to proposal scenario 1
2.42% interference received

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KDOS-LD	D19	LD	APP	GLOBE, AZ	BLANK0000067173	
Undesireds:	K18JL-D	D18	LD	LIC	PHOENIX, AZ	BLDTL20141203AAT	115.0 km
	K19FD	N19+	TX	LIC	CAMP VERDE, AZ	BLTTL20050506ACT	162.2
	KGRF-LD	D19	LD	LIC	GILA RIVER INDIAN CO, AZ	BLANK0000001685	130.0
	K19JT-D	D19	LD	CP	GILA RIVER INDIAN CO, AZ	BNPDTL20100713APS	105.2
	KTTU	D19	DT	LIC	TUCSON, AZ	BLCDDT20030926ANZ	97.7
	KPAZ-TV	D20	DT	LIC	PHOENIX, AZ	BLCDDT20131121AHS	114.6

Service area	Terrain-limited	IX-free	Percent IX
7621.9 29,595	6730.8 28,450	6268.6 27,762	6.87 2.42

Undesired	Total IX	Unique IX	Prcnt Unique IX
KGRF-LD D19 LD LIC	8.9 0	1.0 0	0.01 0.00
K19JT-D D19 LD CP	29.8 0	6.0 0	0.09 0.00
KTTU D19 DT LIC	453.3 688	429.4 688	6.38 2.42
KPAZ-TV D20 DT LIC	5.0 0	1.0 0	0.01 0.00