

### 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 is within 320 kilometers of the common border between the United States of America and Mexico. As demonstrated in the attached study, the assigned, post transition, technical facility proposed herein satisfies DTV interference criteria with respect to all relevant Canadian allotments, applications and assignments.

tvstudy v2.2.2  
Database: localhost, Study: KGBT\_18\_460H\_360K\_ANT, Model: Longley-Rice  
Start: 2017.06.30 15:50:31

Study created: 2017.06.30 15:50:27

Study build station data: LMS TV 2017-06-27 (21)

Proposal: KGBT-TV D18 DT APP HARLINGEN, TX  
File number: KGBT\_18\_460H\_360K\_ANT  
Facility ID: 34457  
Station data: User record  
Record ID: 859  
Country: U.S.  
Zone: III

Non-U.S. records included

Stations potentially affected:

Call	Chan	Svc	Status	City, State	File Number	Distance
KCRP-CD	D17	DC	BL	CORPUS CHRISTI, TX	DTVBL48833	187.9 km
KNVO	D17	DT	BL	MCALLEN, TX	DTVBL69692	24.9
KNIC-DT	D18	DT	LIC	BLANCO, TX	BLCDDT20091019ADG	400.1
KVAW	D18	DT	LIC	EAGLE PASS, TX	BLCDDT20061115ABD	388.0
KUQI	D19	DT	BL	CORPUS CHRISTI, TX	DTVBL82910	180.2
KLDO-TV	D19	DT	LIC	LAREDO, TX	BLCDDT20110421ABF	244.5
XHFN	D17	DT	LIC	MONTERREY, NL	BLANKBDFS20160309AAU	256.5
XEFE	D17	DT	LIC	NUEVO LAREDO, TA	BLANKBDFS20130220AAF	222.6
LICITACIOND18	DT	LIC		LINARES, NL	BLANKBDFS20160525ABW	226.5
XHWX	D19	DT	LIC	MONTERREY, NL	BLANKBDFS20160309AAV	256.5
XERV	D19	DT	LIC	REYNOSA, TA	BLANKBDFS20160318ABA	23.0

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D18  
Latitude: 26 8 56.80 N (NAD83)  
Longitude: 97 49 19.20 W  
Height AMSL: 476.9 m  
HAAT: 460.0 m  
Peak ERP: 360 kW  
Antenna: DIE TFU-27ETT/VP-R 4C330 0.0 deg

39.1 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	84.7 kW	462.1 m	92.7 km
45.0	30.0	463.7	85.4
90.0	40.4	463.2	87.4
135.0	70.0	461.3	91.2
180.0	20.4	457.8	82.5
225.0	53.1	457.7	89.0
270.0	241	457.1	101.3
315.0	322	459.1	104.2

Proposal service area is within baseline plus 1.0%  
Proposal service area population is more than 95.0% of baseline

Distance to Canadian border: 2206.3 km

\*\*Proposal is within coordination distance of Mexican border  
Distance to Mexican border: 9.6 km

Conditions at FCC monitoring station: Kingsville TX  
Bearing: 357.6 degrees Distance: 143.8 km  
ERP: 93.6 kW Field strength: 27.9 dBu, 0.0 mV/m

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:  
 Bearing: 338.0 degrees Distance: 1697.0 km

No land mobile station failures found

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 DTVBL48833 BL, scenario 1  
 Proposal causes no interference.

-----  
 Interference to DTVBL69692 BL, scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KNVO	D17	DT	BL	MCALLEN, TX	DTVBL69692	
Undesireds:	KGBT-TV	D18	DT	BL	HARLINGEN, TX	DTVBL34457	24.9 km
	KGBT-TV	D18	DT	APP	HARLINGEN, TX	KGBT_18_460H_360K_ANT	24.9
	KMBH	D16	DT	BL	HARLINGEN, TX	DTVBL56079	24.3
	KCRP-CD	D17	DC	BL	CORPUS CHRISTI, TX	DTVBL48833	200.9
	XHFN	D17	DT	LIC	MONTERREY, NL	BLANKBPFS20160309AAU	231.6
	XEFE	D17	DT	LIC	NUEVO LAREDO, TA	BLANKBPFS20130220AAF	210.0

	Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
	13080.0	1,241,165	13076.0	1,241,165	12687.7	1,236,989	12668.1	1,237,203	0.16 -0.02
	10870.6	1,304,529	10854.5	1,304,529	10666.0	1,304,276	10565.5	1,304,275	0.94 0.00

(in Mexico)

Undesired	Total IX	Unique IX, before	Unique IX, after
-----------	----------	-------------------	------------------

KGBT-TV D18 DT BL	316.3	4,176	96.1	265			
KGBT-TV D18 DT APP	267.9	2,918			115.7	51	
KGBT-TV D18 DT BL	128.5	65	112.4	65			(in Mexico)
KGBT-TV D18 DT APP	228.9	66			212.9	66	(in Mexico)
KMBH D16 DT BL	272.3	3,911	52.0	0	120.1	1,044	
KMBH D16 DT BL	16.1	0	0.0	0	0.0	0	(in Mexico)
XHFN D17 DT LIC	16.0	0	0.0	0	0.0	0	
XHFN D17 DT LIC	60.1	188	52.0	188	52.0	188	(in Mexico)
XEFE D17 DT LIC	20.0	0	4.0	0	4.0	0	
XEFE D17 DT LIC	8.0	0	0.0	0	0.0	0	(in Mexico)

-----  
Interference to BLCDDT20091019ADG LIC, scenario 1  
Proposal causes no interference.

-----  
Interference to BLCDDT20091019ADG LIC, scenario 2  
Proposal causes no interference.

-----  
Interference to BLCDDT20061115ABD LIC, scenario 1  
Proposal causes no interference.

-----  
Interference to DTVBL82910 BL, scenario 1  
Proposal causes no interference.

-----  
Interference to BLCDDT20110421ABF LIC, scenario 1  
Proposal causes no interference.

-----  
Interference to BLANKBPFS20160309AAU LIC, scenario 1  
Proposal causes no interference.

Interference to BLANKBPFS20130220AAF LIC, scenario 1  
 Proposal causes no interference.

-----  
 Interference to BLANKBPFS20160525ABW LIC, scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	LICITACIOND18	D18	DT	LIC	LINARES, NL	BLANKBPFS20160525ABW	
Undesireds:	KGBT-TV	D18	DT	BL	HARLINGEN, TX	DTVBL34457	226.5 km
	KGBT-TV	D18	DT	APP	HARLINGEN, TX	KGBT_18_460H_360K_ANT	226.5
	XHFN	D17	DT	LIC	MONTERREY, NL	BLANKBPFS20160309AAU	116.3
	XHWX	D19	DT	LIC	MONTERREY, NL	BLANKBPFS20160309AAV	116.3
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	12542.2	188,035	11546.4	178,722	11186.1	178,458	11254.5
					178,506		-0.61 -0.03
Undesired				Total IX	Unique IX, before	Unique IX, after	
KGBT-TV D18 DT BL		336.2		173	336.2	173	
KGBT-TV D18 DT APP		267.9		125		267.9	125
XHFN D17 DT LIC		8.0		31	0.0	0	0
XHWX D19 DT LIC		24.1		91	16.1	60	16.1

-----  
 Interference to BLANKBPFS20160309AAV LIC, scenario 1  
 Proposal causes no interference.

-----  
 Interference to BLANKBPFS20160318ABA LIC, scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	XERV	D19	DT	LIC	REYNOSA, TA	BLANKBPFS20160318ABA	
Undesireds:	KGBT-TV	D18	DT	BL	HARLINGEN, TX	DTVBL34457	23.0 km
	KGBT-TV	D18	DT	APP	HARLINGEN, TX	KGBT_18_460H_360K_ANT	23.0
	KUQI	D19	DT	BL	CORPUS CHRISTI, TX	DTVBL82910	203.2

	KLDO-TV	D19	DT	LIC	LAREDO, TX	BLCDT20110421ABF	259.0					
	KXFX-CD	D20	DC	LIC	BROWNSVILLE, TX	BLDTA20150202ADU	32.9					
	XHWX	D19	DT	LIC	MONTERREY, NL	BLANKBPFS20160309AAV	249.8					
	LICITACIOND20	DT	LIC		AGUALEGUAS, NL	BLANKBPFS20160525ABS	173.5					
	Service area				Terrain-limited							
	8308.5	1,196,210			8308.5	1,196,210	7841.7	1,195,287	8109.0	1,195,790	-3.41	-0.04
	(in U.S.)											
	10267.5	1,278,888			10267.5	1,278,888	10135.3	1,277,686	10099.3	1,276,525	0.36	0.09
	Undesired				Total IX		Unique IX, before		Unique IX, after			
	KGBT-TV D18 DT BL				466.8	923	466.8	923			(in U.S.)	
	KGBT-TV D18 DT APP				199.5	420			199.5	420	(in U.S.)	
	KGBT-TV D18 DT BL				132.2	1,202	132.2	1,202				
	KGBT-TV D18 DT APP				168.2	2,363			168.2	2,363		
-----												
Interference to proposal, scenario 1												
	Call	Chan	Svc	Status	City, State	File Number			Distance			
Desired:	KGBT-TV	D18	DT	APP	HARLINGEN, TX	KGBT_18_460H_360K_ANT						
Undesireds:	KCRP-CD	D17	DC	BL	CORPUS CHRISTI, TX	DTVBL48833			187.9 km			
	KNVO	D17	DT	BL	MCALLEN, TX	DTVBL69692			24.9			
	KVAW	D18	DT	LIC	EAGLE PASS, TX	BLCDT20061115ABD			388.0			
	KUQI	D19	DT	BL	CORPUS CHRISTI, TX	DTVBL82910			180.2			
	LICITACIOND18	DT	LIC		LINARES, NL	BLANKBPFS20160525ABW			226.5			
	XERV	D19	DT	LIC	REYNOSA, TA	BLANKBPFS20160318ABA			23.0			
	Service area				Terrain-limited				IX-free			
	15713.2	1,234,641			15693.3	1,234,634	15669.3	1,230,750	0.15	0.31		
	10834.3	1,301,830			10830.3	1,301,830	10798.2	1,301,822	0.30	0.00	(in Mexico)	
	Undesired				Total IX		Unique IX		Prcnt Unique IX			
	KNVO D17 DT BL				12.0	3,884	4.0	0	0.03	0.00		
	KNVO D17 DT BL				8.0	4	8.0	4	0.07	0.00	(in Mexico)	

LICITACION D18 DT LIC	20.0	3,884	12.0	0	0.08	0.00	
LICITACION D18 DT LIC	20.0	0	20.0	0	0.19	0.00	(in Mexico)
XERV D19 DT LIC	4.0	4	4.0	4	0.04	0.00	(in Mexico)