

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 proposed service area resulting from the technical facility proposed herein is within the baseline service area plus 1%. 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: KTBV_33_RFS_597H_770K, Model: Longley-Rice
Start: 2017.06.22 10:25:21

Study created: 2017.06.22 10:25:14

Study build station data: LMS TV 2017-06-21 (19)

Proposal: KTBV D33 DT APP CONROE, TX
File number: KTBV_33_RFS_597H_770K
Facility ID: 28324
Station data: User record
Record ID: 681
Country: U.S.
Zone: III

Non-U.S. records included

Stations potentially affected:

Call	Chan	Svc	Status	City, State	File Number	Distance
KPXB-TV	D32	DT	LIC	CONROE, TX	BLCDT20090612AHP	1.0 km
KLPA-TV	D33	DT	BL	ALEXANDRIA, LA	DTVBL38590	360.5
KVUE	D33	DT	LIC	AUSTIN, TX	BLCDT20050624AAI	236.5
KUVN-DT	D33	DT	BL	GARLAND, TX	DTVBL35841	364.0
KEYE-TV	D34	DT	BL	AUSTIN, TX	DTVBL33691	236.5
KIAH	D34	DT	CP	HOUSTON, TX	BLANK0000025063	1.2
KIAH	D34	DT	BL	HOUSTON, TX	DTVBL23394	1.2
XHOR	D33	DT	LIC	MATAMOROS, TA	BLANKBPFS20050721AGA	455.0
XHLAT	D33	DT	LIC	NUEVO LAREDO, TA	BLANKBPFS20160318AAY	455.8

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D33
Latitude: 29 33 45.20 N (NAD83)
Longitude: 95 30 35.90 W
Height AMSL: 615.8 m
HAAT: 597.0 m
Peak ERP: 770 kW
Antenna: RFS PEPL42C 0.0 deg

40.6 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	767 kW	595.9 m	118.7 km
45.0	688	598.2	117.8
90.0	647	597.2	117.2
135.0	622	596.9	116.8
180.0	27.2	598.0	89.8
225.0	2.33	596.9	70.9
270.0	70.2	595.7	97.7
315.0	753	591.6	118.3

Database HAAT does not agree with computed HAAT
Database HAAT: 597 m Computed HAAT: 596 m

ERP exceeds maximum
ERP: 770 kW ERP maximum: 332 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: 1765.2 km

Distance to Mexican border: 422.3 km

Conditions at FCC monitoring station: Kingsville TX
Bearing: 225.1 degrees Distance: 330.6 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
 Bearing: 325.6 degrees Distance: 1468.3 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 BLCDT20090612AHP LIC, scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KPXB-TV	D32	DT	LIC	CONROE, TX	BLCDT20090612AHP	
Undesireds:	KTBU	D33	DT	BL	CONROE, TX	DTVBL28324	1.0 km
	KTBU	D33	DT	APP	CONROE, TX	KTBU_33_RFS_597H_770K	1.0
	KUBE-TV	D31	DT	BL	BAYTOWN, TX	DTVBL70492	0.0
	KPXJ	D32	DT	BL	MINDEN, LA	DTVBL81507	377.3
	KDAF	D32	DT	LIC	DALLAS, TX	BLCDT20010606ABJ	358.0
	KMYS	D32	DT	LIC	KERRVILLE, TX	BLCDT20060608ACW	326.9

	Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
	42314.5	6,082,624	42246.4	6,082,478	42174.2	6,081,613	42186.2	6,081,698	-0.03 -0.00
Undesired				Total IX		Unique IX, before		Unique IX, after	
KTBU D33 DT BL			24.1	440		24.1	440		
KTBU D33 DT APP			12.1	355			12.1	355	
KPXJ D32 DT BL			32.0	403		16.0	242	16.0	242
KDAF D32 DT LIC			32.0	183		16.0	22	16.0	22

Interference to BLCDT20090612AHP LIC, scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KPXB-TV	D32	DT	LIC	CONROE, TX	BLCDT20090612AHP	
Undesireds:	KTBU	D33	DT	BL	CONROE, TX	DTVBL28324	1.0 km
	KTBU	D33	DT	APP	CONROE, TX	KTBU_33_RFS_597H_770K	1.0
	KUBE-TV	D31	DT	BL	BAYTOWN, TX	DTVBL70492	0.0
	KPXJ	D32	DT	BL	MINDEN, LA	DTVBL81507	377.3
	KDAF	D32	DT	LIC	DALLAS, TX	BLCDT20010606ABJ	358.0
	KMYS	D32	DT	LIC	KERRVILLE, TX	BLCDT20060608ACW	326.9
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
42314.5 6,082,624		42246.4 6,082,478		42174.2 6,081,613		42186.2 6,081,698	-0.03 -0.00
Undesired		Total IX		Unique IX, before		Unique IX, after	
KTBU D33 DT BL		24.1	440	24.1	440		
KTBU D33 DT APP		12.1	355			12.1	355
KPXJ D32 DT BL		32.0	403	16.0	242	16.0	242
KDAF D32 DT LIC		32.0	183	16.0	22	16.0	22

Interference to DTVBL38590 BL, scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KLPA-TV	D33	DT	BL	ALEXANDRIA, LA	DTVBL38590	
Undesireds:	KTBU	D33	DT	BL	CONROE, TX	DTVBL28324	360.5 km
	KTBU	D33	DT	APP	CONROE, TX	KTBU_33_RFS_597H_770K	360.5
	WBXH-CD	D32	DC	CP	BATON ROUGE, LA	BLANK0000024779	180.2
	KPXJ	D32	DT	BL	MINDEN, LA	DTVBL81507	180.3
	WPXL-TV	D33	DT	BL	NEW ORLEANS, LA	DTVBL21729	302.5
	WVLA-TV	D34	DT	LIC	BATON ROUGE, LA	BLCDT20051221AOO	183.5
	KMSS-TV	D34	DT	LIC	SHREVEPORT, LA	BLCDT20050705AAB	178.8
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX

28237.3	412,219	28189.5	411,764	28125.9	411,454	28133.8	411,549	-0.03	-0.02
Undesired		Total IX		Unique IX, before		Unique IX, after			
KTBU D33 DT BL		63.6	310	63.6	310				
KTBU D33 DT APP		55.6	215			55.6	215		

Interference to DTVBL38590 BL, scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KLPA-TV	D33	DT	BL	ALEXANDRIA, LA	DTVBL38590	
Undesireds:	KTBU	D33	DT	BL	CONROE, TX	DTVBL28324	360.5 km
	KTBU	D33	DT	APP	CONROE, TX	KTBU_33_RFS_597H_770K	360.5
	WBXH-CD	D32	DC	BL	BATON ROUGE, LA	DTVBL51806	180.2
	KPXJ	D32	DT	BL	MINDEN, LA	DTVBL81507	180.3
	WPXL-TV	D33	DT	BL	NEW ORLEANS, LA	DTVBL21729	302.5
	WVLA-TV	D34	DT	LIC	BATON ROUGE, LA	BLCDDT20051221A00	183.5
	KMSS-TV	D34	DT	LIC	SHREVEPORT, LA	BLCDDT20050705AAB	178.8

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
28237.3	412,219	28189.5	411,764	28125.9	411,454	28133.8	411,549	-0.03	-0.02
Undesired		Total IX		Unique IX, before		Unique IX, after			
KTBU D33 DT BL		63.6	310	63.6	310				
KTBU D33 DT APP		55.6	215			55.6	215		

Interference to BLCDDT20050624AAI LIC, scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KVUE	D33	DT	LIC	AUSTIN, TX	BLCDDT20050624AAI	
Undesireds:	KTBU	D33	DT	BL	CONROE, TX	DTVBL28324	236.5 km
	KTBU	D33	DT	APP	CONROE, TX	KTBU_33_RFS_597H_770K	236.5
	KMYS	D32	DT	LIC	KERRVILLE, TX	BLCDDT20060608ACW	131.3

KUVN-DT	D33	DT	BL	GARLAND, TX	DTVBL35841	264.1
KEYE-TV	D34	DT	BL	AUSTIN, TX	DTVBL33691	0.0
XHPNW	D33	DT	LIC	PIEDRAS NEGRAS, CI	BLANKBPFS20160304ABT	319.2
XHLAT	D33	DT	LIC	NUEVO LAREDO, TA	BLANKBPFS20160318AAY	360.1
Service area	Terrain-limited		IX-free, before		IX-free, after	
34415.6	2,661,290	33648.0	2,611,314	32066.8	2,506,788	32322.9
						2,511,421
						Percent New IX
						-0.80
						-0.18

Undesired		Total IX	Unique IX, before		Unique IX, after	
KTBU D33 DT BL	1157.0	40,652	1049.2	10,906		
KTBU D33 DT APP	848.8	29,644			793.1	6,273
KMYS D32 DT LIC	444.4	81,128	364.4	55,519	416.5	69,580
KUVN-DT D33 DT BL	87.6	12,492	59.8	8,355	59.8	669

Interference to BLCDT20050624AAI LIC, scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KVUE	D33	DT	LIC	AUSTIN, TX	BLCDT20050624AAI	
Undesireds:	KTBU	D33	DT	BL	CONROE, TX	DTVBL28324	236.5 km
	KTBU	D33	DT	APP	CONROE, TX	KTBU_33_RFS_597H_770K	236.5
	KMYS	D32	DT	LIC	KERRVILLE, TX	BLCDT20060608ACW	131.3
	KUVN-DT	D33	DT	BL	GARLAND, TX	DTVBL35841	264.1
	KEYE-TV	D34	DT	BL	AUSTIN, TX	DTVBL33691	0.0
	XHPNW	D33	DT	LIC	PIEDRAS NEGRAS, CI	BLANKBPFS20160304ABT	319.2
	XHLAT	D33	DT	LIC	NUEVO LAREDO, TA	BLANKBPFS20160318AAY	360.1
Service area	Terrain-limited		IX-free, before		IX-free, after		Percent New IX
34415.6	2,661,290	33648.0	2,611,314	32066.8	2,506,788	32322.9	
						2,511,421	
							-0.80
							-0.18

Undesired		Total IX	Unique IX, before		Unique IX, after	
KTBU D33 DT BL	1157.0	40,652	1049.2	10,906		
KTBU D33 DT APP	848.8	29,644			793.1	6,273
KMYS D32 DT LIC	444.4	81,128	364.4	55,519	416.5	69,580
KUVN-DT D33 DT BL	87.6	12,492	59.8	8,355	59.8	669

Interference to DTVBL35841 BL, scenario 1
Proposal causes no interference.

Interference to DTVBL33691 BL, scenario 1
Proposal causes no interference.

Interference to DTVBL33691 BL, scenario 2
Proposal causes no interference.

Interference to BLANK0000025063 CP, scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KIAH	D34	DT	CP	HOUSTON, TX	BLANK0000025063	
Undesireds:	KTBU	D33	DT	BL	CONROE, TX	DTVBL28324	1.2 km
	KTBU	D33	DT	APP	CONROE, TX	KTBU_33_RFS_597H_770K	1.2
	WVLA-TV	D34	DT	LIC	BATON ROUGE, LA	BLCDT20051221A00	415.3
	KMSS-TV	D34	DT	LIC	SHREVEPORT, LA	BLCDT20050705AAB	375.1
	KEYE-TV	D34	DT	BL	AUSTIN, TX	DTVBL33691	237.2
	KSTR-DT	D34	DT	BL	IRVING, TX	DTVBL60534	358.6
	KPRC-TV	D35	DT	LIC	HOUSTON, TX	BLCDT19991022ABJ	0.0

	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
	36024.2	6,054,519	35968.1	6,054,274	35298.3
					6,041,905
					35318.4
					6,042,360
					-0.06
					-0.01

Undesired	Total IX	Unique IX, before	Unique IX, after
KTBU D33 DT BL	60.3	1,110	44.2
KTBU D33 DT APP	36.2	648	24.1
KMSS-TV D34 DT LIC	16.0	265	0.0
KEYE-TV D34 DT BL	465.2	8,315	425.1
KSTR-DT D34 DT BL	12.0	18	0.0

KPRC-TV D35 DT LIC	160.4	3,001	156.3	3,001	156.3	3,001
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Interference to DTVBL23394 BL, scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KIAH	D34	DT	BL	HOUSTON, TX	DTVBL23394	
Undesireds:	KTBU	D33	DT	BL	CONROE, TX	DTVBL28324	1.2 km
	KTBU	D33	DT	APP	CONROE, TX	KTBU_33_RFS_597H_770K	1.2
	WVLA-TV	D34	DT	LIC	BATON ROUGE, LA	BLCDT20051221AOO	415.3
	KMSS-TV	D34	DT	LIC	SHREVEPORT, LA	BLCDT20050705AAB	375.1
	KEYE-TV	D34	DT	BL	AUSTIN, TX	DTVBL33691	237.2
	KSTR-DT	D34	DT	BL	IRVING, TX	DTVBL60534	358.6
	KPRC-TV	D35	DT	LIC	HOUSTON, TX	BLCDT19991022ABJ	0.0

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
36012.2 6,054,406	35952.1 6,054,161	35286.4 6,041,945	35306.4 6,042,400	-0.06 -0.01

Undesired	Total IX	Unique IX, before	Unique IX, after
KTBU D33 DT BL	60.3 1,110	44.2 1,053	
KTBU D33 DT APP	36.2 648		24.1 598
KMSS-TV D34 DT LIC	16.0 265	0.0 0	0.0 0
KEYE-TV D34 DT BL	461.2 8,162	421.0 7,822	425.1 7,829
KSTR-DT D34 DT BL	12.0 18	0.0 0	0.0 0
KPRC-TV D35 DT LIC	160.4 3,001	156.3 3,001	156.3 3,001

Interference to BLANKBPFS20050721AGA LIC, scenario 1
Proposal causes no interference.

Interference to BLANKBPFS20160318AAY LIC, scenario 1
Proposal causes no interference.

Interference to proposal, scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KTBU	D33	DT	APP	CONROE, TX	KTBU_33_RFS_597H_770K	
Undesireds:	KPXB-TV	D32	DT	LIC	CONROE, TX	BLCDDT20090612AHP	1.0 km
	KLPA-TV	D33	DT	BL	ALEXANDRIA, LA	DTVBL38590	360.5
	KVUE	D33	DT	LIC	AUSTIN, TX	BLCDDT20050624AAI	236.5
	KUVN-DT	D33	DT	BL	GARLAND, TX	DTVBL35841	364.0
	KIAH	D34	DT	CP	HOUSTON, TX	BLANK0000025063	1.2

Service area	Terrain-limited	IX-free	Percent IX
35522.7 6,026,390	35462.6 6,025,775	34684.5 6,004,156	2.19 0.36

Undesired	Total IX	Unique IX	Prcnt Unique IX
KPXB-TV D32 DT LIC	116.3 2,509	88.2 621	0.25 0.01
KLPA-TV D33 DT BL	4.0 242	0.0 0	0.00 0.00
KVUE D33 DT LIC	597.5 13,248	573.4 12,849	1.62 0.21
KUVN-DT D33 DT BL	16.0 147	0.0 0	0.00 0.00
KIAH D34 DT CP	92.3 7,750	68.2 5,872	0.19 0.10

Interference to proposal, scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KTBU	D33	DT	APP	CONROE, TX	KTBU_33_RFS_597H_770K	
Undesireds:	KPXB-TV	D32	DT	LIC	CONROE, TX	BLCDDT20090612AHP	1.0 km
	KLPA-TV	D33	DT	BL	ALEXANDRIA, LA	DTVBL38590	360.5
	KVUE	D33	DT	LIC	AUSTIN, TX	BLCDDT20050624AAI	236.5
	KUVN-DT	D33	DT	BL	GARLAND, TX	DTVBL35841	364.0
	KIAH	D34	DT	BL	HOUSTON, TX	DTVBL23394	1.2

Service area	Terrain-limited	IX-free	Percent IX
35522.7 6,026,390	35462.6 6,025,775	34688.6 6,004,172	2.18 0.36

Undesired		Total IX		Unique IX	Prcnt Unique IX	
KPXB-TV D32 DT LIC	116.3	2,509	88.2	621	0.25	0.01
KLPA-TV D33 DT BL	4.0	242	0.0	0	0.00	0.00
KVUE D33 DT LIC	597.5	13,248	573.4	12,849	1.62	0.21
KUVN-DT D33 DT BL	16.0	147	0.0	0	0.00	0.00
KIAH D34 DT BL	88.3	7,734	64.2	5,856	0.18	0.10