

INTERFERENCE ANALYSIS FOR PROPOSED KIAH(TV) HOUSTON, TX (CHANNEL 34)

tvstudy v2.2.4 (Z2Qqz3)
Database: localhost, Study: kiah34m1, Model: Longley-Rice

Study build station data: LMS TV 2017-11-22 (93)

Proposal: KIAH34M1 D34 DT APP HOUSTON, TX
File number: kiah34m1
Facility ID: 23394
Station data: User record
Record ID: 1903
Country: U.S.
Zone: III

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	KVUE	D33	DT	LIC	AUSTIN, TX	BLCDT20050624AAI	237.2 km
Yes	KTBU	D33	DT	CP	CONROE, TX	BLANK0000034102	1.2
Yes	KTBU	D33	DT	BL	CONROE, TX	DTVBL28324	1.2
No	WVLA-TV	D34	DT	LIC	BATON ROUGE, LA	BLCDT20051221A00	415.3
Yes	KMSS-TV	D34	DT	LIC	SHREVEPORT, LA	BLCDT20050705AAB	375.1
Yes	KEYE-TV	D34	DT	CP	AUSTIN, TX	BLANK0000025679	237.2
Yes	KEYE-TV	D34	DT	APP	AUSTIN, TX	BLANK0000034391	237.2
Yes	KEYE-TV	D34	DT	BL	AUSTIN, TX	DTVBL33691	237.2
No	KSTR-DT	D34	DT	CP	IRVING, TX	BLANK0000027922	358.7
No	KSTR-DT	D34	DT	APP	IRVING, TX	BLANK0000034260	358.7
No	KSTR-DT	D34	DT	BL	IRVING, TX	DTVBL60534	358.6
No	KPRC-TV	D35	DT	LIC	HOUSTON, TX	BLCDT19991022ABJ	0.0

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D34

Latitude: 29 34 7.00 N (NAD83)
Longitude: 95 29 58.00 W
Height AMSL: 614.8 m
HAAT: 595.0 m

Peak ERP: 1000 kW

Antenna: Omnidirectional

Elev Pattn: Generic
Elec Tilt: 0.75

40.7 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	1000 kW	595.6 m	121.1 km
45.0	1000	597.8	121.2
90.0	1000	597.0	121.1
135.0	1000	595.9	121.1
180.0	1000	596.9	121.1
225.0	1000	595.7	121.1
270.0	1000	594.0	121.0
315.0	1000	590.5	120.8

ERP exceeds maximum

ERP: 1000 kW ERP maximum: 332 kW (Proposal is compliant with largest station in the market criteria.)

Distance to Canadian border: 1764.1 km

Distance to Mexican border: 423.3 km

Conditions at FCC monitoring station: Kingsville TX
Bearing: 225.1 degrees Distance: 331.8 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: 0.10 km (Higher resolution terrain profile point spacing is requested.)

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

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Interference to BLANK0000034102 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KTBU	D33	DT	CP	CONROE, TX	BLANK0000034102	
Undesireds:	KIAH	D34	DT	BL	HOUSTON, TX	DTVBL23394	1.2 km
	KIAH34M1	D34	DT	APP	HOUSTON, TX	kiah34m1	1.2
	KPXB-TV	D32	DT	CP	CONROE, TX	BLANK0000029089	0.8
	KLPA-TV	D33	DT	CP	ALEXANDRIA, LA	BLANK0000028079	360.5
	KVUE	D33	DT	LIC	AUSTIN, TX	BLCDT20050624AAI	236.5
	KUVN-DT	D33	DT	CP	GARLAND, TX	BLANK0000034451	364.0
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
37094.3 6,035,927		36986.1 6,035,568		36364.7 6,022,150		34503.6 5,997,136	5.12 0.42
Undesired			Total IX	Unique IX, before		Unique IX, after	
KIAH D34 DT BL			8.0	1,268		8.0 1,268	
KIAH34M1 D34 DT APP			1869.1	26,282		1869.1 26,282	
KLPA-TV D33 DT CP			8.0	242		0.0 0	
KVUE D33 DT LIC			613.4	12,150		573.3 11,855	
KUVN-DT D33 DT CP			32.1	53		0.0 0	

Interference to DTVBL28324 BL scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KTBU	D33	DT	BL	CONROE, TX	DTVBL28324	
Undesireds:	KIAH	D34	DT	BL	HOUSTON, TX	DTVBL23394	1.2 km
	KIAH34M1	D34	DT	APP	HOUSTON, TX	kiah34m1	1.2
	KPXB-TV	D32	DT	CP	CONROE, TX	BLANK0000029089	0.8
	KLPA-TV	D33	DT	CP	ALEXANDRIA, LA	BLANK0000028079	360.5
	KVUE	D33	DT	LIC	AUSTIN, TX	BLCDT20050624AAI	236.5
	KUVN-DT	D33	DT	CP	GARLAND, TX	BLANK0000034451	364.0
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
39285.7 6,076,501		39177.5 6,076,214		38567.8 6,065,095		38555.7 6,064,671	0.03 0.01
Undesired			Total IX	Unique IX, before		Unique IX, after	
KIAH D34 DT BL			8.0	59		8.0 59	
KIAH34M1 D34 DT APP			20.1	483		20.1 483	
KLPA-TV D33 DT CP			8.0	242		0.0 0	
KVUE D33 DT LIC			601.7	11,060		573.7 10,800	
KUVN-DT D33 DT CP			24.0	260		0.0 0	

Interference to BLCDT20050705AAB LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KMSS-TV	D34	DT	LIC	SHREVEPORT, LA	BLCDT20050705AAB	
Undesireds:	KIAH	D34	DT	BL	HOUSTON, TX	DTVBL23394	375.1 km
	KIAH34M1	D34	DT	APP	HOUSTON, TX	kiah34m1	375.1
	KLPA-TV	D33	DT	CP	ALEXANDRIA, LA	BLANK0000028079	178.8
	KASN	D34	DT	APP	PINE BLUFF, AR	BLANK0000034796	253.4
	WVLA-TV	D34	DT	LIC	BATON ROUGE, LA	BLCDT20051221AOO	362.0
	KMYT-TV	D34	DT	CP	TULSA, OK	BLANK0000027114	406.4
	KSTR-DT	D34	DT	CP	IRVING, TX	BLANK0000027922	283.6
	KLFI-CD	D35	DC	LIC	TEXARKANA, AR	BLANK0000008204	86.1
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
39069.3 1,068,120		38803.9 1,064,541		37316.7 1,049,839		37304.7 1,049,652	0.03 0.02
Undesired			Total IX	Unique IX, before		Unique IX, after	
KIAH D34 DT BL			16.1	96		12.0 51	
KIAH34M1 D34 DT APP			36.2	299		24.1 238	
KASN D34 DT APP			784.2	3,379		716.0 2,661	
WVLA-TV D34 DT LIC			64.6	424		24.2 203	
KSTR-DT D34 DT CP			288.8	8,707		272.7 8,421	
KLFI-CD D35 DC LIC			405.7	2,859		381.8 2,587	

Interference to BLANK0000025679 CP scenario 1

****IX: 0.90% interference caused (Interference consent agreement to be obtained.)**

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KEYE-TV	D34	DT	CP	AUSTIN, TX	BLANK0000025679	

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Undesireds:	KIAH	D34	DT	BL	HOUSTON, TX	DTVBL23394	237.2 km
	KIAH34M1	D34	DT	APP	HOUSTON, TX	kiah34m1	237.2
	KSTR-DT	D34	DT	CP	IRVING, TX	BLANK0000027922	259.6
	KHPF-CD	D35	DC	CP	FREDERICKSBURG, TX	BLANK0000027634	104.2

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
32207.5	2,582,939	31415.6	2,516,863	30914.7
		2,497,341	2,474,964	1.71
				0.90

Undesired	Total IX	Unique IX, before	Unique IX, after
KIAH D34 DT BL	457.1	10,596	441.1
KIAH34M1 D34 DT APP	997.1	41,639	10,437
KSTR-DT D34 DT CP	55.8	9,083	39.8
KHPF-CD D35 DC CP	4.0	2	8,924
		4.0	27.9
			258
			4.0
			2

Interference to BLANK0000034391 APP scenario 1
 **MX: 0.79% interference caused (Interference consent agreement to be obtained.)

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KEYE-TV	D34	DT	APP	AUSTIN, TX	BLANK0000034391	
Undesireds:	KIAH	D34	DT	BL	HOUSTON, TX	DTVBL23394	237.2 km
	KIAH34M1	D34	DT	APP	HOUSTON, TX	kiah34m1	237.2
	KSTR-DT	D34	DT	CP	IRVING, TX	BLANK0000027922	259.6
	KHPF-CD	D35	DC	CP	FREDERICKSBURG, TX	BLANK0000027634	104.2

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
35430.5	2,732,257	34463.4	2,619,787	33690.2
		2,598,477	2,578,062	1.78
				0.79

Undesired	Total IX	Unique IX, before	Unique IX, after
KIAH D34 DT BL	705.2	15,494	677.3
KIAH34M1 D34 DT APP	1309.3	35,909	12,738
KSTR-DT D34 DT CP	63.8	4,021	35.9
KHPF-CD D35 DC CP	32.1	4,551	1,265
		32.1	31.9
			1,265
			32.1
			4,551

Interference to DTVBL33691 BL scenario 1
 **IX: 1.03% interference caused (Interference consent agreement to be obtained.)

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KEYE-TV	D34	DT	BL	AUSTIN, TX	DTVBL33691	
Undesireds:	KIAH	D34	DT	BL	HOUSTON, TX	DTVBL23394	237.2 km
	KIAH34M1	D34	DT	APP	HOUSTON, TX	kiah34m1	237.2
	KVUE	D33	DT	LIC	AUSTIN, TX	BLCDT20050624AAI	0.0
	KSTR-DT	D34	DT	CP	IRVING, TX	BLANK0000027922	259.6
	KHPF-CD	D35	DC	CP	FREDERICKSBURG, TX	BLANK0000027634	104.3

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
32227.4	2,588,587	31447.5	2,525,831	30946.7
		2,505,079	2,479,216	1.82
				1.03

Undesired	Total IX	Unique IX, before	Unique IX, after
KIAH D34 DT BL	448.9	11,828	428.9
KIAH34M1 D34 DT APP	1025.1	46,357	11,669
KVUE D33 DT LIC	4.0	0	993.2
KSTR-DT D34 DT CP	63.8	9,081	4.0
KHPF-CD D35 DC CP	4.0	2	4.0
		4.0	37,532
			0
			31.9
			256
			4.0
			2

Interference to proposal scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KIAH34M1	D34	DT	APP	HOUSTON, TX	kiah34m1	
Undesireds:	KTBU	D33	DT	CP	CONROE, TX	BLANK0000034102	1.2 km
	KMSS-TV	D34	DT	LIC	SHREVEPORT, LA	BLCDT20050705AAB	375.1
	KEYE-TV	D34	DT	CP	AUSTIN, TX	BLANK0000025679	237.2
	KSTR-DT	D34	DT	CP	IRVING, TX	BLANK0000027922	358.7

Service area	Terrain-limited	IX-free	Percent IX
46022.7	6,102,354	45280.5	6,097,233
			1.34
			0.08

Undesired	Total IX	Unique IX	Prcnt Unique IX
KTBU D33 DT CP	4.0	287	4.0
KMSS-TV D34 DT LIC	12.0	352	287
KEYE-TV D34 DT CP	606.0	4,334	0.01
KSTR-DT D34 DT CP	24.1	42	0.00
		573.9	0.01
		4,050	0.00
		0	1.25
			0.07
			0.00
			0.00