INTERFERENCE ANALYSIS FOR PROPOSED KQFX-LD, COLUMBIA, MO (CHANNEL 30)

tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: kqfx_am1, Model: Longley-Rice

Study build station data: LMS TV 2019-12-17

    Proposal: KQFX-AM1 D30 LD APP COLUMBIA, MO
 File number: kqfx_am1
 Facility ID: 56176
Station data: User record
   Record ID: 4244
     Country: U.S.

Build options:
Protect pre-transition records not on baseline channel

Search options:
Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	KLMC-LP	N28+	TX	LIC	JEFFERSON CITY, MO	BLTTL20050613AFP	35.1 km
No	K30NF-D	D29	LD	CP	KEOKUK, IA	BLANK0000072001	204.5
No	KMBC-TV	D29	DT	LIC	KANSAS CITY, MO	BLCDT20090618ACY	172.8
No	KKAF-LD	D30	LD	LIC	FAYETTEVILLE, AR	BLANK0000062918	325.6
No	K30MF-D	D30	LD	LIC	JONESBORO, AR	BLANK0000001516	333.9
No	KLRT-TV	D30	DT	LIC	LITTLE ROCK, AR	BLCDT20020507AAK	442.0
No	KMIK-LD	D30	LD	CP	CEDAR FALLS, IA	BLANK0000052697	418.5
No	KLJB	D30	DT	CP	DAVENPORT, IA	BLANK0000034774	337.4
No	K30NF-D	D30	LD	LIC	KEOKUK, IA	BLANK0000010562	204.5
No	WEIU-TV	D30	DT	CP	CHARLESTON, IL	BLANK0000029172	376.7
No	WTCT	D30	DT	CP	MARION, IL	BLANK0000034912	337.2
No	WMBD-TV	D30	DT	LIC	PEORIA, IL	BLCDT20061019ADD	330.6
Yes	WODK-LD	D30	LD	CP	SPRINGFIELD, IL	BLANK0000089135	194.9
No	K30LZ-D	D30	LD	CP	FORT RILEY, KS	BNPDTL20100510AFK	357.8
No	K30AL-D	D30	LD	LIC	IOLA, KS	BLDTT20090226ABD	243.6
No	K30NO-D	D30	LD	CP	PAXICO, KS	BNPDTL20100514AIC	315.0
No	KCLJ-LP	D30	LD	CP	JOPLIN/CARTHAGE, MO	BDFCDTA20100813CAI	250.0
No	KCLJ-LP	N30z	TX	LIC	JOPLIN/CARTHAGE, MO	BLTTA20050506ACG	250.0
Yes	KPXE-TV	D30	DT	LIC	KANSAS CITY, MO	BLANK0000001701	171.5
No	K30MG-D	D30	LD	LIC	KIRKSVILLE, MO	BLDTT20120607ABF	161.6
No	K30OK-D	D30	LD	LIC	TULSA, OK	BLANK0000080580	420.6
No	KOTV-DT	D30	LD	LIC	TULSA, OK	BLCDT20120817ACF	355.0
No	KWBM	D31	DT	APP	HARRISON, AR	BLANK0000036086	234.4
No	KWBM	D31	DT	LIC	HARRISON, AR	BLCDT20091201ASC	234.4
Yes	KCWE	D31	DT	LIC	KANSAS CITY, MO	BLCDT20051014ABT	172.8
No	KDNL-TV	D31	DT	LIC	ST. LOUIS, MO	BLCDT20021216AAE	194.5

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

    Channel: D30
       Mask: Simple
   Latitude: 38 46 32.10 N (NAD83)
  Longitude: 92 33 24.90 W
Height AMSL: 575.6 m
       HAAT: 0.0 m
   Peak ERP: 15.0 kW
    Antenna: RFS-RD24OM488548L3S 0.0 deg
Elev Pattrn: Generic
  Elec Tilt: 0.75

50.3 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	7.20 kW	356.6 m	55.3 km
45.0	14.3	357.6	59.0
90.0	14.6	360.5	59.2
135.0	8.02	381.2	56.9
180.0	2.44	351.5	49.1
225.0	5.05	345.1	52.8
270.0	5.35	321.7	51.9
315.0	2.66	341.4	49.1

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Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 352 m

Distance to Canadian border: 873.6 km

Distance to Mexican border: 1287.6 km

Conditions at FCC monitoring station: Grand Island NE
Bearing: 297.3 degrees Distance: 554.8 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 281.8 degrees Distance: 1096.6 km

Study cell size: 1.00 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 BLANK0000089135 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WODK-LD	D30	LD	CP	SPRINGFIELD, IL	BLANK0000089135	
Undesireds:	KQFX-AM1	D30	LD	APP	COLUMBIA, MO	kqfx_am1	194.9 km
	WLEH-LD	D29	LD	LIC	ST. LOUIS, IL	BLANK0000080775	44.5
	K30NF-D	D30	LD	LIC	KEOKUK, IA	BLANK0000010562	222.5
	WEIU-TV	D30	DT	CP	CHARLESTON, IL	BLANK0000029172	206.4
	WTCT	D30	DT	CP	MARION, IL	BLANK0000034912	160.5
	KDNL-TV	D31	DT	LIC	ST. LOUIS, MO	BLCDT20021216AAE	0.8

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
7092.5	2,361,273	6824.3	2,347,712	3494.7	1,747,742	3494.7	1,747,742	0.00 0.00

Undesired		Total IX		Unique IX, before		Unique IX, after	
KQFX-AM1 D30 LD APP		1.0	0			0.0	0
WLEH-LD D29 LD LIC		60.3	1,713	1.0	127	1.0	127
WEIU-TV D30 DT CP		7.0	308	0.0	0	0.0	0
WTCT D30 DT CP		621.4	39,616	54.2	4,712	54.2	4,712
KDNL-TV D31 DT LIC		3269.3	595,056	2690.2	560,017	2690.2	560,017

Interference to BLANK0000001701 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KPXE-TV	D30	DT	LIC	KANSAS CITY, MO	BLANK0000001701	
Undesireds:	KQFX-AM1	D30	LD	APP	COLUMBIA, MO	kqfx_am1	171.5 km
	KMBC-TV	D29	DT	LIC	KANSAS CITY, MO	BLCDT20090618ACY	6.8
	KCWE	D31	DT	LIC	KANSAS CITY, MO	BLCDT20051014ABT	6.8

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
32176.9	2,439,945	31908.3	2,438,780	31772.0	2,436,141	31443.0	2,433,799	1.04 0.10

Undesired		Total IX		Unique IX, before		Unique IX, after	
KQFX-AM1 D30 LD APP		334.9	2,365			329.0	2,342
KMBC-TV D29 DT LIC		101.6	2,243	13.0	508	13.0	508
KCWE D31 DT LIC		123.4	2,131	34.7	396	34.7	396

Interference to BLCDT20051014ABT LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KCWE	D31	DT	LIC	KANSAS CITY, MO	BLCDT20051014ABT	
Undesireds:	KQFX-AM1	D30	LD	APP	COLUMBIA, MO	kqfx_am1	172.8 km
	KPXE-TV	D30	DT	LIC	KANSAS CITY, MO	BLANK0000001701	6.8
	KWBM	D31	DT	APP	HARRISON, AR	BLANK0000036086	293.5
	KDCU-DT	D31	DT	LIC	DERBY, KS	BLCDT20090821AAM	298.2
	KDNL-TV	D31	DT	LIC	ST. LOUIS, MO	BLCDT20021216AAE	366.8
	KMTV-TV	D31	DT	LIC	OMAHA, NE	BLANK0000074904	278.4

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	KSMO-TV	D32	DT	LIC	KANSAS CITY, MO	BLANK0000072612	3.9

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
32206.9	2,459,121	31763.8	2,455,885	30719.9	2,433,928	30719.9	2,433,928	0.00	0.00

Undesired		Total IX		Unique IX, before		Unique IX, after	
KQFX-AM1 D30 LD APP		1.0	5			0.0	0
KPXE-TV D30 DT LIC		129.0	2,916	56.0	448	56.0	448
KWBM D31 DT APP		304.2	879	198.9	539	198.9	539
KDCU-DT D31 DT LIC		231.9	6,079	134.9	4,246	134.9	4,246
KDNL-TV D31 DT LIC		32.8	83	10.9	36	10.9	36
KMTV-TV D31 DT LIC		389.5	9,533	337.9	7,870	337.9	7,870
KSMO-TV D32 DT LIC		188.4	6,889	112.5	4,577	112.5	4,577

Interference to BLCDT20051014ABT LIC scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KCWE	D31	DT	LIC	KANSAS CITY, MO	BLCDT20051014ABT	
Undesireds:	KQFX-AM1	D30	LD	APP	COLUMBIA, MO	kqfx_am1	172.8 km
	KPXE-TV	D30	DT	LIC	KANSAS CITY, MO	BLANK0000001701	6.8
	KWBM	D31	DT	LIC	HARRISON, AR	BLCDT20091201ASC	293.5
	KDCU-DT	D31	DT	LIC	DERBY, KS	BLCDT20090821AAM	298.2
	KDNL-TV	D31	DT	LIC	ST. LOUIS, MO	BLCDT20021216AAE	366.8
	KMTV-TV	D31	DT	LIC	OMAHA, NE	BLANK0000074904	278.4
	KSMO-TV	D32	DT	LIC	KANSAS CITY, MO	BLANK0000072612	3.9

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
32206.9	2,459,121	31763.8	2,455,885	30900.7	2,434,437	30900.7	2,434,437	0.00	0.00

Undesired		Total IX		Unique IX, before		Unique IX, after	
KQFX-AM1 D30 LD APP		1.0	5			0.0	0
KPXE-TV D30 DT LIC		129.0	2,916	63.0	481	63.0	481
KWBM D31 DT LIC		48.2	102	18.1	30	18.1	30
KDCU-DT D31 DT LIC		231.9	6,079	157.0	4,308	157.0	4,308
KDNL-TV D31 DT LIC		32.8	83	17.8	52	17.8	52
KMTV-TV D31 DT LIC		389.5	9,533	337.9	7,870	337.9	7,870
KSMO-TV D32 DT LIC		188.4	6,889	124.5	4,624	124.5	4,624

Interference to proposal scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KQFX-AM1	D30	LD	APP	COLUMBIA, MO	kqfx_am1	
Undesireds:	K30NF-D	D30	LD	LIC	KEOKUK, IA	BLANK0000010562	204.5 km
	KCLJ-LP	D30	LD	CP	JOPLIN/CARTHAGE, MO	BDFCDTA20100813CAI	250.0
	KPXE-TV	D30	DT	LIC	KANSAS CITY, MO	BLANK0000001701	171.5

Service area		Terrain-limited		IX-free		Percent IX	
9252.1	337,592	9150.9	336,368	8945.8	330,160	2.24	1.85

Undesired		Total IX		Unique IX		Prcnt Unique IX	
KPXE-TV D30 DT LIC		205.1	6,208	205.1	6,208	2.24	1.85
