tvstudy v2.2.4 (Z2Qqz3)
Database: localhost, Study: KXFV-LD 15 kW FSM Application, Model: Longley-Rice
Start: 2017.12.07 16:21:11

Study created: 2017.12.07 16:21:11

Study build station data: LMS TV 2017-12-07 (65)

    Proposal: KFXV-LD D20 LD LIC MCALLEN, TX
 File number: KXFV-LD 15 kW FSM Application
 Facility ID: 49038
Station data: User record
   Record ID: 1388
     Country: U.S.

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

Search options:
Non-U.S. records included

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	KSCC	D19	DT	CP	CORPUS CHRISTI, TX	BLANK0000027434	191.1 km
No	KSCC	D19	DT	APP	CORPUS CHRISTI, TX	BLANK0000035702	191.1
No	KSCC	D19	DT	BL	CORPUS CHRISTI, TX	DTVBL82910	191.1
No	KLDO-TV	D19	DT	LIC	LAREDO, TX	BLCDT20110421ABF	232.8
No	NEW	D20	LD	APP	KIRKSVILLE, MO	BMJADTL20100517AFH	215.2
Yes	KXFX-CD	D20	DC	LIC	BROWNSVILLE, TX	BLDTA20150202ADU**	55.9
No	K20JT-D	D20	LD	LIC	CORPUS CHRISTI, TX	BLDTL20140326AAP	198.7
No	KRTX-LP	D20	LD	CP	SAN ANTONIO, TX	BDFCDTL20111212ABI	356.8
No	KAVU-TV	D20	DT	CP	VICTORIA, TX	BLANK0000028099	320.0
No	KAVU-TV	D20	DT	BL	VICTORIA, TX	DTVBL73101	320.0
No	KLUJ-TV	D21	DT	CP	HARLINGEN, TX	BLANK0000028192	31.6
No	KLUJ-TV	D21	DT	BL	HARLINGEN, TX	DTVBL12913	31.6
No	KJST-LP	N28-	TX	LIC	MCALLEN, TX	BLTTL19990218JB	25.1
No	XHWX	D19	DT	LIC	MONTERREY, NL	BLANKBPFS20160309AAV	231.6
No	XERV	D19	DT	LIC	REYNOSA, TA	BLANKBPFS20160318ABA	26.7
No	CADENATRES	D20	DT	LIC	NUEVA ROSITA, CI	BLANKBPFS20160525ABH	373.7
No	XHPN	D20	DT	LIC	PIEDRAS NEGRAS, CI	BLANKBPFS20160226ABG	379.0
Yes	XHSTC	D20	DT	LIC	SALTILLO, CI	BLANKBPFS20140507AAH	304.0
Yes	LICITACION	D20	DT	LIC	AGUALEGUAS, NL	BLANKBPFS20160525ABS	149.2
Yes	CADENATRES	D20	DT	LIC	LINARES, NL	BLANKBPFS20160525ABX	204.0
No	CADENATRES	D20	DT	LIC	CIUDAD VICTORIA, TA	BLANKBPFS20160525ACF	285.1
No	XHSAW	D21	DT	LIC	MONTERREY, NL	BLANKBPFS20100601AFI	231.4
No	XHSAW	D21	DT	LIC	SABINAS HIDALGO, NL	BLANKBPFS20090811AAU	216.6
No	XHFET	D21	DT	LIC	SAN FERNANDO, TA	BLANKBPFS20111115ABT	137.1

**The proposed KFXV-LD operation causes excessive interference to KxFX-CD's licensed operation. However, as detailed Elsewhere in this application, KXFX-CD has agreed to accept the interference caused by the proposed KFXV-LD operation.

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

    Channel: D20
       Mask: Full Service
   Latitude: 26 5 19.00 N (NAD83)
  Longitude: 98 3 45.00 W
Height AMSL: 277.0 m
       HAAT: 0.0 m
   Peak ERP: 15.0 kW
    Antenna: DIE-TFU-12DSB/VP-R C160 (ID 1002323) 0.0 deg
Elev Pattrn: Generic

49.4 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	14.0 kW	251.4 m	54.3 km
45.0	13.6	254.7	54.3
90.0	14.4	255.3	54.7
135.0	11.6	254.7	53.5
180.0	1.14	249.6	41.1
225.0	1.16	254.1	41.4
270.0	2.50	249.7	45.2
315.0	13.6	248.1	54.0

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m   Computed HAAT: 252 m

Distance to Canadian border: 2225.4 km

**Proposal is within coordination distance of Mexican border
Distance to Mexican border: 2.6 km

Conditions at FCC monitoring station: Kingsville TX

Bearing: 6.7 degrees   Distance: 151.4 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 338.7 degrees   Distance: 1694.5 km

No land mobile station failures found

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 BLDTA20150202ADU LIC scenario 1
**IX: 51.17% interference caused

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KXFX-CD	D20	DC	LIC	BROWNSVILLE, TX	BLDTA20150202ADU	
Undesireds:	KFXV-LD	D20	LD	LIC	MCALLEN, TX	KXFV-LD 15 kW FSM Appl	55.9 km
	KLUJ-TV	D21	DT	CP	HARLINGEN, TX	BLANK0000028192	38.3

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX		
725.8	224,683	725.8	224,683	725.8	224,683	105.0	109,704	85.53	51.17	
1098.8	468,920	1098.8	468,920	1098.8	468,920	369.4	443,928	66.38	5.33	(in Mexico)

Undesired	Total IX	Unique IX, before	Unique IX, after	
KFXV-LD D20 LD LIC	620.8	114,979	620.8	114,979
KFXV-LD D20 LD LIC	729.3	24,992	729.3	24,992 (in Mexico)

Interference to BLANKBPFS20140507AAH LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	XHSTC	D20	DT	LIC	SALTILLO, CI	BLANKBPFS20140507AAH	
Undesireds:	KFXV-LD	D20	LD	LIC	MCALLEN, TX	KXFV-LD 15 kW FSM Appl	304.0 km
	XHWX	D19	DT	LIC	MONTERREY, NL	BLANKBPFS20160309AAV	72.7
	CADENATRES	D20	DT	LIC	NUEVA ROSITA, CI	BLANKBPFS20160525ABH	283.5
	XHSCE	D21	DT	LIC	SALTILLO, CI	BLANKBPFS20160224AAR	5.7
	XHSAW	D21	DT	LIC	MONTERREY, NL	BLANKBPFS20100601AFI	72.9

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
7755.7	1,106,398	4378.0	926,710	4283.8	926,640	4282.8	926,640	0.02	0.00

Undesired	Total IX	Unique IX, before		Unique IX, after	
KFXV-LD D20 LD LIC	3.0	0		1.0	0
XHWX D19 DT LIC	1.0	0	0.0	0	0.0	0
CADENATRES D20 DT LIC	4.0	0	4.0	0	3.0	0
XHSCE D21 DT LIC	88.2	70	88.2	70	87.2	70
XHSAW D21 DT LIC	2.0	0	1.0	0	1.0	0

Interference to BLANKBPFS20160525ABS LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	LICITACION	D20	DT	LIC	AGUALEGUAS, NL	BLANKBPFS20160525ABS	
Undesireds:	KFXV-LD	D20	LD	LIC	MCALLEN, TX	KXFV-LD 15 kW FSM Appl	149.2 km
	CADENATRES	D20	DT	LIC	NUEVA ROSITA, CI	BLANKBPFS20160525ABH	245.9
	CADENATRES	D20	DT	LIC	LINARES, NL	BLANKBPFS20160525ABX	163.4
	CADENATRES	D20	DT	LIC	CIUDAD VICTORIA, TA	BLANKBPFS20160525ACF	290.9

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX		
100.5	1,495	99.5	1,495	98.6	1,492	98.6	1,492	0.00	0.00	(in U.S.)
6145.9	34,681	6117.3	34,677	5899.0	34,151	5862.5	34,006	0.62	0.42	

Undesired	Total IX	Unique IX, before		Unique IX, after	
KFXV-LD D20 LD LIC	45.4	149		36.5	145
CADENATRES D20 DT LIC	1.0	0	0.0	0	0.0	0
CADENATRES D20 DT LIC	1.0	3	1.0	3	1.0	3 (in U.S.)
CADENATRES D20 DT LIC	218.3	526	188.7	525	181.7	522
CADENATRES D20 DT LIC	28.6	1	0.0	0	0.0	0

Interference to BLANKBPFS20160525ABX LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	CADENATRES	D20	DT	LIC	LINARES, NL	BLANKBPFS20160525ABX	
Undesireds:	KFXV-LD	D20	LD	LIC	MCALLEN, TX	KXFV-LD 15 kW FSM Appl	204.0 km
	KXFX-CD	D20	DC	LIC	BROWNSVILLE, TX	BLDTA20150202ADU	239.2
	XHWX	D19	DT	LIC	MONTERREY, NL	BLANKBPFS20160309AAV	116.3
	LICITACION	D20	DT	LIC	AGUALEGUAS, NL	BLANKBPFS20160525ABS	163.4
	CADENATRES	D20	DT	LIC	CIUDAD VICTORIA, TA	BLANKBPFS20160525ACF	131.6

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
12548.2	188,148	11541.3	179,138	9058.3	144,673	9039.4	144,655	0.21	0.01

Undesired	Total IX	Unique IX, before		Unique IX, after	
KFXV-LD D20 LD LIC	40.9	18		19.0	18
KXFX-CD D20 DC LIC	4.0	0	1.0	0	1.0	0
XHWX D19 DT LIC	7.0	44	0.0	0	0.0	0
LICITACION D20 DT LIC	93.6	536	35.9	76	23.9	76
CADENATRES D20 DT LIC	2444.1	34,389	2384.4	33,929	2379.4	33,929

Interference to proposal scenario 1
2.02% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KFXV-LD	D20	LD	LIC	MCALLEN, TX	KXFV-LD 15 kW FSM Appl	
Undesireds:	KXFX-CD	D20	DC	LIC	BROWNSVILLE, TX	BLDTA20150202ADU	55.9 km
	XERV	D19	DT	LIC	REYNOSA, TA	BLANKBPFS20160318ABA	26.7

Service area		Terrain-limited		IX-free		Percent IX		
4661.5	975,374	4661.5	975,374	4589.4	955,647	1.55	2.02	
3239.4	759,734	3239.4	759,734	3045.7	741,883	5.98	2.35	(in Mexico)

Undesired	Total IX		Unique IX		Prcnt Unique IX		
KXFX-CD D20 DC LIC	72.1	19,727	50.3	8,601	1.08	0.88	
KXFX-CD D20 DC LIC	192.7	17,851	148.2	7,641	4.58	1.01	(in Mexico)
XERV D19 DT LIC	21.7	11,126	0.0	0	0.00	0.00	
XERV D19 DT LIC	45.5	10,210	1.0	0	0.03	0.00	(in Mexico)