

INTERFERENCE ANALYSIS FOR PROPOSED KPXR-TV CEDAR RAPIDS, IA (CHANNEL 22)

tvstudy v2.2.3 (Dxtpx3)
Database: localhost, Study: kpxr22m5, Model: Longley-Rice

Study build station data: LMS TV 2017-10-24 (75)

Proposal: KPXR22M5 D22 DT APP CEDAR RAPIDS, IA
File number: kpxr22m5
Facility ID: 21156
Station data: User record
Record ID: 1601
Country: U.S.
Zone: II

Stations affected by proposal:

Call	Chan	Svc	Status	City, State	File Number	Distance
KGCW	D21	DT	CP	BURLINGTON, IA	BLANK0000028473	156.9 km
KGCW	D21	DT	BL	BURLINGTON, IA	DTVBL7841	156.9
WLS-TV	D22	DT	CP	CHICAGO, IL	BLANK0000025941	353.6
WLS-TV	D22	DT	BL	CHICAGO, IL	DTVBL73226	353.6
WBUI	D22	DT	LIC	DECATUR, IL	BLCDT20091119ACF	364.9
WUCW	D22	DT	LIC	MINNEAPOLIS, MN	BLCDT20060405AAI	323.6
WOWT	D22	DT	LIC	OMAHA, NE	BLCDT20110509AAN	360.1
WFRV-TV	D22	DT	CP	GREEN BAY, WI	BLANK0000027552	388.5
WFRV-TV	D22	DT	BL	GREEN BAY, WI	DTVBL9635	388.5
KCWI-TV	D23	DT	APP	AMES, IA	BPCDT20130205AAY	151.7
KCWI-TV	D23	DT	LIC	AMES, IA	BLCDT20090612AIO	151.7

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D22
Latitude: 42 17 43.00 N (NAD83)
Longitude: 91 53 11.00 W
Height AMSL: 722.9 m
HAAT: 451.0 m
Peak ERP: 215 kW
Antenna: Omnidirectional
Elev Pattn: Generic
Elec Tilt: 0.8

39.6 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	215 kW	440.7 m	98.1 km
45.0	215	439.5	98.0
90.0	215	448.7	98.7
135.0	215	463.0	99.8
180.0	215	458.3	99.4
225.0	215	454.2	99.1
270.0	215	463.3	99.8
315.0	215	442.3	98.2

**Proposal service area extends beyond baseline plus 1.0%
Proposal service area population is more than 95.0% of baseline

Distance to Canadian border: 639.4 km

Distance to Mexican border: 1631.3 km

Conditions at FCC monitoring station: Allegan MI
Bearing: 83.9 degrees Distance: 487.5 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 262.4 degrees Distance: 1139.0 km

Study cell size: 1.00 km (Higher resolution cell size requested.)
Profile point spacing: 0.50 km (Higher resolution terrain profile point spacing requested.)

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

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Scenario comparisons

Case	Before		After		Percent New IX	
IX_BLANK0000028473_C	28244.4	892,867	28229.4	892,625	0.05	0.03
IX_BLANK0000028473_C	28245.4	892,869	28230.4	892,627	0.05	0.03
IX_BLANK0000028473_C	28244.4	892,867	28229.4	892,625	0.05	0.03
IX_BLANK0000028473_C	28245.4	892,869	28230.4	892,627	0.05	0.03
IX_DTVBL7841_BL_#1	27780.4	887,424	27761.4	886,879	0.07	0.06
IX_DTVBL7841_BL_#2	27780.4	887,426	27761.4	886,881	0.07	0.06
IX_DTVBL7841_BL_#3	27780.4	887,424	27761.4	886,879	0.07	0.06
IX_DTVBL7841_BL_#4	27780.4	887,426	27761.4	886,881	0.07	0.06
IX_BLANK0000025941_C	38944.5	10,166,277	38943.5	10,166,275	0.00	0.00
IX_BLANK0000025941_C	38944.5	10,166,277	38943.5	10,166,275	0.00	0.00
IX_BLANK0000025941_C	38944.5	10,166,277	38943.5	10,166,275	0.00	0.00
IX_BLANK0000025941_C	38944.5	10,166,277	38943.5	10,166,275	0.00	0.00
IX_BLANK0000025941_C	38965.6	10,169,005	38964.6	10,169,003	0.00	0.00
IX_BLANK0000025941_C	38965.6	10,169,005	38964.6	10,169,003	0.00	0.00
IX_BLANK0000025941_C	38965.6	10,169,005	38964.6	10,169,003	0.00	0.00
IX_BLANK0000025941_C	38965.6	10,169,005	38964.6	10,169,003	0.00	0.00
IX_BLANK0000025941_C	38965.6	10,169,005	38964.6	10,169,003	0.00	0.00
IX_BLANK0000025941_C	38789.6	10,162,040	38788.6	10,162,038	0.00	0.00
IX_BLANK0000025941_C	38902.4	10,165,138	38901.4	10,165,136	0.00	0.00
IX_BLANK0000025941_C	38789.6	10,162,040	38788.6	10,162,038	0.00	0.00
IX_BLANK0000025941_C	38902.4	10,165,138	38901.4	10,165,136	0.00	0.00
IX_BLANK0000025941_C	38789.6	10,162,040	38788.6	10,162,038	0.00	0.00
IX_BLANK0000025941_C	38902.4	10,165,138	38901.4	10,165,136	0.00	0.00
IX_BLANK0000025941_C	38789.6	10,162,040	38788.6	10,162,038	0.00	0.00
IX_BLANK0000025941_C	38902.4	10,165,138	38901.4	10,165,136	0.00	0.00
IX_BLANK0000025941_C	38810.8	10,164,768	38809.8	10,164,766	0.00	0.00
IX_BLANK0000025941_C	38923.6	10,167,866	38922.6	10,167,864	0.00	0.00
IX_BLANK0000025941_C	38810.8	10,164,768	38809.8	10,164,766	0.00	0.00
IX_BLANK0000025941_C	38923.6	10,167,866	38922.6	10,167,864	0.00	0.00
IX_BLANK0000025941_C	38810.8	10,164,768	38809.8	10,164,766	0.00	0.00
IX_BLANK0000025941_C	38923.6	10,167,866	38922.6	10,167,864	0.00	0.00
IX_BLANK0000025941_C	38810.8	10,164,768	38809.8	10,164,766	0.00	0.00
IX_BLANK0000025941_C	38923.6	10,167,866	38922.6	10,167,864	0.00	0.00
IX_DTVBL73226_BL_#1	38557.7	10,145,374	38556.7	10,145,374	0.00	0.00
IX_DTVBL73226_BL_#2	38557.7	10,145,374	38556.7	10,145,374	0.00	0.00
IX_DTVBL73226_BL_#3	38557.7	10,145,374	38556.7	10,145,374	0.00	0.00
IX_DTVBL73226_BL_#4	38557.7	10,145,374	38556.7	10,145,374	0.00	0.00
IX_DTVBL73226_BL_#5	38577.8	10,146,458	38576.8	10,146,458	0.00	0.00
IX_DTVBL73226_BL_#6	38577.8	10,146,458	38576.8	10,146,458	0.00	0.00
IX_DTVBL73226_BL_#7	38577.8	10,146,458	38576.8	10,146,458	0.00	0.00
IX_DTVBL73226_BL_#8	38577.8	10,146,458	38576.8	10,146,458	0.00	0.00
IX_DTVBL73226_BL_#9	38413.6	10,140,713	38412.6	10,140,713	0.00	0.00
IX_DTVBL73226_BL_#10	38516.6	10,144,413	38515.7	10,144,413	0.00	0.00
IX_DTVBL73226_BL_#11	38413.6	10,140,713	38412.6	10,140,713	0.00	0.00
IX_DTVBL73226_BL_#12	38516.6	10,144,413	38515.7	10,144,413	0.00	0.00
IX_DTVBL73226_BL_#13	38413.6	10,140,713	38412.6	10,140,713	0.00	0.00
IX_DTVBL73226_BL_#14	38516.6	10,144,413	38515.7	10,144,413	0.00	0.00
IX_DTVBL73226_BL_#15	38413.6	10,140,713	38412.6	10,140,713	0.00	0.00
IX_DTVBL73226_BL_#16	38516.6	10,144,413	38515.7	10,144,413	0.00	0.00
IX_DTVBL73226_BL_#17	38433.8	10,141,797	38432.8	10,141,797	0.00	0.00
IX_DTVBL73226_BL_#18	38536.8	10,145,497	38535.8	10,145,497	0.00	0.00
IX_DTVBL73226_BL_#19	38433.8	10,141,797	38432.8	10,141,797	0.00	0.00
IX_DTVBL73226_BL_#20	38536.8	10,145,497	38535.8	10,145,497	0.00	0.00
IX_DTVBL73226_BL_#21	38433.8	10,141,797	38432.8	10,141,797	0.00	0.00
IX_DTVBL73226_BL_#22	38536.8	10,145,497	38535.8	10,145,497	0.00	0.00
IX_DTVBL73226_BL_#23	38433.8	10,141,797	38432.8	10,141,797	0.00	0.00
IX_DTVBL73226_BL_#24	38536.8	10,145,497	38535.8	10,145,497	0.00	0.00
IX_BLCDT20091119ACF_	25724.7	973,711	25724.7	973,711	0.00	0.00
IX_BLCDT20091119ACF_	25645.4	972,828	25645.4	972,828	0.00	0.00
IX_BLCDT20091119ACF_	25744.6	973,783	25744.6	973,783	0.00	0.00
IX_BLCDT20091119ACF_	25665.3	972,900	25665.3	972,900	0.00	0.00
IX_BLCDT20091119ACF_	25724.7	973,711	25724.7	973,711	0.00	0.00
IX_BLCDT20091119ACF_	25645.4	972,828	25645.4	972,828	0.00	0.00
IX_BLCDT20091119ACF_	25744.6	973,783	25744.6	973,783	0.00	0.00
IX_BLCDT20091119ACF_	25665.3	972,900	25665.3	972,900	0.00	0.00
IX_BLCDT20091119ACF_	25679.5	973,342	25679.5	973,342	0.00	0.00
IX_BLCDT20091119ACF_	25710.7	973,643	25710.7	973,643	0.00	0.00
IX_BLCDT20091119ACF_	25600.2	972,459	25600.2	972,459	0.00	0.00
IX_BLCDT20091119ACF_	25631.4	972,760	25631.4	972,760	0.00	0.00
IX_BLCDT20091119ACF_	25698.4	973,414	25698.4	973,414	0.00	0.00
IX_BLCDT20091119ACF_	25729.6	973,715	25729.6	973,715	0.00	0.00
IX_BLCDT20091119ACF_	25619.1	972,531	25619.1	972,531	0.00	0.00

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Scenario comparisons

Case		Before		After		Percent New IX	
IX_BLCDT20091119ACF_	25650.3	972,832	25650.3	972,832	0.00	0.00	
IX_BLCDT20091119ACF_	25679.5	973,342	25679.5	973,342	0.00	0.00	
IX_BLCDT20091119ACF_	25710.7	973,643	25710.7	973,643	0.00	0.00	
IX_BLCDT20091119ACF_	25600.2	972,459	25600.2	972,459	0.00	0.00	
IX_BLCDT20091119ACF_	25631.4	972,760	25631.4	972,760	0.00	0.00	
IX_BLCDT20091119ACF_	25698.4	973,414	25698.4	973,414	0.00	0.00	
IX_BLCDT20091119ACF_	25729.6	973,715	25729.6	973,715	0.00	0.00	
IX_BLCDT20091119ACF_	25619.1	972,531	25619.1	972,531	0.00	0.00	
IX_BLCDT20091119ACF_	25650.3	972,832	25650.3	972,832	0.00	0.00	
IX_BLCDT20060405AAI_	33466.6	3,651,779	33462.5	3,651,864	0.01	-0.00	
IX_BLCDT20110509AAN_	38223.7	1,378,449	38226.7	1,378,449	-0.01	0.00	
IX_BLCDT20110509AAN_	38227.7	1,378,463	38230.7	1,378,463	-0.01	0.00	
IX_BLANK0000027552_C	31118.7	1,201,311	31117.7	1,201,291	0.00	0.00	
IX_BLANK0000027552_C	31128.7	1,201,549	31127.7	1,201,529	0.00	0.00	
IX_DTVBL9635_BL_#1	30509.2	1,185,184	30509.2	1,185,184	0.00	0.00	
IX_DTVBL9635_BL_#2	30528.3	1,186,656	30528.3	1,186,656	0.00	0.00	
IX_BPCDT20130205AAY_	47495.9	1,119,795	47334.3	1,114,649	0.34	0.46	
IX_BPCDT20130205AAY_	47517.1	1,119,856	47355.4	1,114,710	0.34	0.46	
IX_BLCDT20090612AIO_	38304.0	1,041,391	38145.8	1,039,802	0.41	0.15	
IX_BLCDT20090612AIO_	38309.0	1,041,405	38150.9	1,039,816	0.41	0.15	