INTERFERENCE ANALYSIS FOR PROPOSED KMIZ, COLUMBIA, MO, FACILITY (CHANNEL 17)

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tvstudy v2.2.5 (4uoc83)
Database: localhost,  Study: kmiz_a2,  Model: Longley-Rice

Study build station data: LMS TV 2019-10-31

    Proposal: KMIZ_A2 D17 DT APP COLUMBIA, MO
 File number: kmiz_a2
 Facility ID: 63164
Station data: User record
   Record ID: 4160
     Country: U.S.
        Zone: II

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   KOZK      D16        DT  CP      SPRINGFIELD, MO          BLANK0000086690        181.2 km
No   KWQC-TV   D17        DT  CP      DAVENPORT, IA            BLANK0000033932        355.1
No   KDAO-CD   D17-       DC  LIC     MARSHALLTOWN, IA         BLANK0000068435        367.6
No   KAAS-TV   D17        DT  APP     SALINA, KS               BLANK0000035657        419.2
No   KAAS-TV   D17        DT  LIC     SALINA, KS               BLCDT20021120AAP       419.2
No   WKMU      D17        DT  LIC     MURRAY, KY               BLANK0000087481        422.4
No   WKMU      D17        DT  CP      MURRAY, KY               BLANK0000034644        422.4
No   WKOH      D17        DT  CP      OWENSBORO, KY            BLANK0000086473        467.3
No   WKOH      D17        DT  LIC     OWENSBORO, KY            BLANK0000087401        467.3
Yes  KSNF      D17        DT  LIC     JOPLIN, MO               BLANK0000071604        257.6
Yes  KETC      D17        DT  BL      ST. LOUIS, MO            DTVBL62182             190.3
No   KYNE-TV   D17        DT  LIC     OMAHA, NE                BLANK0000019249        407.9
No   KYNE-TV   D17        DT  APP     OMAHA, NE                BLANK0000035901        407.9
No   WSEC      D18        DT  CP      JACKSONVILLE, IL         BLANK0000080205        235.0
No   KCPT      D18        DT  LIC     KANSAS CITY, MO          BLEDT20090821AAU       169.8

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

    Channel: D17
   Latitude:  38 46 32.10 N (NAD83)
  Longitude:  92 33 24.90 W
Height AMSL: 575.6 m
       HAAT: 352.0 m
   Peak ERP: 120 kW
    Antenna: RFS-RD24OM488548L3S 0.0 deg
Elev Pattrn: Generic
  Elec Tilt: 0.75

39.0 dBu contour:
Azimuth      ERP       HAAT   Distance
  0.0 deg   70.4 kW   356.6 m   84.8 km
 45.0        111      357.6     88.2
 90.0        113      360.5     88.6
135.0       76.2      381.2     87.4
180.0       44.1      351.5     81.1
225.0       54.8      345.1     81.9
270.0       56.8      321.7     79.8
315.0       43.8      341.4     80.0

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
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No land mobile station failures found

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 BLANK0000071604 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KSNF	D17	DT	LIC	JOPLIN, MO	BLANK0000071604	
Undesireds:	KMIZ	D17	DT	BL	COLUMBIA, MO	DTVBL63164	257.6 km
	KMIZ_A2	D17	DT	APP	COLUMBIA, MO	kmiz_a2	257.6
	KOZK	D16	DT	CP	SPRINGFIELD, MO	BLANK0000086690	143.4
	KAAS-TV	D17	DT	APP	SALINA, KS	BLANK0000035657	335.0
	KTEN	D17	DT	CP	ADA, OK	BLANK0000034216	352.0
	KUTU-CD	D17	DC	CP	TULSA, OK	BLANK0000026567	164.3
	KFSM-TV	D18	DT	LIC	FORT SMITH, AR	BLCDT20060530AIM	142.9

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
26868.7	621,919	26569.5	617,868	25970.7	599,765	25990.6	599,829	-0.08	-0.01

Undesired	Total IX	Unique IX, before		Unique IX, after	
KMIZ D17 DT BL	107.7	674	47.7	156	
KMIZ_A2 D17 DT APP	51.8	359		27.8	92
KOZK D16 DT CP	196.1	2,472	140.1	1,978	176.1	2,229
KTEN D17 DT CP	40.0	401	12.0	93	12.0	93
KUTU-CD D17 DC CP	219.2	1,149	187.2	817	187.2	817
KFSM-TV D18 DT LIC	123.8	14,233	123.8	14,233	123.8	14,233

Interference to DTVBL62182 BL scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KETC	D17	DT	BL	ST. LOUIS, MO	DTVBL62182	
Undesireds:	KMIZ	D17	DT	BL	COLUMBIA, MO	DTVBL63164	190.2 km
	KMIZ_A2	D17	DT	APP	COLUMBIA, MO	kmiz_a2	190.3
	KWQC-TV	D17	DT	CP	DAVENPORT, IA	BLANK0000033932	340.7
	WKMU	D17	DT	LIC	MURRAY, KY	BLANK0000087481	257.7
	WKOH	D17	DT	CP	OWENSBORO, KY	BLANK0000086473	277.2
	WSEC	D18	DT	CP	JACKSONVILLE, IL	BLANK0000080205	128.2

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
21576.5	2,854,495	21473.3	2,852,574	21257.4	2,846,154	21273.5	2,846,292	-0.08	-0.00

Undesired	Total IX	Unique IX, before		Unique IX, after	
KMIZ D17 DT BL	204.0	6,306	192.0	6,226	
KMIZ_A2 D17 DT APP	187.8	6,168		175.9	6,088
KWQC-TV D17 DT CP	16.0	166	4.0	108	4.0	108
WKMU D17 DT LIC	7.9	28	4.0	4	4.0	4
WSEC D18 DT CP	12.0	58	0.0	0	0.0	0

Interference to DTVBL62182 BL scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KETC	D17	DT	BL	ST. LOUIS, MO	DTVBL62182	
Undesireds:	KMIZ	D17	DT	BL	COLUMBIA, MO	DTVBL63164	190.2 km
	KMIZ_A2	D17	DT	APP	COLUMBIA, MO	kmiz_a2	190.3
	KWQC-TV	D17	DT	CP	DAVENPORT, IA	BLANK0000033932	340.7
	WKMU	D17	DT	CP	MURRAY, KY	BLANK0000034644	257.7
	WKOH	D17	DT	CP	OWENSBORO, KY	BLANK0000086473	277.2
	WSEC	D18	DT	CP	JACKSONVILLE, IL	BLANK0000080205	128.2

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
21576.5	2,854,495	21473.3	2,852,574	21257.4	2,846,154	21273.5	2,846,292	-0.08	-0.00

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Undesired		Total IX		Unique IX, before		Unique IX, after	
KMIZ D17 DT BL	204.0	6,306	192.0	6,226			
KMIZ_A2 D17 DT APP	187.8	6,168			175.9	6,088	
KWQC-TV D17 DT CP	16.0	166	4.0	108	4.0	108	
WKMU D17 DT CP	7.9	28	4.0	4	4.0	4	
WSEC D18 DT CP	12.0	58	0.0	0	0.0	0	

Interference to proposal scenario 1
1.00% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KMIZ_A2	D17	DT	APP	COLUMBIA, MO	kmiz_a2	
Undesireds:	KWQC-TV	D17	DT	CP	DAVENPORT, IA	BLANK0000033932	355.1 km
	KSNF	D17	DT	LIC	JOPLIN, MO	BLANK0000071604	257.6
	KETC	D17	DT	BL	ST. LOUIS, MO	DTVBL62182	190.3

Service area		Terrain-limited		IX-free		Percent IX	
22229.0	532,025	21993.8	530,008	21487.0	524,690	2.30	1.00

Undesired		Total IX		Unique IX		Prcnt Unique IX	
KWQC-TV D17 DT CP	8.0	40	0.0	0		0.00	0.00
KSNF D17 DT LIC	258.7	4,257	218.9	3,929		1.00	0.74
KETC D17 DT BL	287.9	1,389	240.2	1,021		1.09	0.19
