tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: Raton24d4kw, Model: Longley-Rice
Start: 2018.11.08 16:08:33

Study created: 2018.11.08 16:08:33

Study build station data: LMS TV 2018-11-07

    Proposal: K24IY-D D24 LD APP RATON, NM
 Facility ID: 181576
Station data: User record
   Record ID: 973
     Country: U.S.

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

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	K23NF-D	D23	LD	LIC	ROMEO, ETC., CO	BLANK0000062907	144.2 km
Yes	K44CG-D	D23	LD	CP	CAPULIN, ETC., NM	BLANK0000053996	47.9
Yes	K23JD-D	D23	LD	LIC	COLFAX, NM	BLDTT20100716ABZ	71.0
No	K23NN-D	D23	LD	LIC	LAS VEGAS, NM	BLANK0000062951	141.9
No	NEW	D24	LD	APP	ASPEN, CO	BNPDTL20090825BXI	353.4
No	K24HQ-D	D24	LD	LIC	BOULDER, CO	BLANK0000034173	370.8
Yes	KRDO-TV	D24	DT	LIC	COLORADO SPRINGS, CO	BLCDT20060329AAW	232.6
No	K24CH-D	D24	LD	LIC	CORTEZ, ETC, CO	BLDTT20090522ACF	339.8
No	K24JO-D	D24	LD	LIC	CRAWFORD, CO	BLDTT20110728AIK	359.9
No	K45DH-D	D24	LD	CP	DURANGO, CO	BLANK0000051782	311.3
No	K24EZ-D	D24	LD	LIC	IDALIA, CO	BLDTT20110613AAH	378.4
No	K24KR-D	D24	LD	LIC	JACKS CABIN, CO	BLDTT20120413ABE	308.7
No	K24NM-D	D24	LD	LIC	SARGENTS, CO	BLANK0000063156	262.3
Yes	KNAT-TV	D24	DT	LIC	ALBUQUERQUE, NM	BLCDT20130710AAN	245.5
No	K49BY-D	D24	LD	CP	CLOVIS, NM	BLANK0000054410	272.0
No	K24IV-D	D24	LD	LIC	FARMINGTON, NM	BLDTL20120522ABH	307.6
No	K43IA	D24	LD	CP	TAOS, NM	BLANK0000029881	105.7
Yes	K40DK-D	D24	LD	CP	TUCUMCARI, NM	BLANK0000053143	183.6

No	K45IQ	D24+	LD	CP	AMARILLO, TX	BLANK0000054570	299.4
No	K40DD-D	D24	LD	CP	GRUVER, TX	BLANK0000053125	275.3
No	KXTQ-CD	D24	DC	CP	LUBBOCK, TX	BLANK0000059341	422.4
No	K41BW-D	D24	LD	CP	NEW MOBEETIE, TX	BLANK0000053932	370.4
No	KOAA-TV	D25	DT	CP	PUEBLO, CO	BLANK0000030611	232.5
Yes	K46BY-D	D25	LD	CP	CAPULIN, ETC., NM	BLANK0000053997	47.9
No	K25FI-D	D25	LD	LIC	MORA, NM	BLDTT20120301AEN	116.3
No	K25LJ-D	D25	LD	LIC	TRES PIEDRAS, NM	BLDTT20130613AAG	144.2
No	KSPK-LD	N28-	TX	LIC	WALSENBURG, CO	BLTTL20050315AGL	111.0

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

```
    Channel: D24
       Mask: Stringent
   Latitude:  36 41  0.00 N (NAD83)
  Longitude: 104 24 52.00 W
Height AMSL: 2375.5 m (Adjusted based on actual ground elevation calculation)
       HAAT: 0.0 m
   Peak ERP: 4.00 kW
    Antenna: Omnidirectional
Elev Pattrn: Generic
  Elec Tilt: 1.75
```

49.8 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	4.00 kW	465.2 m	56.9 km
45.0	4.00	410.4	55.0
90.0	4.00	313.9	50.6
135.0	4.00	334.9	51.7
180.0	4.00	464.3	56.9
225.0	4.00	513.6	58.5
270.0	4.00	471.8	57.2
315.0	4.00	441.4	56.1

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 427 m

Distance to Canadian border: 1368.9 km

Distance to Mexican border: 577.9 km

Conditions at FCC monitoring station: Grand Island NE
Bearing: 45.9 degrees Distance: 700.3 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 349.8 degrees Distance: 388.2 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 BLANK0000053996 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K44CG-D	D23	LD	CP	CAPULIN, ETC., NM	BLANK0000053996	
Undesireds:	K24IY-D	D24	LD	APP	RATON, NM		47.9 km
	KZCS-LP	N23z	TX	LIC	COLORADO SPRINGS, CO	BLTTL20021218AAJ	242.7
	K23JD-D	D23	LD	LIC	COLFAX, NM	BLDTT20100716ABZ	118.6
	K50CX-D	D23	LD	CP	TUCUMCARI, NM	BLANK0000053140	175.1

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
6391.6	872	5348.6	784	5278.3	768	5264.3	768	0.27	0.00

Undesired	Total IX	Unique IX, before	Unique IX, after

K24IY-D D24 LD APP	36.1	15			14.0	0
KZCS-LP N23z TX LIC	5.0	0	5.0	0	5.0	0
K23JD-D D23 LD LIC	63.2	16	63.2	16	41.2	1
K50CX-D D23 LD CP	2.0	0	2.0	0	2.0	0

Interference to BLDTT20100716ABZ LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K23JD-D	D23	LD	LIC	COLFAX, NM	BLDTT20100716ABZ	
Undesireds:	K24IY-D	D24	LD	APP	RATON, NM		71.0 km
	K38EC-D	D22	LD	CP	EAGLES NEST, NM	BLANK0000053216	0.0
	K22EW	D22	LD	CP	MORA, NM	BLANK0000053186	68.2
	KTVS-LD	D23	LD	CP	ALBUQUERQUE, NM	BLANK0000053312	187.5
	K44CG-D	D23	LD	CP	CAPULIN, ETC., NM	BLANK0000053996	118.6
	K23NN-D	D23	LD	LIC	LAS VEGAS, NM	BLANK0000062951	106.5
	K50CX-D	D23	LD	CP	TUCUMCARI, NM	BLANK0000053140	207.8

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
7601.5	32,439	5629.9	6,279	5581.7	6,275	5576.6	6,275	0.09	0.00

Undesired	Total IX		Unique IX, before		Unique IX, after	
K24IY-D D24 LD APP	22.1	4			5.0	0
K38EC-D D22 LD CP	24.1	0	20.1	0	16.0	0
KTVS-LD D23 LD CP	1.0	0	1.0	0	1.0	0
K44CG-D D23 LD CP	26.1	4	22.1	4	10.0	0
K23NN-D D23 LD LIC	1.0	0	0.0	0	0.0	0
K50CX-D D23 LD CP	2.0	0	1.0	0	1.0	0

Interference to BLCDT20060329AAW LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KRDO-TV	D24	DT	LIC	COLORADO SPRINGS, CO	BLCDT20060329AAW	
Undesireds:	K24IY-D	D24	LD	APP	RATON, NM		232.6 km
	KCDO-TV	D23	DT	LIC	STERLING, CO	BLCDT20100127ADD	163.6

	KOAA-TV	D25	DT	CP	PUEBLO, CO	BLANK0000030611	0.1
	KVSN-DT	D25	DT	BL	PUEBLO, CO	DTVBL166331	0.1

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
31468.2	2,630,633	28670.2	2,264,873	27262.1	2,253,618	27252.1	2,253,615	0.04	0.00

Undesired	Total IX		Unique IX, before		Unique IX, after	
K24IY-D D24 LD APP	10.0	3			10.0	3
KCDO-TV D23 DT LIC	1270.7	10,807	1270.7	10,807	1270.7	10,807
KOAA-TV D25 DT CP	100.4	308	58.0	254	58.0	254
KVSN-DT D25 DT BL	79.4	194	37.1	140	37.1	140

Interference to BLCDT20130710AAN LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KNAT-TV	D24	DT	LIC	ALBUQUERQUE, NM	BLCDT20130710AAN	
Undesireds:	K24IY-D	D24	LD	APP	RATON, NM		245.5 km

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
57799.5	1,156,346	51384.8	1,121,356	51384.8	1,121,356	51334.0	1,121,044	0.10	0.03

Undesired	Total IX		Unique IX, before		Unique IX, after	
K24IY-D D24 LD APP	50.8	312			50.8	312

Interference to BLANK0000053143 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K40DK-D	D24	LD	CP	TUCUMCARI, NM	BLANK0000053143	
Undesireds:	K24IY-D	D24	LD	APP	RATON, NM		183.6 km
	K24CT	D24	LD	CP	ALAMOGORDO, NM	BLANK0000054866	326.2
	KNAT-TV	D24	DT	LIC	ALBUQUERQUE, NM	BLCDT20130710AAN	250.0
	K49BY-D	D24	LD	CP	CLOVIS, NM	BLANK0000054410	89.3
	K42FX-D	D24	LD	CP	HOBBS, NM	BLANK0000029527	268.1
	K25HJ-D	D25	LD	LIC	HORNSBY RANCH, ETC., NM	BLANK0000024579	42.9

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
3723.7	7,955	3439.1	7,931	3417.1	7,931	3417.1	7,931	0.00	0.00

Undesired		Total IX	Unique IX, before		Unique IX, after	
K24IY-D D24 LD APP	4.0	0			0.0	0
KNAT-TV D24 DT LIC	14.0	0	11.0	0	8.0	0
K49BY-D D24 LD CP	11.0	0	8.0	0	8.0	0

Interference to BLANK0000053997 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K46BY-D	D25	LD	CP	CAPULIN, ETC., NM	BLANK0000053997	
Undesireds:	K24IY-D	D24	LD	APP	RATON, NM		47.9 km
	KOAA-TV	D25	DT	CP	PUEBLO, CO	BLANK0000030611	242.6
	KQDF-LP	N25+	TX	LIC	ALBUQUERQUE, NM	BLTTL20020924AAC	318.5
	K25HJ-D	D25	LD	LIC	HORNSBY RANCH, ETC., NM	BLANK0000024579	192.6
	K26DX-D	D26	LD	LIC	RATON, NM	BLDTT20120308ABC	48.0

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
6311.3	872	5288.4	784	5127.4	777	5101.3	762	0.51	1.93

Undesired		Total IX	Unique IX, before		Unique IX, after	
K24IY-D D24 LD APP	31.1	15			26.1	15
KOAA-TV D25 DT CP	155.9	7	155.9	7	155.9	7
K26DX-D D26 LD LIC	5.0	0	5.0	0	0.0	0

Interference to proposal scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K24IY-D	D24	LD	APP	RATON, NM		
Undesireds:	K44CG-D	D23	LD	CP	CAPULIN, ETC., NM	BLANK0000053996	47.9 km
	K23JD-D	D23	LD	LIC	COLFAX, NM	BLDTT20100716ABZ	71.0
	KRDO-TV	D24	DT	LIC	COLORADO SPRINGS, CO	BLCDT20060329AAW	232.6

KNAT-TV	D24	DT	LIC	ALBUQUERQUE, NM	BLCDT20130710AAN	245.5
K46BY-D	D25	LD	CP	CAPULIN, ETC., NM	BLANK0000053997	47.9

Service area		Terrain-limited		IX-free		Percent IX	
9617.1	22,349	7506.5	11,902	7165.0	11,885	4.55	0.14

Undesired		Total IX		Unique IX		Prcnt Unique IX	
K44CG-D D23 LD CP	195.4	11	1.0	0		0.01	0.00
K23JD-D D23 LD LIC	54.1	0	38.1	0		0.51	0.00
KRDO-TV D24 DT LIC	128.0	8	84.0	6		1.12	0.05
KNAT-TV D24 DT LIC	30.0	0	12.0	0		0.16	0.00
K46BY-D D25 LD CP	194.4	11	0.0	0		0.00	0.00