tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: Hudson10dFP, Model: Longley-Rice
Start: 2018.05.08 11:49:27

Study created: 2018.05.08 11:49:27

Study build station data: LMS TV 2018-05-08

    Proposal: K20KE-D D10 LD APP FORT MORGAN, CO
 Facility ID: 182260
Station data: User record
   Record ID: 624
     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
Yes	KUSA	D9	DT	LIC	DENVER, CO	BLCDT20090417AIZ	68.9 km
No	K09LH	N9	TX	LIC	MANITOU SPRINGS, CO	BLTTV4695	142.2
Yes	K10PM-D	D10	LD	LIC	BRECKENRIDGE, CO	BLDTV20101015AAN	138.6
Yes	KZDN-LD	D10	LD	APP	DENVER, CO	BLANK0000052727	69.3
No	K10RB-D	D10	LD	LIC	MESA, CO	BLDTV20141217ABI	329.3
No	KRMZ	D10	DT	LIC	STEAMBOAT SPRINGS, CO	BLCDT20060711ABO	194.1
No	K10PR-D	D10	LD	LIC	THOMASVILLE, CO	BLDTV20100709AHY	197.2
No	KRYD-LP	N10-	TX	LIC	VAIL, CO	BLTVL20080311ADN	166.2
No	K10MA-D	D10	LD	LIC	WAUNITA HOT SPRINGS, CO	BLDTV20101216ACS	237.8
Yes	KBSL-DT	D10	DT	LIC	GOODLAND, KS	BLCDT20130318ADJ	270.3
No	KQME	D10	DT	LIC	LEAD, SD	BLCDT20050825ABN	471.6
No	K10PS-D	D10	LD	CP	PINE RIDGE, SD	BPDTV20140609ABM	363.1
No	K10PS-D	D10	LD	LIC	PINE RIDGE, SD	BLDTV20100427AAK	363.4
Yes	K10FQ	N10	TX	LIC	BIG LARAMIE, ETC., WY	BLTTV3978	143.6
No	KFNE	D10	DT	LIC	RIVERTON, WY	BLCDT20090227AAE	475.6
No	K11UW-D	D11	LD	LIC	AKRON, CO	BLDTV20111122ALL	129.0
Yes	KQCK	D11	DT	LIC	CHEYENNE, WY	BLCDT20040513ABA	68.9
No	KCHY-LP	N13+	TX	CP	CHEYENNE, WY	BLANK0000005104	113.9

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

```
    Channel: D10
       Mask: Full Service
   Latitude:  40  7 18.10 N (NAD83)
  Longitude: 104 36 17.50 W
Height AMSL: 1649.0 m
       HAAT: 0.0 m
   Peak ERP: 3.00 kW
    Antenna: Omnidirectional
Elev Pattrn: Generic
```

48.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	3.00 kW	175.5 m	54.9 km
45.0	3.00	168.7	54.3
90.0	3.00	158.5	53.3
135.0	3.00	124.7	49.2
180.0	3.00	120.3	48.7
225.0	3.00	130.7	50.0
270.0	3.00	128.7	49.7
315.0	3.00	148.6	52.2

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 144 m

Distance to Canadian border: 986.7 km

Distance to Mexican border: 942.7 km

Conditions at FCC monitoring station: Grand Island NE
Bearing: 78.3 degrees Distance: 529.3 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 273.8 degrees Distance: 55.2 km
ERP: 3.00 kW Field strength: 67.7 dBu, 2.4 mV/m

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 BLCDT20090417AIZ LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KUSA	D9	DT	LIC	DENVER, CO	BLCDT20090417AIZ	
Undesireds:	K20KE-D	D10	LD	APP	FORT MORGAN, CO		68.9 km
	KTSC	D8	DT	LIC	PUEBLO, CO	BLEDT20090612AAM	114.1
	KPNE-TV	D9	DT	LIC	NORTH PLATTE, NE	BLEDT20090225ABM	373.9

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
32183.9	3,792,747	28122.3	3,563,190	27445.2	3,460,041	27413.2	3,460,041	0.12	0.00

Undesired	Total IX		Unique IX, before		Unique IX, after	
K20KE-D D10 LD APP	32.0	0			32.0	0
KTSC D8 DT LIC	420.2	103,026	420.2	103,026	420.2	103,026
KPNE-TV D9 DT LIC	256.9	123	256.9	123	256.9	123

Interference to BLDTV20101015AAN LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K10PM-D	D10	LD	LIC	BRECKENRIDGE, CO	BLDTV20101015AAN	

Undesireds:	K20KE-D	D10	LD	APP	FORT MORGAN, CO		138.6 km
	KRYD-LP	N10-	TX	LIC	VAIL, CO	BLTVL20080311ADN	44.5

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
2594.3	31,715	1906.9	30,331	1898.9	30,331	1897.9	30,331	0.05	0.00

Undesired	Total IX	Unique IX, before		Unique IX, after	
K20KE-D D10 LD APP	1.0	0		1.0	0
KRYD-LP N10- TX LIC	8.0	0	8.0	0	8.0	0

Interference to BLANK0000052727 APP scenario 1
**MX: 8.80% interference caused

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KZDN-LD	D10	LD	APP	DENVER, CO	BLANK0000052727	
Undesireds:	K20KE-D	D10	LD	APP	FORT MORGAN, CO		69.3 km
	KUSA	D9	DT	LIC	DENVER, CO	BLCDT20090417AIZ	0.4

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
4046.5	2,196,705	4018.8	2,195,303	3789.4	2,059,125	2294.5	1,877,911	39.45	8.80

Undesired	Total IX	Unique IX, before		Unique IX, after	
K20KE-D D10 LD APP	1647.4	267,496		1494.9	181,214
KUSA D9 DT LIC	229.4	136,178	229.4	136,178	76.9	49,896

Interference to BLCDT20130318ADJ LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KBSL-DT	D10	DT	LIC	GOODLAND, KS	BLCDT20130318ADJ	
Undesireds:	K20KE-D	D10	LD	APP	FORT MORGAN, CO		270.3 km
	KAKE	D10	DT	LIC	WICHITA, KS	BLCDT20090410ABG	397.5
	KOLN	D10	DT	LIC	LINCOLN, NE	BLCDT20090226AAR	400.1

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	

36855.4	49,804	36232.6	46,837	36186.7	46,796	36182.7	46,796	0.01	0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
K20KE-D D10 LD APP	4.0 0	4.0 0	
KAKE D10 DT LIC	40.8 39	40.8 39	40.8 39
KOLN D10 DT LIC	5.0 2	5.0 2	5.0 2

Interference to BLTTV3978 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K10FQ	N10	TX	LIC	BIG LARAMIE, ETC., WY	BLTTV3978	
Undesireds:	K20KE-D	D10	LD	APP	FORT MORGAN, CO		143.6 km

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
253.3	30,541	252.3	30,541	252.3	30,541	245.2	30,538	2.80	0.01

Undesired	Total IX	Unique IX, before	Unique IX, after
K20KE-D D10 LD APP	7.1 3	7.1 3	

Interference to BLCDT20040513ABA LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KQCK	D11	DT	LIC	CHEYENNE, WY	BLCDT20040513ABA	
Undesireds:	K20KE-D	D10	LD	APP	FORT MORGAN, CO		68.9 km

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
31150.5	3,223,130	28967.3	3,163,615	28967.3	3,163,615	28961.3	3,163,479	0.02	0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
K20KE-D D10 LD APP	6.0 136	6.0 136	

Interference to proposal scenario 1
**MX: 49.45% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K20KE-D	D10	LD	APP	FORT MORGAN, CO		
Undesireds:	KUSA	D9	DT	LIC	DENVER, CO	BLCDT20090417AIZ	68.9 km
	KZDN-LD	D10	LD	APP	DENVER, CO	BLANK0000052727	69.3
	KBSL-DT	D10	DT	LIC	GOODLAND, KS	BLCDT20130318ADJ	270.3
	KQCK	D11	DT	LIC	CHEYENNE, WY	BLCDT20040513ABA	68.9

Service area		Terrain-limited		IX-free		Percent IX	
8331.7	1,089,533	8168.2	1,071,655	5593.4	541,745	31.52	49.45

Undesired	Total IX		Unique IX		Prcnt Unique IX	
KUSA D9 DT LIC	38.3	42,606	3.0	1,182	0.04	0.11
KZDN-LD D10 LD APP	2508.9	517,275	2453.5	475,824	30.04	44.40
KBSL-DT D10 DT LIC	22.1	27	2.0	0	0.02	0.00
KQCK D11 DT LIC	60.9	11,453	60.9	11,453	0.75	1.07