tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: Deer20d15kwELTI50F, Model: Longley-Rice
Start: 2021.07.27 16:40:41

Study created: 2021.07.27 16:40:40

Study build station data: LMS TV 2021-07-27

    Proposal: K43NI-D D20 LD APP DEER LODGE, MT
 Facility ID: 186043
Station data: User record
   Record ID: 102
     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	KWYB	D19	DT	LIC	BUTTE, MT	BLCDT20080424ABB	49.5 km
No	KTGF-LD	D19	LD	LIC	GREAT FALLS, MT	BLANK0000029293	166.6
No	KZTN-LD	D20	LD	LIC	BOISE, ID	BLANK0000005170	402.8
No	KZTN-LD	D20	LD	CP	BOISE, ID	BLANK0000031961	398.5
No	KBOI-TV	D20	DT	APP	BOISE, ID	BLANK0000153318	395.8
No	K20NZ-D	D20	LD	LIC	GARDEN VALLEY, ID	BLANK0000079949	358.5
No	K20MQ-D	D20	LD	LIC	REXBURG, ID	BLANK0000080478	296.8
No	KTFT-LD	D20	LD	LIC	TWIN FALLS, ID	BLDTL20080813AAO	429.9
No	K20HB	D20+	LD	CP	BILLINGS, MT	BLANK0000143153	336.8
No	K20HB	N20+	TX	LIC	BILLINGS, MT	BLTT20041123AKE	336.8
No	K20KL-D	D20	LD	CP	DRUMMOND, MT	BLANK0000019042	41.9
No	K20KL-D	D20	LD	LIC	DRUMMOND, MT	BLDTT20131122AWR	41.9
No	K20CP-D	D20	LD	LIC	ELMO, MT	BLDTT20091013ABT	179.4
No	K20LX-D	D20	LD	CP	GLEN, MT	BNPDTL20100609AIO	98.2
No	K20KQ-D	D20	LD	LIC	LIVINGSTON, ETC., MT	BLDTT20130906AAU	190.9
Yes	KECI-TV	D20	DT	CP	MISSOULA, MT	BLANK0000127630	119.3
No	K20LA-D	D20	LD	CP	MISSOULA, MT	BNPDTL20100505AFQ	106.0
No	K20BP-D	D20	LD	LIC	PHILLIPS COUNTY, MT	BLDTT20111116AUB	356.9

No	KREM	D20	DT	LIC	SPOKANE, WA	BLCDT20050623ABG	370.7
No	K20LT-D	D20	LD	LIC	DIAMOND BASIN, ETC., WY	BLDTT20130807AAN	349.5
No	K21MG-D	D21	LD	CP	DILLON, MT	BNPDTL20100609AIH	165.5
No	KUGF-TV	D21	DT	LIC	GREAT FALLS, MT	BLEDT20101008ACG	166.6
No	KHBB-LD	D21	LD	LIC	HELENA, MT	BLDTL20081126ADG	67.4

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:  46 24 19.90 N (NAD83)
  Longitude: 112 43 43.90 W
Height AMSL: 1390.3 m (Adjusted based on actual ground elevation calculation)
       HAAT: 0.0 m
   Peak ERP: 15.0 kW
    Antenna: ELTI-ELTI UHF Panel (ID 1008435) 50.0 deg
Elev Pattrn: Generic
```

49.4 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	2.27 kW	10.8 m	22.4 km
45.0	14.3	-225.8	30.8
90.0	4.23	-338.5	25.2
135.0	0.024	-387.2	7.3
180.0	0.122	-23.2	10.9
225.0	0.033	-126.3	7.9
270.0	0.080	-343.4	9.8
315.0	0.014	-92.5	6.5

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: -191 m

Proposal 24.36 dBu contour does not cross Canadian border
Distance to Canadian border: 288.2 km

Distance to Mexican border: 1530.7 km

Conditions at FCC monitoring station: Ferndale WA
Bearing: 294.7 degrees Distance: 787.3 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 136.3 degrees Distance: 920.5 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 BLCDT20080424ABB LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KWYB	D19	DT	LIC	BUTTE, MT	BLCDT20080424ABB	
Undesireds:	K43NI-D	D20	LD	APP	DEER LODGE, MT		49.5 km
	KTVM-TV	D20	DT	BL	BUTTE, MT	DTVBL18066	0.1
	KECI-TV	D20	DT	CP	MISSOULA, MT	BLANK0000127630	164.6

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
24706.1	86,378	15141.1	68,843	14810.8	68,549	14782.6	68,216	0.19	0.49

Undesired	Total IX		Unique IX, before		Unique IX, after	
K43NI-D D20 LD APP	34.3	333			28.2	333
KTVM-TV D20 DT BL	328.2	294	328.2	294	322.2	294
KECI-TV D20 DT CP	2.0	0	2.0	0	2.0	0

Interference to BLCDT20080424ABB LIC scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KWYB	D19	DT	LIC	BUTTE, MT	BLCDT20080424ABB	
Undesireds:	K43NI-D	D20	LD	APP	DEER LODGE, MT		49.5 km
	KTVM-TV	D20	DT	BL	BUTTE, MT	DTVBL18066	0.1
	KECI-TV	D20	DT	BL	MISSOULA, MT	DTVBL18084	164.6

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
24706.1	86,378	15141.1	68,843	14810.8	68,549	14782.6	68,216	0.19	0.49

Undesired	Total IX		Unique IX, before		Unique IX, after	
K43NI-D D20 LD APP	34.3	333			28.2	333
KTVM-TV D20 DT BL	328.2	294	328.2	294	322.2	294
KECI-TV D20 DT BL	2.0	0	2.0	0	2.0	0

Interference to BLANK0000127630 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KECI-TV	D20	DT	CP	MISSOULA, MT	BLANK0000127630	
Undesireds:	K43NI-D	D20	LD	APP	DEER LODGE, MT		119.3 km
	KWYB	D19	DT	LIC	BUTTE, MT	BLCDT20080424ABB	164.6
	KBOI-TV	D20	DT	APP	BOISE, ID	BLANK0000153318	397.4
	KTVM-TV	D20	DT	BL	BUTTE, MT	DTVBL18066	164.5
	KREM	D20	DT	LIC	SPOKANE, WA	BLCDT20050623ABG	255.8

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
47926.3	229,078	38595.1	194,659	37002.5	192,007	36994.4	192,007	0.02	0.00

Undesired	Total IX		Unique IX, before		Unique IX, after	
K43NI-D D20 LD APP	37.4	9			8.1	0
KWYB D19 DT LIC	7.1	14	0.0	0	0.0	0
KTVM-TV D20 DT BL	1485.5	2,652	1419.8	2,638	1392.6	2,629

KREM D20 DT LIC	165.7	0	107.1	0	107.1	0

Interference to proposal scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K43NI-D	D20	LD	APP	DEER LODGE, MT		
Undesireds:	K20KL-D	D20	LD	CP	DRUMMOND, MT	BLANK0000019042	41.9 km
	KECI-TV	D20	DT	CP	MISSOULA, MT	BLANK0000127630	119.3

Service area		Terrain-limited		IX-free		Percent IX	
956.9	4,371	701.1	4,146	655.6	4,144	6.48	0.05

Undesired	Total IX		Unique IX		Prcnt Unique IX	
KECI-TV D20 DT CP	45.4	2	45.4	2	6.48	0.05