

tvstudy v2.2.5 (4uoc83)

Database: localhost, Study: Bismarck16d9kwELTI220T, Model: Longley-Rice

Start: 2021.07.21 13:29:27

Study created: 2021.07.21 13:29:27

Study build station data: LMS TV 2021-07-21

Proposal: K40NK-D D16 LD APP BISMARCK, ND

Facility ID: 187471

Station data: User record

Record ID: 699

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	KXBK-LD	D15	LD	CP	BISMARCK, ND	BLANK0000149745	16.6 km
No	KSRE	D15	DT	LIC	MINOT, ND	BLANK0000069151	133.8
No	K16KK-D	D16	LD	CP	BARNSVILLE, MN	BNPDTL20100505AKZ	333.0
No	KCGE-DT	D16	DT	LIC	CROOKSTON, MN	BLEDT20031024AAC	328.1
No	K16GP-D	D16	LD	LIC	CIRCLE, MT	BLANK0000139784	357.1
No	K16GP-D	N16	TX	LIC	CIRCLE, MT	BLTT20041110ABU	357.1
No	K16DH	D16	LD	CP	MILES CITY, MT	BLANK0000054417	396.9
No	K16DH	D16	LD	APP	MILES CITY, MT	BLANK0000152874	396.9
No	K16KL-D	D16	LD	CP	JAMESTOWN, ND	BNPDTL20100505ALK	133.8
No	K16JP-D	D16	LD	CP	SENTINEL BUTTE, ND	BNPDTL20100506ACJ	239.0
No	K16KS-D	D16	LD	CP	WILLISTON, ND	BNPDTL20100510ANE	250.0
No	K16LA-D	D16	LD	CP	DRAPER, SD	BNPDTL20100510AIS	338.1
No	KCLO-TV	D16	DT	LIC	RAPID CITY, SD	BLCDT20060207ABK	376.1
Yes	KBYM	D17	DT	LIC	BISMARCK, ND	BLCDT20090701ADJ	40.3
No	K17KN-D	D17	LD	CP	DICKINSON, ND	BNPDTL20100506ACC	153.7

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D16
Mask: Stringent
Latitude: 46 56 31.00 N (NAD83)
Longitude: 100 41 41.70 W
Height AMSL: 670.0 m
HAAT: 0.0 m
Peak ERP: 9.00 kW
Antenna: ELTI-ELTI UHF Panel (ID 1008435) 220.0 deg
Elev Pattn: Generic

48.9 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.064 kW	40.1 m	10.9 km
45.0	0.016	53.8	9.0
90.0	0.049	86.5	15.0
135.0	0.028	116.1	15.1
180.0	2.60	108.8	37.3
225.0	8.60	102.1	42.6
270.0	1.21	108.2	33.3
315.0	0.015	74.6	10.4

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: 86 m

Proposal 23.94 dBu contour does not cross Canadian border

Distance to Canadian border: 228.7 km

Distance to Mexican border: 1756.5 km

Conditions at FCC monitoring station: Grand Island NE

Bearing: 164.0 degrees Distance: 693.1 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 207.4 degrees Distance: 837.9 km

No land mobile station failures found

Proposal is not within the Offshore Radio Service protected area

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 BLANK0000149745 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KXBK-LD	D15	LD	CP	BISMARCK, ND	BLANK0000149745	
Undesireds:	K40NK-D	D16	LD	APP	BISMARCK, ND		16.6 km
	KSRE	D15	DT	LIC	MINOT, ND	BLANK0000069151	145.7
	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
	848.8 98,711	842.8	98,702	840.8	98,702	768.7 97,195	8.57 1.53
Undesired				Total IX	Unique IX, before	Unique IX, after	
K40NK-D D16 LD APP				73.1 1,507		72.1 1,507	
KSRE D15 DT LIC				2.0 0	2.0 0	1.0 0	

Interference to BLCDT20090701ADJ LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KBMY	D17	DT	LIC	BISMARCK, ND	BLCDT20090701ADJ	
Undesireds:	K40NK-D	D16	LD	APP	BISMARCK, ND		40.3 km

KDSD-TV D17 DT LIC ABERDEEN, SD BLEDT20110816AAM 270.2

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
19286.2	119,796	19147.2	119,688	19138.1	119,688	19133.1	119,686	0.03	0.00
Undesired			Total IX		Unique IX, before		Unique IX, after		
K40NK-D D16 LD APP		5.0	2			5.0	2		
KDSD-TV D17 DT LIC		9.1	0		9.1	0	9.1	0	

Interference to proposal scenario 1
6.14% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K40NK-D	D16	LD	APP	BISMARCK, ND		
Undesireds:	KXBK-LD	D15	LD	CP	BISMARCK, ND	BLANK0000149745	16.6 km
	KBY	D17	DT	LIC	BISMARCK, ND	BLCDT20090701ADJ	40.3

Service area		Terrain-limited		IX-free		Percent IX	
2036.8	101,793	1969.6	101,685	1819.9	95,440	7.60	6.14
Undesired			Total IX		Unique IX	Prct Unique IX	
KXBK-LD D15 LD CP		3.0	5,765	3.0	5,765	0.15	5.67
KBY D17 DT LIC		146.7	480	146.7	480	7.45	0.47