KWNB-TV - HAYES CENTER, NEBRASKA
Longley-Rice Interference Analysis
tvstudy version 2.2.4
November 2017

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tvstudy v2.2.4 (Z2Qqz3)
Database: localhost,  Study: KWNB 6 OMNI 45 kW 171125,  Model: Longley-Rice
Start: 2017.11.25 13:04:44

Study created: 2017.11.25 13:04:44

Study build station data: LMS TV 2017-11-22 (39)

    Proposal: KWNB-TV D6 DT LIC HAYES CENTER, NE
 File number: KWNB 6 OMNI 45 kW 171125
 Facility ID: 21162
Station data: User record
   Record ID: 2496
     Country: U.S.
        Zone: II

Search options:
Non-U.S. records included
Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX   Call      Chan       Svc Status  City, State              File Number             Distance
No   KNHL      D5         DT  LIC     HASTINGS, NE             BLCDT20081205AFM        223.2 km
Yes  KBSD-DT   D6         DT  LIC     ENSIGN, KS               BLCDT20090717AAS        336.9

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

    Channel: D6
   Latitude:  40 37 32.00 N (NAD83)
  Longitude: 101  1 47.00 W
Height AMSL: 1160.0 m
       HAAT: 221.0 m
   Peak ERP: 45.0 kW
    Antenna: Omnidirectional
Elev Pattrn: Generic

28.0 dBu contour:
Azimuth      ERP        HAAT    Distance
  0.0 deg   45.0 kW   230.6 m  116.4 km
 45.0       45.0       244.4    117.8
 90.0       45.0       247.4    118.1
135.0       45.0       254.6    118.8
180.0       45.0       233.6    116.7
225.0       45.0       211.8    114.4
270.0       45.0       192.1    112.2
315.0       45.0       178.0    110.4

Database HAAT does not agree with computed HAAT
Database HAAT: 221 m   Computed HAAT: 224 m

ERP exceeds maximum
ERP: 45.0 kW   ERP maximum: 45.0 kW
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Distance to Canadian border: 930.8 km

Distance to Mexican border: 1097.8 km

Conditions at FCC monitoring station: Grand Island NE
Bearing: 80.6 degrees Distance: 221.4 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 262.9 degrees Distance: 359.0 km

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 BLCDT20090717AAS LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KBSD-DT	D6	DT	LIC	ENSIGN, KS	BLCDT20090717AAS	
Undesireds:	KWNB-TV	D6	DT	BL	HAYES CENTER, NE	DTVBL21162	336.9 km
	KWNB-TV	D6	DT	LIC	HAYES CENTER, NE	KWNB 6 OMNI 45 kW 1711	336.9

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
38545.4	155,012	38385.2	154,891	38200.1	154,618	37850.9	154,053	0.91	0.37

Undesired	Total IX		Unique IX, before		Unique IX, after	
KWNB-TV D6 DT BL	185.0	273	185.0	273		
KWNB-TV D6 DT LIC	534.3	838			534.3	838

Interference to proposal scenario 1
1.76% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KWNB-TV	D6	DT	LIC	HAYES CENTER, NE	KWNB 6 OMNI 45 kW 1711	
Undesireds:	KBSD-DT	D6	DT	LIC	ENSIGN, KS	BLCDT20090717AAS	336.9 km

Service area		Terrain-limited		IX-free		Percent IX	
42032.5	112,807	41592.7	111,879	41176.6	109,912	1.00	1.76

Undesired	Total IX		Unique IX		Prcnt Unique IX	
KBSD-DT D6 DT LIC	416.1	1,967	416.1	1,967	1.00	1.76