Minor Change: Change antenna make and model and add elliptical component.

Study created: 2022.07.25 10:58:51

Study build station data: LMS TV 2022-07-21

 Proposal: K51KR D31 LD CP BILLINGS, MT

 File number: DIE TUL LP

 Facility ID: 131137

Station data: User record

 Record ID: 279

 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 DDK23HI N23z TX APP BILLINGS, MT BLTTL20070809ABT 7.7 km

No K27IM-D N27z TX LIC BILLINGS, MT BLTT20060711ABH 0.4

No K30OU-D D30 LD LIC CODY, ETC, WY BLANK0000078411 134.5

No KVUI D31 DT LIC POCATELLO, ID BLANK0000068416 456.4

Yes K31LE-D D31 LD LIC BRIDGER, ETC., MT BLDTL20110207ADP 64.9

No K31NW-D D31 LD LIC FORSYTH, MT BLANK0000124962 148.3

No K47CY-D D31 LD LIC FORT PECK, MT BLANK0000067776 299.8

No KTVH-DT D31 DT APP HELENA, MT BLANK0000177547 275.9

Yes K31PY-D D31 LD LIC ROUNDUP, MT BLANK0000152042 78.6

No K31QA-D D31 LD LIC DEADWOOD, SD BLANK0000179230 396.3

No K31HT N31+ TX LIC CASPER, WY BLTTL20070628ACN 375.1

No K31HT D31+ LD CP CASPER, WY BLANK0000152312 375.1

No K31HT N31+ TX CP CASPER, WY BPTTL20140513ABY 375.2

No K31LF-D D31 LD LIC CLARETON, WY BLANK0000124578 325.6

No K31DC-D N31 TX LIC FREEDOM, WY BLTT20050303AAK 362.6

No K31DC-D D31 LD LIC FREEDOM, WY BLANK0000130272 362.6

No K31JO-D D31 LD LIC WOOD RIVER, ETC., WY BLDTT20081212AAT 191.5

No K32OM-D D32 LD CP BIG TIMBER, MT BNPDTL20100505AGQ 117.2

No K32MN-D D32 LD LIC HOWARD, MT BLANK0000124960 128.4

No K46LY-D D32 LD LIC LIVINGSTON, MT BLANK0000067749 163.4

No K32IF-D D32 LD LIC NORTH FORK, ETC., WY BLDTT20081212AAW 151.9

No K33EA-D N33 TX LIC COLUMBUS, MT BLTT19940902IF 66.6

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

 Channel: D31

 Mask: Full Service

 Latitude: 45 45 51.30 N (NAD83)

 Longitude: 108 27 21.00 W

Height AMSL: 1137.8 m

 HAAT: 0.0 m

 Peak ERP: 5.00 kW

 Antenna: L-LP-C1-04/04M 330.0 deg

Elev Pattrn: Generic

50.4 dBu contour:

Azimuth ERP HAAT Distance

 0.0 deg 2.46 kW 152.1 m 38.3 km

 45.0 0.020 115.0 12.7

 90.0 0.025 62.3 10.0

135.0 0.014 35.1 6.5

180.0 0.012 8.4 5.9

225.0 0.021 65.9 9.8

270.0 0.210 160.0 26.2

315.0 4.13 102.5 37.3

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: 88 m

Distance to Canadian border: 359.6 km

Distance to Mexican border: 1545.8 km

Conditions at FCC monitoring station: Grand Island NE

Bearing: 120.1 degrees Distance: 971.8 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 156.2 degrees Distance: 675.8 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%

No IX check failures found.