



KENV-DT - ELKO, NEVADA **AUGUST 2023** **APPENDIX B** **Longley-Rice Interference Analysis**

tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: KENV-DT 20 APP, Model: Longley-Rice
Start: 2023.08.04 15:30:09

Study created: 2023.08.04 15:30:09

Study build station data: LMS TV 2023-08-02

Proposal: KENV-DT D20 DT APP *P ELKO, NV
File number: BLANK0000206515
Facility ID: 63845
Station data: LMS TV 2023-08-02
Record ID: 25076ff37529362a0175473115b12280
Country: U.S.
Zone: II

Build options:
Protect pre-transition records not on baseline channel

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 | KVME-TV | D20 | DT | LIC | BISHOP, CA | BLANK0000001562 | 415.1 km |
| Yes | KBOI-TV | D20 | DT | CP | BOISE, ID | BLANK0000153318 | 340.1 |
| No | 950306KF | D20 | DT | BL | IDAHO FALLS, ID | DTVBL41238 | 444.7 |
| No | KNSN-TV | D20 | DT | CP | RENO, NV | BLANK0000035790 | 353.4 |
| No | KNSN-TV | D20 | DT | LIC | RENO, NV | BLANK0000217304 | 353.4 |
| No | KTMW | D20 | DT | LIC | SALT LAKE CITY, UT | BLCDT20140529AJC | 312.0 |

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
Latitude: 40 41 58.80 N (NAD83)
Longitude: 115 54 10.90 W
Height AMSL: 2261.0 m
HAAT: 562.2 m
Peak ERP: 75.0 kW
Antenna: Omnidirectional
Elev Pattn: Generic
Elec Tilt: 0.80

39.4 dBu contour:

| Azimuth | ERP | HAAT | Distance |
|---------|---------|---------|----------|
| 0.0 deg | 75.0 kW | 587.0 m | 100.2 km |
| 45.0 | 75.0 | 604.1 | 101.0 |
| 90.0 | 75.0 | 629.4 | 102.0 |
| 135.0 | 75.0 | 587.8 | 100.2 |
| 180.0 | 75.0 | 544.0 | 97.5 |
| 225.0 | 75.0 | 263.3 | 75.7 |

Appendix B - Interference Analysis
KENV-DT - Elko, Nevada
Channel 20 -75 kW - Page 2

270.0 75.0 631.3 102.1
 315.0 75.0 618.6 101.6

Database HAAT does not agree with computed HAAT
 Database HAAT: 562 m Computed HAAT: 558 m

Distance to Canadian border: 922.7 km

Distance to Mexican border: 892.8 km

Conditions at FCC monitoring station: Livermore CA
 Bearing: 238.6 degrees Distance: 602.5 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
 Bearing: 90.4 degrees Distance: 902.6 km

No land mobile station failures found

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 BLANK0000153318 CP scenario 1

| | Call | Chan | Svc | Status | City, State | File Number | Distance |
|--------------|------------|-----------------|-----|-------------------|-----------------|------------------|----------------|
| Desired: | KBOI-TV | D20 | DT | CP | BOISE, ID | BLANK0000153318 | |
| Undesireds: | KENV-DT | D20 | DT | APP | ELKO, NV | BLANK0000206515 | 340.1 km |
| | 950306KF | D20 | DT | BL | IDAHO FALLS, ID | DTVBL41238 | 327.7 |
| | KTVM-TV | D20 | DT | CP | BUTTE, MT | BLANK0000157471 | 381.5 |
| Service area | | Terrain-limited | | IX-free, before | | IX-free, after | Percent New IX |
| 54408.7 | 717,322 | 45536.6 | | 708,345 | 45421.1 | 708,344 | 0.12 0.00 |
| Undesired | | Total IX | | Unique IX, before | | Unique IX, after | |
| KENV-DT | D20 DT APP | 56.1 | | 0 | | 56.1 | 0 |
| 950306KF | D20 DT BL | 111.5 | | 1 | 111.5 1 | 111.5 | 1 |
| KTVM-TV | D20 DT CP | 4.0 | | 0 | 4.0 0 | 4.0 | 0 |

 Interference to proposal scenario 1

| | Call | Chan | Svc | Status | City, State | File Number | Distance |
|--------------|-----------|-----------------|-----|-----------|-------------|-----------------|--------------|
| Desired: | KENV-DT | D20 | DT | APP | ELKO, NV | BLANK0000206515 | |
| Undesireds: | KBOI-TV | D20 | DT | CP | BOISE, ID | BLANK0000153318 | 340.1 km |
| | KNSN-TV | D20 | DT | CP | RENO, NV | BLANK0000035790 | 353.4 |
| Service area | | Terrain-limited | | IX-free | | Percent IX | |
| 30191.5 | 47,372 | 19981.5 | | 42,221 | 19848.0 | 42,221 | 0.67 0.00 |
| Undesired | | Total IX | | Unique IX | | Prcnt Unique IX | |
| KBOI-TV | D20 DT CP | 133.5 | | 0 | 133.5 0 | 0.67 | 0.00 |