tvstudy v2.2.3 (DAezu1)
Database: localhost,  Study: BLCDT20120817ABF - 48kW,  Model: Longley-Rice
Start: 2017.12.04 16:23:00

Study created: 2017.12.04 16:22:38

Study build station data: LMS TV LMS TV Data -- 12-4-2017

    Proposal: WIWN D5 DT LIC FOND DU LAC, WI
 File number: BLCDT20120817ABF - 48kW
 Facility ID: 60571
Station data: User record
   Record ID: 131
     Country: U.S.
        Zone: I

Stations affected by proposal:

| Call | Chan | Svc | Status | City, State | File Number | Distance |
|---|---|---|---|---|---|---|
| WGVK | D5 | DT | LIC | KALAMAZOO, MI | BLEDT20060703ABQ | 203.5 km |

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

    Channel: D5
   Latitude:  43  5 46.20 N (NAD83)
  Longitude:  87 54 15.00 W
Height AMSL: 536.7 m
       HAAT: 338.0 m
   Peak ERP: 48.0 kW
    Antenna: ERI-ESR-3L2-HP2C1-5 (ID 109433) 0.0 deg
Elev Pattrn: Generic
  Elec Tilt: 0.50

28.0 dBu contour:

| Azimuth | ERP | HAAT | Distance |
|---|---|---|---|
| 0.0 deg | 34.2 kW | 332.6 m | 121.6 km |
| 45.0 | 2.01 | 359.7 | 95.3 |
| 90.0 | 0.000 | 359.7 | 18.3 |
| 135.0 | 2.01 | 357.3 | 95.2 |
| 180.0 | 34.2 | 342.4 | 122.0 |
| 225.0 | 43.8 | 318.4 | 123.6 |
| 270.0 | 37.4 | 318.3 | 121.9 |
| 315.0 | 43.8 | 320.0 | 123.8 |

Database HAAT does not agree with computed HAAT
Database HAAT: 338 m   Computed HAAT: 339 m

ERP exceeds maximum
ERP: 48.0 kW   ERP maximum: 7.06 kW

**Proposal service area extends beyond baseline plus 1.0%
Proposal service area population is more than 95.0% of baseline

Distance to Canadian border: 401.8 km

Distance to Mexican border: 1905.4 km

Conditions at FCC monitoring station: Allegan MI
Bearing: 108.3 degrees   Distance: 167.9 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 263.1 degrees   Distance: 1473.0 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%

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Interference to BLEDT20060703ABQ LIC, scenario 1

| | Call | Chan | Svc | Status | City, State | File Number | Distance |
|---|---|---|---|---|---|---|---|
| Desired: | WGVK | D5 | DT | LIC | KALAMAZOO, MI | BLEDT20060703ABQ | |
| Undesireds: | WIWN | D5 | DT | BL | FOND DU LAC, WI | DTVBL60571 | 203.5 km |
| | WIWN | D5 | DT | LIC | FOND DU LAC, WI | BLCDT20120817ABF - 48k | 203.5 |
| | WLMB | D5 | DT | APP | TOLEDO, OH | BLANK0000035695 | 149.0 |

| Service area | | Terrain-limited | | IX-free, before | | IX-free, after | | Percent New IX | |
|---|---|---|---|---|---|---|---|---|---|
| 28214.3 | 2,439,225 | 28170.3 | 2,437,526 | 25844.2 | 2,314,582 | 25528.1 | 2,305,803 | 1.22 | 0.38 |

| Undesired | Total IX | | Unique IX, before | | Unique IX, after | |
|---|---|---|---|---|---|---|
| WIWN D5 DT BL | 52.0 | 57 | 32.0 | 0 | | |
| WIWN D5 DT LIC | 432.3 | 11,333 | | | 348.2 | 8,779 |
| WLMB D5 DT APP | 2294.1 | 122,944 | 2274.1 | 122,887 | 2210.0 | 120,390 |

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Interference to BLEDT20060703ABQ LIC, scenario 2

| | Call | Chan | Svc | Status | City, State | File Number | Distance |
|---|---|---|---|---|---|---|---|
| Desired: | WGVK | D5 | DT | LIC | KALAMAZOO, MI | BLEDT20060703ABQ | |
| Undesireds: | WIWN | D5 | DT | BL | FOND DU LAC, WI | DTVBL60571 | 203.5 km |
| | WIWN | D5 | DT | LIC | FOND DU LAC, WI | BLCDT20120817ABF - 48k | 203.5 |
| | WLMB | D5 | DT | LIC | TOLEDO, OH | BLCDT20050201AAF | 149.0 |

| Service area | | Terrain-limited | | IX-free, before | | IX-free, after | | Percent New IX | |
|---|---|---|---|---|---|---|---|---|---|
| 28214.3 | 2,439,225 | 28170.3 | 2,437,526 | 25984.8 | 2,322,099 | 25664.7 | 2,313,320 | 1.23 | 0.38 |

| Undesired | Total IX | | Unique IX, before | | Unique IX, after | |
|---|---|---|---|---|---|---|
| WIWN D5 DT BL | 52.0 | 57 | 32.0 | 0 | | |
| WIWN D5 DT LIC | 432.3 | 11,333 | | | 352.2 | 8,779 |
| WLMB D5 DT LIC | 2153.5 | 115,427 | 2133.5 | 115,370 | 2073.4 | 112,873 |

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Interference to proposal, scenario 1
6.82% interference

| | Call | Chan | Svc | Status | City, State | File Number | Distance |
|---|---|---|---|---|---|---|---|
| Desired: | WIWN | D5 | DT | LIC | FOND DU LAC, WI | BLCDT20120817ABF - 48k | |
| Undesireds: | WGVK | D5 | DT | LIC | KALAMAZOO, MI | BLEDT20060703ABQ | 203.5 km |
| | WLMB | D5 | DT | APP | TOLEDO, OH | BLANK0000035695 | 352.4 |

| Service area | | Terrain-limited | | IX-free | | Percent IX | |
|---|---|---|---|---|---|---|---|
| 35351.4 | 5,289,281 | 34895.7 | 5,219,044 | 33942.5 | 4,863,227 | 2.73 | 6.82 |

| Undesired | Total IX | | Unique IX | | Prcnt Unique IX | |
|---|---|---|---|---|---|---|
| WGVK D5 DT LIC | 953.1 | 355,817 | 953.1 | 355,817 | 2.73 | 6.82 |